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GREATER THAN ITSELF: VALUE, CAPITAL, AND INVOLUNTARY UNEMPLOYMENT IN CLASSICAL POLITICAL ECONOMY

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For my Family

Civil government, so far as it is instituted for the security of property, is in reality instituted for the defence of the rich against the poor, or of those who have some property against those who have none at all.

Adam Smith
(Smith 1993, 413, V.i)

…involuntary unemployment is only associated with money-using contractual economies. In other words, real economies that do not use money and money labor contracts to organize production (e.g., feudalism, slave economies, South Sea Islanders discovered by Margaret Mead, etc.) may possess important nonlinearities and even an uncertain future—but there is never an important involuntary unemployment problem. Slaves are always fully employed as well as are serfs in feudalism…. […] animals never suffer from involuntary unemployment!

Paul Davidson
(Quoted in Mosler 1998, 167)

What after all has over-production to do with absolute needs? It is only concerned with demand that is backed by ability to pay. It is not a question of absolute over-production…

Karl Marx
(Marx and Engels 1989b, 137)

To what extent is a [philosophical] system possible? There was a system long before humans ever thought of making one — the system of the world. The actual task is to discover it.

F.W.J. Schelling
(Schelling 2016, 5, my translation)

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Abstract

This dissertation addresses a contentious topic within the history of political economy and the interpretation of several influential theories which engage with it. It is what I call the "problem of overproduction or underconsumption" (POU), which is intimately related to involuntary unemployment. The orthodox, classical theory of political economy (i.e., Adam Smith, Jean Baptiste Say, and David Ricardo), I argue, can neither recognize nor explain the POU as an actual problem, because its fundamental assumptions rule out the very possibility of the POU *a priori* (e.g., Say's Law). Indeed, Smith implicitly and Say and Ricardo explicitly state that the POU is impossible. In his philosophical discussion of modern poverty and the "rabble" (*Pöbel*), G.W.F. Hegel, meanwhile, recognizes the possibility of the POU, because he recognizes it as something that actually happens in modern society. And, interestingly, he also seems to suggest that it is the cause of involuntary unemployment and the "rabble". Because he is still steeped in the assumptions of the orthodox, classical theory, however, he cannot fundamentally or sufficiently explain it. In his *Capital*, Karl Marx ultimately presents alternative assumptions with which the POU and involuntary unemployment can be recognized and explained. They are his novel concepts of *value* and *capital*. His theory of the dynamic of capital investment presents one possible explanation of what he calls the "surplus population" or "industrial reserve army" of the unemployed, which is arguably just what Hegel means by the "rabble".

The payoff, as it were, of the research presented here is threefold: first, a view according to which Hegel's phenomenon can arguably be saved; second, a philosophical analysis of the limits of orthodox, classical political economy; and finally, a novel interpretation of Marx's economic theory of capitalist societies, according to which it is closer to the post-Keynesian school of macroeconomics than the orthodox, classical school or David Ricardo ("labor theory of value").

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Preface

This dissertation addresses a contentious topic within the history of political economy, which has been variously referred to as the problem of "overproduction" or "underconsumption" (hereafter: POU), and which is associated with involuntary unemployment, a uniquely modern variety of poverty, stagnation, and crises. It examines the way in which the assumptions of classical political-economic theories (e.g., Smith and Ricardo) bear upon their ability or inability to recognize the possibility of the POU and present coherent explanations of the latter. Situating them within the context of discussions in 20th century economic theory (e.g., Schumpeter, Veblen, Keynes), it argues that a coherent explanation of the POU would require several assumptions which are very unconventional by the lights of classical political economy. Karl's Marx's theory of value and capital in *Capital* and *Theories of Surplus Value* presents a framework in which the POU is not only possible and explicable but would also follow as a matter of course in capitalist economies.

Representatives of the orthodox school of classical political economy, such as Jean Baptiste Say and David Ricardo, explicitly claim it is impossible that an overproduction or underconsumption of commodities ("general glut") could create serious problems for a modern, capitalist economy. Yet representatives of the heterodox school of classical political economy, such as Simonde de Sismondi and Robert Malthus, claim that overproduction or underconsumption of commodities is possible. The unequal distribution of wealth or overaccumulation of capital in the hands of capitalists can give rise to the POU at virtually regular intervals, they claim. Curiously, the POU also makes a prominent appearance in G.W.F. Hegel's *Elements of the Philosophy of Right* and attendant lectures. Hegel claims that "overproduction and the lack of a proportionate number of consumers who are themselves productive" (§ 245) give rise to the involuntarily unemployed, impoverished, and indignant group of individuals in modern society, which he calls

the "rabble" (*Pöbel*). In Hegel's practical philosophy, the economic conditions which give rise to the "rabble" present problems for the modern, liberal conviction that "*all* humans are implicitly free, *qua* human" in modern society. But more importantly for this dissertation's argument, they create problems for the soundness of classical political economy.

Though it also claims that the POU is impossible, the orthodox, classical theory of political economy cannot so much as recognize the POU as a real problem, because its fundamental assumptions rule out the very possibility of the POU *a priori*. Consequently, it does not and cannot present any explanation of the POU. To be clear from the start, however, the contention as I will address it in what follows has nothing to do with the way in which empirical data or economic phenomena such as unemployment must be understood or explained. This is not a dissertation in empirical economics, but rather the history of political economy and its interpretation. The contention will not be that the orthodox theory is just wrong, while Hegel or Marx's views might be right. And the problem will not simply be that the orthodox theory, Hegel, or Marx see the same empirical facts (e.g., unemployment) yet interpret them differently, such that only the respective predictive powers of their theories would decide which one is correct. Here one must avoid the treacherous formulation of the problem in which two sides of a debate each take for granted precisely that which the other disputes. For example, the orthodox theory might regard unsold goods and unemployment as a temporary anomaly or imbalance of supply and demand, while heterodox theory might regard them as effects of the POU. Rather, the problem lies upstream of these considerations. Namely, the orthodoxy theory could not recognize the phenomenon of the POU even if the POU were to occur, though one need not even assume it does, because the former just assumes the POU is impossible from the start. In short, the orthodox theory seems to beg the question, assume what it ought to prove, as though its assertion were a sound conclusion.

Stated roughly, the classical theory takes for granted (1) a fundamentally microeconomic (individualistic) understanding of the national economy; (2) an understanding of economic value and exchange of commodities on which it is a direct barter of goods for goods, abstracting from money completely (e.g., Say's Law, "real analysis"); and (3) an understanding of capital on which it consists simply of real physical goods which are used to produce more real physical goods, abstracting again from money completely. These questionable assumptions *entail* from the very beginning that supply and demand, production and consumption, and markets are always basically in harmony, equilibrium, and that the POU is impossible. Yet they hardly describe capitalism.

Much like the heterodox school of classical political economy (Sismondi and Malthus), Hegel's account of modern poverty and the "rabble" holds that the POU and involuntary unemployment are *possible*, because he thinks that they are *actual* empirical phenomena occurring before his eyes (e.g., the post-Napoleonic depression of 1815-22). Yet, again like the heterodox school of the classical theory, which contemporary economists call "underconsumptionism", Hegel is ultimately unable to *explain* the fundamental causes of the POU, because his views on political economy are still too steeped within the assumptions of the classical theory. Hegel's conclusion about the "rabble" simply does not follow from the assumptions of the orthodox, classical theory to which he refers (i.e., "Smith, Say, and Ricardo", § 189). And he makes no mention of the heterodoxy with which he substantively agrees, which at any rate fares little better than he does. Nevertheless, he presents a useful and powerful illustration of what precisely would have to be changed in the classical theory if the POU which he indeed seems to recognize could be so much as possible. In short, Hegel and the heterodoxy must choose between orthodox premises and heterodox conclusions. In sum, the thesis of this dissertation for which I will argue in what follows is:

> The economic problem of overproduction or underconsumption which Hegel recognizes is conceivable and explicable from an economic perspective *only if* one abandons the fundamental premises or assumptions of orthodox, classical political economy (e.g., Smith, Say, and Ricardo) and substitutes radically different, heterodox premises, such as Marx can provide (i.e., his concepts of value and capital).

Marx's theory of value and capital is sufficiently different from the orthodox, classical theory that it could provide the conceptual framework in which Hegel's view of the POU or the "rabble" might validly follow or at least be coherent. Marx's theory adopts (1) a fundamentally macroeconomic understanding of the national economy; (2) an understanding of economic value and exchange of commodities on which they are essentially mediated by money (e.g., "monetary analysis") and embedded in a context of social relations; and (3) an understanding of capital on which it is a process of *accumulation* of aggregate profit, what Marx calls "surplus-value", or value which is "greater than itself", as he puts it in *Capital* (i.e., investment and reinvestment of proceeds in production). These assumptions could not be more different from the orthodox, classical theory's view, and they arguably hew closer to facts on the ground of modern capitalist society.

Marx thinks that changes in the structure of capital investments into means of production and wages (the "organic composition of capital"), which occur over the course of accumulation of capital, can give rise to the economic POU and hence Hegel's "rabble". Marx calls the latter the "industrial reserve army of the unemployed" or "surplus population". In short, competition motivates capitalists to introduce more efficient machinery, to require the employment of fewer workers, to save on wage-costs, to increase short-term profit margins. So, real productivity can increase while effective demand decreases, and workers are thrown into temporary or permanent unemployment, which ironically can have negative effects on long-term profitability (i.e., POU), in addition to destroying human lives. And so, Marx thinks that the accumulation of capital runs up against its own endogenous limits such as the POU, unlike Smith and Ricardo, who imagine

that the only limits to the production and accumulation of capital are alien or exogeneous (e.g., physical, technical).

Finally, the way in which this dissertation distinguishes the classical theory of political economy and Marx's theory presents a detailed analysis of the limits of former and an interpretation of the latter according to which it does *not* comfortably belong to the classical school of political economy. Marx's economic theory is often interpreted and rejected as an instance of the classical "labor theory of value" which Smith sketches in his *Wealth of Nations*, Ricardo completes in his *Principles of Political Economy*, and is notoriously problematic. Indeed, prominent 20th century economists such as Paul Samuelson have regarded Marx as a "minor post-Ricardian" and often dismiss him as such. Yet, on the view defended in this dissertation, that standard interpretation could not be more mistaken. Marx's groundbreaking theory of value and capital is in fact much closer to the 20th century post-Keynesian school of macroeconomics than his predecessors. Accordingly, those interpretations of Marx with which I will agree and engage most deeply are those which in one way or another place Marx's theory into the context of post-classical or post-Keynesian theory, such as those of Michael Heinrich, Fred Moseley, Michał Kalecki, and Alfred Sohn-Rethel.[1]

[1] Cf. Sohn-Rethel 1950/51: "I had started reading Capital while still at school and when, on entering the university at Heidelberg, I heard that the labour theory of value and it with the whole basis of the Marxian critique of capitalism was refuted and out of date, I was deeply shocked. I made it my special concern, like many of my generation in Germany, to go into this question more thoroughly to find out whether the rise of the subjectivist [i.e. neo-classical, marginal-utility] theory of value had really knocked the bottom out of Marx's theoretical position. The way in which I set about doing this was to try to substitute the new bourgeois [i.e., market-centered] theory of value for the labour theory in the opening chapter of Capital and to see what became of Marx's critique as a result. I admit that putting it like this is a rationalization of my attempt at the time and that, in point of fact… it took many years… But in the end I made what was to be a shattering discovery".

Chapter One: Hegel's "Rabble" (*Pöbel*)

1. Introduction: Hegel's view of the "Rabble"

In this chapter, I address an important problem from the history of political economy, which makes a prominent appearance in one of the most significant moments of modern European thought—in the political philosophy of G.W.F. Hegel. It is the social problem which Hegel designates with the term "rabble" (*Pöbel*), and which he ultimately thinks is a consequence of what I will call the *economic problem of overproduction or underconsumption* (POU).[2] The "rabble" is an angry, indignant, disenfranchised, and resentful portion of modern, bourgeois, or capitalist society, the existence of which threatens the legitimacy of latter in several significant ways, and which is *involuntarily* unemployed because of an arguably essential yet contentious feature of modern, capitalist economies. The latter are so immensely productive that economic needs can be met with less than full employment of the entire human population, rendering an unhappy portion of the latter, who wish to and would otherwise have to work for their living, economically *redundant*. It is the phenomenon which Marx would later call the "relative surplus population or industrial reserve army" of the unemployed,[3] which Keynes would call "involuntary unemployment" and "poverty in the midst of plenty",[4] and still other post-Keynesian economists today define as "that

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[2] Hegel 1991a, 267 § 245. Cf. Sweezy 1970, 162f.; Schumpeter 1954, 738f.; Bleaney, 1976; Blaug 1985, 166f., 253, 283f.

[3] Marx 1990, 781. Accounts which hold that the relevant point of comparison for understanding the "rabble" is Marx's concept of the "proletariat" (e.g., Ruda 2011 and Ruda 2017) are as misguided, in my view, as those who compare capitalists or the bourgeoisie and workers or the proletariat to Hegel's account of the "lordship and bondage" or "Herrschaft und Knechtschaft" (e.g., Kojève 1969) in the *Phenomenology of Spirit*. It is what Marx calls the "dangerous class" (Marx and Engels 1978, 482) or "lumpenproletariat" (cf. Marx and Engels 1978, 615-16).

[4] Cf. Keynes 1964, 6, 15, 26, 30).

quantity of labor offered for sale at the market price that can find no buyer(s) at that price".[5] Yet Hegel already articulates and anticipates these important views.

It can admittedly be difficult to imagine how having too much ("overproduction") and consuming too little ("underconsumption") could truly be called a "problem" in any meaningful sense, which could give rise to any further problems. Indeed, the very idea sounds so irrational that it defies common sense. Moreover, it is not clear how underconsumption and overproduction could be compatible phenomena. How could overproduction be coupled with underconsumption? It seems obvious that any excess goods here would simply be cancelled out, as it were, by the needs of those who lack and need to consume them there. And, accordingly, this is a highly controversial notion in the history of political economy, as I will discuss later. Imagine, for instance, a lot of unconsumed goods going to waste, on the one hand, while a huddled mass of beings starves, on the other. This never takes place in nature among hives of bees, packs of wolves, or flocks of geese. Similarly, in ancient or feudal human societies, a *lack* or *scarcity* of goods is the fundamental problem, not overproduction, overabundance, or simply having too much to consume, which sounds like more like heaven on earth than the human condition. In nature and most of the history of human society, it is a *lack* or *scarcity* of consumables that gives rise to underconsumption (e.g., starvation, extinction), not overproduction or overabundance. Too little is the problem, not too much. So, it might seem that there is no simpler problem to solve or that there is nothing to explain. (While non- or pre-capitalist societies may produce and contend with surpluses of their own sort, the only sort I address here is a specifically economic kind which is unique to modern capitalism.[6])

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[5] Moseler 1998, 176.

[6] Cf. e.g., the account of the Maring ritual cycle by Rappaport 1971. Cf. Friedman 1974, 459: "the ritual pig feasts operate as a negative feedback mechanism which keeps local pig herds below the level at which they would cause environmental degradation, destroying the energy base of the society if not the larger ecosystem".

Similarly, involuntary unemployment simply sounds so bizarre and is such a uniquely modern phenomenon that it is hard to imagine from a common-sense perspective. While in nature an animal might prefer rest to the hunt, starvation will compel it to the latter. While a slave might not want to work for the master, the latter will violently compel him or her to do so. Yet involuntary unemployment, meanwhile, means that one would *like* to work for one's living, but *cannot* do so in the given circumstances. What are these circumstances? There is no involuntary unemployment in premodern conditions, in which poverty is due to the fact that productive activity is not efficient enough, not because it is *too* productive, such that one cannot act productively at all.

For specifically modern economies, however, which are indeed immensely productive, these impressions could not be farther from the truth. If it were the case that goods are produced in modern economies for the sake of satisfying human needs, then needy human beings would simply consume them and there would be no needy human beings or any economic problem to speak of for that matter. If people worked only to satisfy their own needs, there would be no involuntary unemployment (though there might be starvation). Yet this is not so. Modern economies do not primarily produce goods or employ labor to satisfy human needs. Rather, they primarily produce goods to yield *monetary profits* for the owners of capital in excess of the costs of their production, while only meeting human needs secondarily. So, there is more to a modern economy than mere *goods and needs and labor*. The *demand* for goods, which might otherwise go to waste, is not synonymous with the absolute *need* for them. Demand for goods counts in a modern economy *only if* it is an "effective demand" (i.e., need backed by the ability to pay in money).[7] People may consume goods *only if* they have enough *money* to purchase those goods on the market at a rate that is profitable for their owners, *only if* they have enough disposable income (e.g.,

[7] Cf. Keynes 1964, 33, 97, 342; Marx 1991, 486, 281-2; Marx 1990, 567; Marx and Engels 1989b, 133, 137.

wages). So, "overproduction" means an excess of supply in relation to the financial means of consumers to buy the goods. It means the production of more goods than can be consumed in a way that is *profitable* for their immediate owners (i.e., capitalists), while "underconsumption" means that people's needs go unmet and the economy falters because they do not have the means to buy what they need at a profitable rate. People's needs *per se* do not constitute an "effective demand" for goods. So, in what follows, I will speak of poverty in a distinctly *modern* sense, which is bound up with involuntary unemployment, and I will consider overproduction or underconsumption of commodities as "opposite sides of the same coin", as it were, or two ways of saying the same thing, which I regard as a single phenomenon (POU).[8]

While the idea of the economic POU might seem paradoxical or counterintuitive, what it designates is quite familiar in one form or another to every individual who inhabits a modern economy and society. It is a phenomenon that is unique to the modern economic formation of society known as "capitalism". In its lower-intensity version, the POU means secular stagnation, systemic poverty, or structural unemployment, while in its higher-intensity version, the POU means recession, depression, or crises. The modern experience (e.g., 1873, 1929, 1987, 2008) has shown that, if effective demand falls short of profitable consumption of goods, it can trigger a chain-reaction of bankruptcies, layoffs, and poverty (i.e., crises, the POU). And this is how the paradoxical situation can arise in which empty factories sit idle while unemployed and hungry workers who wish to work cannot find employment or produce the goods that they need to consume in order to live; how homeless persons can be locked out of empty homes with no one to

[8] Sweezy 1970, 183. Cf. Schumpeter 1954, 740 fn. 4: "In a sense, of course, underconsumption can always be described as overproduction". Cf. Foster and Catchings 1926, 540: "Overproduction… should be called underconsumption". Cf. Hobson 1988, 14, 17-18, 106-7, 110, 162, 179, 190, 198.

buy them.[9] Hegel's recognition of this phenomenon in the early 19th century makes his philosophy an important milestone in the history of political-economic thought, which must be closely analyzed.

In the literature on Hegel's political philosophy, it has been widely recognized that the problem of modern poverty and the "rabble" (*Pöbel*) in some ways stands at the center of Hegel's account of modern society, economy, and the state.[10] Yet the specifics of Hegel's engagement with the theory of political economy have been relatively neglected. Even those accounts which engage with the relation between Hegel and political economy focus on the orthodox views which he references, but they do not address the fact Hegel's conclusion about poverty and the "rabble" is heterodox in the extreme.[11] Hegel's view combines orthodox premises and heterodox conclusions, as I address later. My account, by contrast, will accordingly engage with Hegel's account primarily in terms of political economy (i.e., "involuntary unemployment") and the philosophy of social science, and later I argue that Hegel's view requires massive revisions.

The function which the economic POU and debate about it performs in the larger argument that I will present in this dissertation is the opportunity it presents today to appreciate the limits of the orthodox, classical theory of political economy (OCT). The economic POU is a highly contentious topic. Properly appreciated, it highlights a larger methodological problem and controversy within the OCT which remains relevant for contemporary discussions, and which this

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[9] Cf. Marx 1976a, 37: "It is also paradox that the earth moves round the sun, and that water consists of two highly inflammable gases. Scientific truth is always paradox, if judged by everyday experience, which catches only the delusive appearance of things". Cf. Keynes 1964, 322: "We reach a condition where there is shortage of houses, but where nevertheless no one can afford to live in the houses that there are".

[10] Cf. Avineri 1972, Ritter 1982, Wood 1990, Ruda 2011, Ruda 2017, Mann 2015, Mann 2017a.

[11] For example, Wood 1990 states that "the original problem that created widespread poverty was that there was an excess of goods and services in relation to effective demand" (248), yet he gives no explanation of what this is supposed to mean or how it is supposed to work economically. Cf. Avineri 1972 chapters 5 and 7; Wood 1990, 247-53; Herzog 2013, 55f. & 101-11; Henderson and Davis 1991, Davis 1989, Ver Eecke 1983, Plant 1977a and 1977b. Ruda 2011 and Ruda 2017 do not address the theory of political economy at all.

dissertation addresses. Classical political economy discusses the economic POU, which Hegel recognizes as the cause of the "rabble", in terms of "general gluts" of unsold commodities on the market. On the one hand, the reigning orthodoxy — e.g., Adam Smith, Jean Baptiste Say, and David Ricardo — declares that general gluts (POU) are *impossible*.[12] The premises of the OCT rule out the possibility of the POU, involuntary unemployment, and hence the "rabble" *a priori*. On the other hand, the marginal heterodoxy — e.g., Simonde de Sismondi, Robert Thomas Malthus, and so-called "underconsumptionists" — fear and believe that "general gluts" or the POU inevitably happen, though they do not present theoretical frameworks which are radically different from the OCT. So, if the empirical phenomenon which Hegel recognizes as the "rabble" (i.e., involuntary unemployment) can be possible, then the premises or theoretical framework of the OCT will have to be modified. As I will argue much later, Marx's novel theory of value and capital transcend the limits of the OCT, which denies the possibility of the POU, and Marx presents a possible explanation.

2. Hegel's Psychological Description of the "Rabble": Resentment

Hegel presents his account of the "rabble" principally at the end of his reflections on modern "ethical life" (*Sittlichkeit*) in the *Philosophy of Right* (§§240-9).[13] He characterizes it in the final sections of his reflections on political economy. And on its face, it is hardly evident just what this clearly *pejorative* term is supposed to mean.[14] In order to isolate the identifying characteristic of what he takes to be the problem of the "rabble", he specifically singles out a "subjective aspect"[15]

[12] Cf. Smith 1993, 223-4, II.v; Smith 1993, 232, III.i; Say 1821, 8; Say 1834, chapter 15; Mill 1808, 84-5; Ricardo 1951a, 291-2, XXI.
[13] For discussions of Hegel's "rabble" especially in the context of his *Philosophy of Right*, cf. Knowles 2002, chapters 11 and 12; Houlgate 2005a, chapter 8.
[14] Cf. Wood 1990, 253.
[15] Hegel 1991a, 265 § 242.

and variously characterizes it as a *disposition*[16] or a *mentality* (*Gesinnung*)[17] of a certain group of people in modern society. And, though he does not have a reputation for psychologizing, Hegel paints a quite vivid picture of the mentality that he has in mind here.

The "rabble" mentality is characteristically one of "laziness, viciousness, and the other vices",[18] of "inward rebellion",[19] "moral degradation",[20] the "non-recognition of right",[21] "mockery and shamelessness",[22] and even "inner indignation and hatred".[23] It is "frivolous and lazy".[24] Elsewhere Hegel states that it involves "laziness and extravagance" and the "renunciation of shame and honour", which are "the subjective bases of society", as Hegel understands the latter.[25] And it is anchored in a lack of the feeling of "right, integrity [*Rechtlichkeit*] and honor",[26] as well as the feeling of being "excluded and mocked by everyone".[27] In short, it is a sense of entitlement and the frustration of its entitlement. So, it presupposes a sense of right or honor, though it also feels that it has been wronged by the social order, which it therefore rejects as unjust. One might say that the rabble mentality is marked by an inferiority complex or spiteful "envy and hatred towards anyone who has anything" which the members of the "rabble" lack.[28]

In the history of western philosophy, the nearest cousin of Hegel's notion of the "rabble" mentality is Nietzsche's notion of "*ressentiment*", which is the mentality or ethos of slaves which combines envy and hatred for those whom it must recognize as superior, who forcefully

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16 Hegel 1991a, 454.
17 Hegel 1991a, 265 § 241.
18 Hegel 1991a, 265 § 241.
19 Hegel 1991a, 266 § 244.
20 Hegel 1991a, 453.
21 Hegel 1991a, 454.
22 Hegel 1991a, 454, 435.
23 Hegel 1983a, 140.
24 Hegel 1991a, 266 § 244.
25 Hegel 1991a, 267 § 245.
26 Hegel 1991a, 266 § 244.
27 Hegel 1991a, 453.
28 Hegel 1983b, 196. My translation.

subordinate it.[29] It is the mentality of those who have become "embittered against the social [*bürgerlich—bourgeois*] order",[30] feel that they have been wronged perhaps without having had the opportunity in which to respond in kind, such that a lingering sense of injustice and a pathological appetite for revenge, whether real or imaginary, remains. And like the latter, Hegel's notion of the "rabble" also has to do with the mental reaction of those who are subordinated within society and relegated to a permanent social position of inactivity or powerlessness. Indeed, Hegel thinks that the "rabble" mentality is a "necessary" reaction to modern economic conditions.[31] So, it is necessary to consider the *objective* conditions in which the subjective phenomenon of the "rabble" mentality appears. According to Hegel, historically and socially specific, *modern economic* conditions give rise to this mentality, which might just compromise the modern order.

3. Hegel's Sociological Description of the "Rabble": Poverty and Involuntary Unemployment

Though Hegel's reputation for "absolute idealism" often overshadows his other more concrete observations,[32] one must appreciate the sober-minded, sociological dimension of his view of the "rabble". Hegel consistently holds that any human phenomenon, such as the characteristic mentality or subjectivity of a group of people, can only be understood within the objective social context and relations in which it appears.[33] The condition in which the "rabble" mentality appears

[29] Nietzsche 1989, § 10, § 13.
[30] Hegel 2002, 286.
[31] Hegel 1991a, 453.
[32] I.e., methodological holism, cf. Hegel 1969, 154f., Hegel 1977, 11.
[33] For Hegel, mind (*Geist*) is just a structure of actual socially embedded behavior (cf. Forster 2019; Hegel 1977, 193f.). Consider, for example, his following statement about the original social grounds for the cynical mentality: "Diogenes, in his whole character as a Cynic, is in fact merely a product of the social life of Athens, and what determined him what the opinion against which his entire way of life reacted. His way of life was therefore not independent, but merely a consequence of these social conditions, and itself an unprepossessing product of luxury [i.e. economic wealth]. Where, on the one hand, luxury is at its height, want [i.e. economic poverty] and depravity are equally great on the other, and Cynicism is then evoked by the extreme opposite of refinement" (Hegel 1991a, 231 § 195, addition).

as a "class" in modern society is a particular *kind* of "poverty".[34] It is not the "universal poverty" that occurs in primitive societies or economies, where there is relatively "universal equality", as Adam Smith puts it.[35] Poverty is a necessary, but insufficient condition, because there has always been poverty, though there has not always been the "rabble", and the "rabble" are poor, though not everyone who is poor belongs to the "rabble".[36] Hegel is talking about a specifically "modern" kind of poverty[37] and addressing "*this specific society*", which produces an immense amount of wealth and contains an immense amount of inequality.[38] It is the poverty of "unemployment".[39]

First, the characteristically normal kind of mentality in a modern, bourgeois (*bürgerlich*), or capitalist society, according to Hegel, is a self-conception in which one is autonomous or independent. Humans develop a mind of their own, as it were, only through their own "work".[40] Hegel calls this the "principle of civil [or bourgeois] society".[41] The political economist, David Ricardo similarly speaks of the "value of independence", which he believes must be inculcated in the working class.[42] And one can sustain such a self-conception in fact *only if* one can actually provide for oneself and satisfy one's own needs through working to do so for oneself; *only if* "they have sufficient honour to gain their livelihood through own work". So, self-sufficiency is the

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[34] Cf. Hegel 1991a, 454: "poverty is the ground of the rabble-mentality…" Cf. Hegel 1995, 210: "A poor person", Hegel states in his lectures, "is one who possesses neither capital [*Kapital*] nor skill". Hegel seems to distinguish the "rabble" as a "class" (*Klasse*), rather than an "estate" (*Stand*). Cf. Hegel 1991a, 266 § 243, 267 § 245; Cf. Wood 1990, 251.

[35] Smith 1993, 410, V.i.

[36] Hegel distinguishes a type of "ingenuous poverty" that is distinct from the rabble (cf. Wood 1990, 252).

[37] Cf. Hegel 1991a, 267 § 244, addition: "The important question of how poverty can be remedied is one which agitates and torments modern societies especially".

[38] Hegel 1991a, 267 § 246. Cf. Hegel's statement in his preface, that the task of philosophy is "the *comprehension of the present and what is actual*" (Hegel 1991a, 20, translation modified).

[39] "It is lack of employment which is… the main cause of poverty" (quoted in Avineri 1985, 207).

[40] Hegel 1977, 118, W3: 153; Cf. LPH 82: "In essence, Spirit is the result of its own activity…" Cf. Hegel 1991a, 231 § 196.

[41] Hegel 1991a, 267 § 245.

[42] Cf. Ricardo 1951a, 107, V: "By gradually contracting the sphere of the poor laws; by impressing on the poor the value of independence, by teaching them that they must look not to systematic of casual charity, but to their own exertions for support, that prudence and forethought are neither unnecessary not unprofitable virtues, we shall by degrees approach a sounder and healthier state".

necessary condition for a normal, civil, or bourgeois mentality, and everyone must behave in a civil or bourgeois way, in modern society. Yet clearly, this will depend upon economic conditions, which decide whether everyone can do so or how many people will be able to do so. For example, this will depend upon sufficient opportunities for employment of the entire population. And so, if for some economic reason one cannot obtain employment and provide for oneself (i.e., involuntary unemployment), then one will not only become poor, but will also fall out of the norm of civil society with respect to one's cognitive orientation. And this is the case of the "rabble". In his *Philosophy of Right*, Hegel writes:

> **When a large mass of people sinks below the level of a certain standard of living** – which automatically regulates itself at the level necessary for a member of the society in question – **that feeling of right**, integrity [*Rechtlichkeit*], and honour **which comes from supporting oneself by one's own activity and work is lost. This leads to the creation of a *rabble*** [*Pöbel*], which in turn makes it much easier for disproportionate wealth to be concentrated in a few hands [i.e., "*expanding population and industry*", "the *accumulation of wealth*"].[43]

And in his lectures, he continues:

> The **lowest level of subsistence [*Subsistenz*], that of the rabble**, defines itself automatically, but this minimum varies greatly between different peoples. […] Poverty in itself does not reduce people to a rabble; a rabble is created only by the **disposition associated with poverty, by inward rebellion [*Empörung*] against the rich, against society, the government**, etc. It also follows that **those who are dependent upon contingency** [i.e., the unemployed or underemployed] become frivolous and lazy… This in turn gives rise to the evil that the rabble to not have sufficient honor to **gain their livelihood through their own work**, yet [as free rational beings and citizens they] claim that they have a right to receive their livelihood. No one can assert a right against nature, but within the conditions of society hardship at once assumes the form of a wrong inflicted upon this or that class.[44]

So, the "rabble" *rightly* objects to its condition. And Hegel is not alone in his belief that economic conditions prevent sufficient employment and give rise to involuntary unemployment, modern poverty, or the "rabble". Apart from his heterodox successors (i.e., Keynes and Marx), his

[43] Hegel 1991a, § 244.
[44] Hegel 1991a, 266 § 244. Addition. Cf. Wood 1990, 253.

heterodox contemporary, Simonde de Sismondi similarly speaks of an "unhappy class" which fits his description precisely.[45] And Robert Thomas Malthus also recognizes this problem as well. He writes: "When there is no demand for labor, however low the price of food may be, the labouring classes can only obtain it by charity";[46] "…it was useless and foolish directly to encourage the birth of more children, as the effect of such encouragement, without a demand for labour and the means for paying it properly, could only be increased misery and mortality with little or no final increase of population".[47] Or, as Joan Robinson would put it more than a century later: "the misery of being exploited by capitalists is nothing compared to the misery of not being exploited at all".[48]

Second, the "rabble" mentality not only appears in conditions of poverty, but also conditions of poverty in which it also confronted by immense wealth, which means conditions of inequality. The "rabble" "claim[s] that they have a right to receive their livelihood", though they cannot do so for themselves through work and nevertheless constantly encounter what they cannot have. This is the constellation of material-social relations in which the type of resentment, indignation, and envy that Hegel designates with the "rabble" occur. Modern, capitalist societies are a constellation of social relations in which there are various positions which subjects can occupy vis-à-vis one another, in which various kinds of perspectives, mentalities or subjectivity may appear. In a society in which there is both immense wealth and immense poverty, each will understand the other from its unique vantage point. Here is the unavoidable confrontation of the wealthy with the poor and the poor with the wealth of society in which they live, which they are

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45 Sismondi 2019, 555f., 564, 572, 548-9, 535. Cf. ibid., 181, 185, 286, 298, 322, 333, 337, 452, 530, 556.

46 Malthus 1836, 437.

47 Malthus 1836, 328. Cf. Malthus's following comment (quoted in Keynes 2015, 495): "A man who is born into a world already possessed, if he cannot get subsistence from his parents on whom he has a just demand, and if the society do not want his labour, has no claim of *right* to the smallest portion of food, and, in fact has no business to be where he is. At nature's mighty feast there is no vacant corner for him. She tells him to be gone and will quickly execute her own orders, if he do not work upon the compassion of some of her guests".

48 Robinson 2006, 41.

meant to be able to enjoy in principle (e.g., "access", "opportunity") in modern society, yet which they cannot enjoy as a matter of stubborn fact. These are the conditions which Keynes would later describe as "poverty in the midst of plenty" or "involuntary unemployment" (i.e., socio-economically enforced idleness).[49] Immensely productive, modern economies could effectively do away with poverty altogether if the purpose of production were simply satisfying human needs (*Bedürfnisse*), which Hegel also thinks the economy is meant to satisfy.[50] But Hegel is also well aware and emphasizes that property relations come between goods and the satisfaction of needs.[51] In modern, capitalist economies, production primarily takes place for the sake of *profit*, and only secondarily for the satisfaction or human needs or social reproduction. Thus, Hegel writes: "The emergence of poverty is in general a consequence of civil society [*bürgerliche Gesellschaft*], and on the whole it arises necessarily out of it… Poverty is a condition in civil society which is unhappy and forsaken on all sides".[52] "These two sides, poverty and wealth, thus constitute the corruption of civil society".[53]

Civil society not only creates poverty and the wealth which the wealthy have and which the poor do not. Civil society also creates the needs that go unsatisfied in the poor, who did not miss what they do not have until their social context both required it of them and prevented them from obtaining it. For example, not having a mobile phone is 1990 is normal, in 2000 it is hard to say, yet it 2010 is it is abnormal, and in 2020 it is arguably a sign of poverty, because "smart" phones are ubiquitous and social relations now require them of even the most menial laborer. In

[49] Keynes 1964, 30.
[50] Hegel 1991a, 227ff. §§189ff.
[51] Cf. Hegel 1991a, 106 § 76.
[52] Hegel 1991a, 453.
[53] Hegel 1991a, 454.

the *Philosophy of Right*, Hegel outlines the situation of poverty as one in which one has modern, social needs, which are nevertheless unmet by modern society. He writes:

> Not only arbitrariness, however, but also contingent physical factors and circumstances based on external conditions (see § 200) may reduce individuals to poverty. In this condition, **they are left with the needs of civil society and yet** – since society has at the same time taken from them the natural means of acquisition (see § 217), and also dissolves [*aufhebt*] the bond of the family in its wider sense as a kinship group (see § 181) **– they are more or less deprived of all the advantages of society**, such as the ability to acquire skills and education in general, as well as of the administration of justice, health care, and often even of the consolation of religion.[54]

And in his lectures, he similarly states:

> The poor are subject to yet another division, **a division of emotion [*Gemüt*]** between them and civil society. The poor man feels excluded and mocked by everyone, and this necessarily gives rise to an inner indignation. He is conscious of himself as an infinite, free being [i.e., a rational being, a citizen, a human being], and thus arises the demand that his external existence should correspond to this consciousness. In civil society it is not only natural distress against which the poor man has to struggle. **The poor man is opposed not only by nature, a mere being, but also by my [i.e., the bourgeois] will.** The poor man feels as though he were related to an arbitrary will, to human contingency, and in the last analysis what makes him indignant is that he is put into this state of division through an arbitrary will. Self-consciousness appears driven to the point where it no longer has any rights, where freedom has no existence. **In this position, where the existence of freedom becomes something wholly contingent, inner indignation is necessary**. Because the individual's freedom has no existence, the recognition of universal freedom disappears. **From this condition arises that shamelessness that we find in the rabble**. A rabble arises chiefly in a developed society…[55]

The damage which involuntary unemployment and its consequent poverty inflict upon humans and society, according to Hegel, is especially vividly depicted in his statements about morality and religion. Religion is arguably the last and most affordable consolation for the hardships of everyday life in a society of mortals. And yet, according to Hegel, those who live in the kind of modern poverty that gives rise to the "rabble" are often not even capable of partaking in it or

[54] Hegel 1991a, 265 § 241. Cf. Hegel 1991a, 290f. § 270.
[55] Hegel 1991a, 453.

enjoying it. The idea that morality in modernity is a luxury afforded by circumstance on par with table manners or party etiquette is abhorrent.[56]

4. The Philosophical Problem of the Rabble: Illegitimacy and Unfreedom

In the view which I advance in this dissertation, the "rabble" does not present an independent philosophical problem, whether moral, political, or otherwise. It presents a problem from the history and philosophy of social science. For, unlike many other topics which Hegel often discusses, the "rabble" is not a pure determination of thought such as *being, nothing,* or *becoming*, etc. If Hegel is right about anything on the topic, "the rabble" is an *empirical fact*, which might not exist in any other political-economic system than the modern one in which we live, and which has an explanation like any other. It is an effect with causes which can and must be understood in the terms of political economy, for reasons I address in the following chapters. Some clarification is nevertheless in order here. Though it is not essential for my argument, it is worth considering how the "rabble" fits into Hegel's conception of the good or freedom, because doing so will help anyone who might otherwise be skeptical to concede that it is something which is worth thinking about, for reasons which I presume that most people would accept or at least consider.

As I have already argued, the "rabble" is not synonymous with poverty, which modern capitalist economies arguably produce alongside wealth. But neither is it synonymous with unemployment. One can be *voluntarily* unemployed or underemployed or poor and nevertheless salvage some sense of dignity or honor, and therefore not belong to the "rabble". Yet modern

[56] Elsewhere, he states: "The poor are burdened not only by external distress, but by moral degradation. The poor are for the most part deprived of the consolation of religion; they cannot visit church often, because they have no suitable clothing or must work on Sundays. Further, they must participate in a worship which is chiefly designed for an educated audience. […] Equally, the enjoyment of the administration of justice is often made very difficult for them. Their medical care is usually very bad. Even if they receive treatment for actual illnesses, they lack the means necessary for the preservation of their health" (Hegel 1991a, 453).

economies do not just produce wealth and poverty, and there is more to economics than explaining wealth or poverty. They also produce specifically *involuntary unemployment*, which produces the specific kind of poverty that characterizes the "rabble". Less than full employment of a population means that someone *cannot* work *even if* he or she wanted to, and it is a phenomenon unique to the modern economic situation. This is the situation in which a human has the *right* or *entitlement* to the good life or freedom in principle (e.g., "opportunity", "access"), though, due to conditions beyond any one person's immediate control or will, it is impossible to actualize it through one's own activity in fact.[57] The reason why I insist on this economic dimension is that the specialized literature on Hegel and political economy generally and the "rabble" in particular neglects the economic literature which presents explanations that are relevant to Hegel's discussion (e.g., involuntary unemployment).[58] No amount of tempering modern economies with "state intervention" can whisk away the fact that they produce involuntary unemployment (i.e., the "rabble") and were not able to solve it in the most promising heyday of post-war capitalism (e.g., the social democratic welfare state), which neo-liberalism and financialization have obliterated.[59]

The sense in which the "rabble" presents a problem for the prevalent self-conception in modern, bourgeois states, which are the object of Hegel's account in the *Philosophy of Right*, is

[57] So, I cannot agree with the account in Ruda 2017, 163-4: "Poverty, as a necessary product of the economic dynamic of civil society, provides therefore the constantly given condition of the possibility of the rabble's emergence, of a social existence without honour. Although Hegel characterizes the rabble in terms of a series of losses additional to the material loss that is poverty – the rabble is work-shy, without shame and honour, and lazy – the rabble is at the same time not a necessary consequence of being in poverty. […] one should emphasize that, although poverty is a necessary product of society, the rabble is self-generating, *sui generis*. That is to say, the rabble does not necessarily appear (although the social condition of its possibility is necessary), but appears contingently. This also means that the poor and the rabble are distinct – a distinction that finds itself repeated in the distinction between the working class in general and the proletariat in Marx (a distinction which has as often gone unnoticed as the one in Hegel). The rabble emerges only when a contingent attitude supplements the necessary condition, that is, when through the addition of a subjective attitude that entails a further loss (of honour, etc.) the rabble makes itself on the basis of the condition of poverty". Cf. Ruda 2011.

[58] E.g., the work of Sismondi, Malthus, Marx, Veblen, Schumpeter, Keynes, Kalecki, Robinson, Minsky, and post-Keynesian macroeconomics generally

[59] Cf. Harvey 2005, Duménil and Lévy 2011, Hudson 2015, Christophers 2021.

the sense in which it shows the following problem. Namely, the same historical and socio-economic conditions which give rise to the modern idea of freedom, which for Hegel must be *universal and actual* to be anything other than a figment or a lie, are the same conditions which make the actualization of the idea of freedom impossible for every inhabitant of those states. (I will elaborate on this point momentarily.) As Hegel puts it in his *Lectures on the Philosophy of History*, the arc of human history from a modern standpoint is meant to be the arc of the universalization *and* actualization of the idea of freedom. He writes

> …the Orientals knew only that *one* person is free [i.e., despotism]; the Greeks and Romans that *some* are free [i.e., aristocracy or oligarchy based on slavery]; while *we* [modern Christians] know that *all* humans are implicitly free [i.e., in principle], *qua* human.[60]

The problem that the "rabble" will pose for the modern, bourgeois self-conception will be the respect in which it is a living counterexample here. If all can be free in principle, but one just happens to be unfree in fact for purely contingent reasons, this would present no problem. Yet if all are free but one, and the one who is unfree *cannot be free*, for reasons which are economically necessary, then there is indeed a problem. The fact that some people in modern society *cannot* be free in fact means that all *are not free in principle*.[61] Modern economic conditions *cause* involuntary unemployment, the "rabble", the *bad* life, unfreedom.[62] This is an empirical issue for which an explanation is possible and required. It is an awkward bone in the throat of modernity, which can only gnaw at the conscience of any honest and liberally minded, modern person. That the kind of order which modern society is gives rise to a tragic group of people who are neither virtuous or excellent, nor good, nor free, as people ought to be, nor *can* even be so, is too much.

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[60] Hegel 1988b, 22.

[61] Cf. Dr. Martin Luther King Jr.'s "Letter from the Birmingham Jail": "Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly" (King 1963, 264).

[62] Cf. Adorno 2006, 39 § 19.

The sense in which the "rabble" presents a problem from Hegel's philosophical perspective has to do with the way in which he stands on the shoulders of Aristotle and Kant, while disagreeing with both, as it were, with respect to the idea of the good or freedom. One might ordinarily suppose that the good or freedom might be actual *or* universal, though it need not be both in order to be the genuine good or freedom. Yet Hegel argues that *both* aspects of the good or freedom are required.

On the one hand, Aristotle is an *actualist* about the good or freedom, though he is not a *universalist* about it. For, unlike Kant, Aristotle thinks that a good which is not actual — for instance, a hypothetical, unrealized, or merely ideal good — is not actually the good. It is a condition of the good that it be *actual* in this world. For Aristotle, only the practically wise and free man (*phronimos*) knows the good, for whom it is actual in the life that he actually leads.[63] Unlike Kant, again, not all, but only the privileged few can be truly virtuous or excellent, good and free, for Aristotle: "leisure is necessary both for the development of virtue and the performance of political duties".[64] And leisure or freedom for some is only afforded by the toil and unfreedom of others. It makes sense, moreover, that Aristotle has a fundamentally aristocratic conception here. In the context of the ancient Greek city-state, which rested upon slavery, only a few can enjoy the privilege of leading a virtuous or excellent, good, and free life, engaging in philosophy, science, and politics.[65] Other human beings (i.e., slaves) must work to free that minority of excellent persons from labor. Being excellent is a full-time job. And the many who therefore cannot be excellent, good, or free are a sacrifice Aristotle is willing to accept for the actuality of the good.

On the other hand, as a modern, Kant is a *universalist* about the good or freedom, though he is not an *actualist* about it. For Kant, it may be that the good or freedom are *ideals* towards

[63] Cf. Book VI of the *Nicomachean Ethics* (in Aristotle 1941).
[64] Cf. Aristotle 1941, 1289 (*Politics*, 1329a).
[65] Cf. Weber 1946, Luxemburg 2004.

which we may strive or hope to attain, yet which may not be actualized in this world. They are a *regulative ideal* which must be assumed yet which is nevertheless not actualized here and now.[66] In Hegel's words: "the good remains [something that] *ought-to-be*… The idea of the realized good is… no more than a postulate",[67] a "mere *ought*" (which by definition is not).[68] For Kant, unlike Aristotle, the fact that the good or freedom might be an *ideal*, rather than *actual*, does not make them any less what they purport to be. And unlike Aristotle again, the good and freedom must be *universal*, for Kant, though they need not be actual. So, it would not sufficient that only *some* can be good or free in principle, while others are not. This would undermine the very essence of the good or freedom.

Now, by contrast to both Aristotle and Kant, Hegel presents and wants a third possibility here, which goes beyond both of their one-sided conceptions, yet which captures both.[69] Hegel is an actualist *and* a universalist about the good or freedom.[70] On the one hand, that Hegel is an *actualist* about the good or freedom means that he thinks it is what it purports to be *only if* it is actually so. An unactualized ideal of the good or freedom, in other words, simply does not count. Here Hegel is closer to Aristotle than to Kant. On the other hand, that Hegel is a *universalist* about the good or freedom is to say that it is what it purports to be *only if* it is universally instantiated for every rational agent or self-conscious human being. So, here Hegel, as one of the moderns, is closer to Kant than to Aristotle. Both sides taken together present a highly demanding view, which presents a tragic dilemma for any society in which it is impossible for *every* rational agent or self-conscious human being to *actually* be good — virtuous or excellent, in the aristocratic language

[66] Kant 2002, 167ff., I.II.VI; Kant 1993, 49ff., III.
[67] Hegel 1969, 820
[68] Hegel 1991b, 302 § 234
[69] Cf. Gobsch and Haase 2021.
[70] Cf. Hegel 1969, 818-819; Hegel 1991b, 312 § 234. Addition; Hegel 1991b, 303 § 234; Hegel 1991b, 302 § 234; Hegel 1991b, 287, § 213; Hegel 2007, 214 § 481; Hegel 2007, 215 § 482.

— and free. If it were the case that by mere contingent happenstance some humans simply *are* neither good nor free in modern society, this would not pose any problem. Yet if the order of modern society is such that some humans are good and free *only if* others are not and therefore *cannot* be so, then that society would be a problem. This is the situation of the "rabble" (i.e., involuntary unemployment).

From Hegel's perspective, the good must be actual and universal to be the genuine good, which is to say must be known in its actuality by all to be known in its actuality by anyone. And so, the "rabble" presents a contradiction in ethical life, or modern civil society destroys the possibility of the good. The problem which Hegel recognizes here is not simply that the "rabble" is *excluded* by bourgeois society.[71] Rather, it is that bourgeois society or economy *produces* that group of people within modern society who cannot be "good" or "free" and thus are not only doomed but are the manifest corruption and self-condemnation of civil society. And this is incompatible with Hegel's universalist actualism about the good. Granted, one could just be a Kantian and accept a figment of the good in its place, and then there is no contraction, but then one is effectively just a dreamer. Or one could be an Aristotelian and accept that only the few know the good in its actuality, and there is no contradiction, but then one is simply an elitist.

Stepping back from Aristotle, Kant, and Hegel entirely, I will try to state this point in a slightly more deflationary way. No human being who is even vaguely committed to democratic, republican, egalitarian, or liberal principles could accept the idea that the substantive freedom of some requires the substantive unfreedom of others. The universal extension of freedom in principle

[71] Cf. Ruda 2017, 167: "A society that proclaims its own universality without the existence of any actual universality within it is unmasked by the rabble's verdict on it. The rabble unmasks the masquerade of a civil society not simply because it is its 'victim', but rather also because the rabble points towards a dimension that includes potentially everyone and thereby makes it possible to think of a non-exclusive, that is, actual, universality that would be as universal as Hegel's sphere of ethical life within the state (as anyone is latently poor and any poor person is latently rabble)" (cf. Ruda 2017, 171).

is essential to the modern attitude. If all and therefore some are in principle free (i.e., "opportunity", "access"), though the latter just contingently happen to spoil their own lot, as it were, then this could perhaps be accepted. But if it were known *a priori* that in the modern economic system, *someone must be unfree*, such that others could be free, then only the most reactionary monarchist could rejoice. The modern situation would contradict the modern idea to which it gives rise. And a small amount of poison spoils a large amount of punch. Inequality in principle is just too much.

Ultimately, Hegel's account of the "rabble" is not an account of a philosophical notion or topic. What is troubling in the case of the "rabble" is not that it is a grotesque notion, but that it is an empirical *fact* of unfreedom which belongs to the same world in which humans are meant to be free in principle for the first time in history. Of all the grand ideas that could have been inserted in § 245, Hegel chose a prosaic social problem with worldly causes. It points beyond *a priori* philosophy, albeit in a very mundane sense. The ultimate moral of Hegel's story, as I will address it, is its demonstration that a merely *a priori* philosophical, normative, or moralistic approach to the problem is insufficient for grappling with it. The problem of the "rabble" might not *prima facie* seem to be anything more than a moral-political or normative problem with modern economies and societies. But Hegel is giving an account of the world as it is in its actuality, and he shows that the "rabble" is actually a social problem with causes that can be known and explained, and indeed must be explained and understood if it is to be effectively solved. Philosophy must get its clean hands dirty with the empirical world of political economy, as it were, in a way which Hegel calls *Realphilosophie*. He shows that it must engage with social and economic theory in order to understand its problems, though he will not ultimately go far enough himself, I will argue. Similarly, as I will argue much later, Marx will, in analogous way, go farther and argue that one must take philosophy all the way into an engagement with political economy.

5. Hegel's Economic Explanation of the Rabble (*Pöbel*): The Problem of Overproduction or Underconsumption (POU)

Though Hegel is clearly troubled by the existence of the "rabble" and believes that it poses a moral-philosophical problem for modern society, I will argue in what follows that it is not primarily a *moral-philosophical* problem, but rather an empirical problem of political economy which must be explained just like any other empirical phenomenon. In this section I will address Hegel's account of the way in which, he thinks, the "rabble" or the involuntarily unemployed — extreme poverty alongside extreme wealth — can appear in modern societies or economies. He makes the *prima facie* perplexing claim that a surplus of goods can cause unemployment, poverty, and the "rabble". This claim can seem paradoxical because, if the problem were simply that *more* goods are produced than people must consume to satisfy their natural needs, then there would not be any poverty or unsatisfied needs or involuntary unemployment. The question might simply be one of wasteful and inefficient *distribution* of goods, not unemployment or poverty. But that is not what Hegel means. He claims that the problem is an excess of supply or lack of demand, not a lack of supply or excess of demand, which creates the principal problem of modern economies. Though he does not completely or explicitly work it out, Hegel is already grasping towards what Marx and Keynes will call "effective demand", which is a need backed by the ability to pay for goods or products with money (e.g., wages), so-called purchasing power or disposable income.[72] So, Hegel will claim, it is possible for capitalist firms which employ workers to produce an amount of goods that is greater than the effective demand of consumers (i.e., disposable income); it is possible that the working population (i.e., supply of labor) is greater than capitalists' effective demand for labor

[72] Cf. Keynes 1964, 33, 97, 342; Marx 1991, 486, 281-2, Marx 1990, 567, Marx and Engels 1989b, 133. Cf. Avineri 1972, 148-9. Smith also presents this notion, though it will have a different meaning for him, as I address in following chapters (cf. Smith 1993, 54, I.vii). Malthus is one post-Smithian who, like Sismondi, will develop this notion, as I address in later chapters (cf. Malthus 1836, 411, fn.; 405, 311, 315, 325, 405, 416).

(i.e., investment in wages), which will mean that there will be involuntary unemployment (i.e., poverty, the "rabble"). Thus, the tragedy of modern economies and the "rabble", which the pathology of the latter illustrates, is that its problems are not *absolutely* necessary, because they could be solved technologically, though they are conditionally *necessary* in modernity, because *all things remaining the same* (i.e., capitalist property relations) they are inevitable.

The most important statement which Hegel makes in his published works about the "rabble" occurs in his *Philosophy of Right*. In § 245, he expresses the belief that the economic POU is the cause of involuntary unemployment, modern poverty, and the "rabble". But he also presents an argument for the claim that there does not appear to be any solution to the problem. In a way which is strikingly similar to the orthodox economic reflections of David Ricardo[73] and the heterodox reflections of Robert Thomas Malthus,[74] he considers two conceivable remedies and rules them out, because they come into conflict with "the principle of civil [or bourgeois] society", according to which one must earn one's own livelihood through one's own labor and thereby gain the normal sense of independence or bourgeois consciousness. For, it is when individuals cannot provide for their own livelihood through their own activity, due to socio-economic circumstances, that they fall into the class of the "rabble". First, I will quote Hegel's statement in its entirety. And then I will reconstruct the argument he presents. He writes:

> [1] If the direct burden [of support] were to fall on the wealthier class, or if direct means were available in other public institutions (such as wealthy hospitals, foundations, or monasteries) to maintain the increasingly impoverished mass at its normal standard of living, the livelihood of the needy would be ensured without the mediation of work; [but] this would be **contrary to [2] the principle of civil society** and the feeling of self-sufficiency and honour among its individual members. Alternatively [3], their livelihood might be mediated by work (i.e. by the opportunity to work) which would increase the volume of production; but [3] **it is precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive that the evil [*Übel*] consists [*besteht*]**, and this is merely exacerbated by the two expedients in question.

[73] Cf. Ricardo 1951a, 107, V.
[74] Cf. Malthus 1836, 321, 425-6, 429-31, 437.

> This shows that [4], **despite an excess of wealth, civil society is not wealthy enough** – i.e. its own distinct resources are not sufficient – **to prevent an excess of poverty and the formation of a rabble.**[75]

Hegel's final, paradoxical formulation [4] — an "excess of wealth" and an "excess of poverty" — expresses his view of what I call the economic "POU". The penultimate sentence [3] contains the claim that the economic POU is the ultimate cause of involuntary unemployment, modern poverty, or the "rabble" ("the evil [*Übel*] consists [*besteht*] precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive").[76] Slightly later Hegel similarly describes "the emergence of a mass of people who cannot gain satisfaction for their needs by their work when production exceeds the needs of the consumers".[77] Yet by "needs" here Hegel must clearly mean "effective demand" (i.e., disposable income from employment), rather than absolute needs, as he signals in the passage above ("a proportionate number of consumers *who are themselves productive*" [i.e., receive wages]).[78] Together with "the principle of civil society", these are his assumptions for his argument about the intractability of the problem of the "rabble".

First, Hegel considers [1] a distribution of wealth from the wealthy either through taxation or charity as a conceivable remedy to the problem of the "rabble".[79] This *gratis* support would "ensure the livelihood of the needy", but it would do so without "the mediation of work", hence it would be "contrary to [2] the principle of civil society and the feeling of self-sufficiency and honour among its individual members". In other words, the recipients of *gratis* support will not have a healthy *bourgeois consciousness*, but rather the mentality of the "rabble". So, this fails.

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[75] Hegel 1991a, 267 § 245.
[76] Hegel 1991a, 267 §§ 245. Translation modified.
[77] Hegel 1991a, 269 § 248. Addition.
[78] Hegel 1991a, 267 §§ 245. Translation modified.
[79] Cf. Sherover 1979, Kaufman 1997.

Second, Hegel considers [3] what might happen if the "rabble" were given the opportunity to work or employment. The way in which this conceivable remedy fails illustrates his view of the economic POU and his belief that it ultimately causes involuntary unemployment, modern poverty, and the "rabble" phenomenon. Hegel takes it as a *premise* [4] that "the evil" or problem consists "in overproduction" and lack of consumption by productive workers (e.g., wages, effective demand).[80] Thus increasing employment and hence production would only produce more commodities, for which there is insufficient effective demand, only making the problem or "evil" worse. Commentators often take Hegel's second consideration to mean something like the so-called Keynesian public-works programs or federal job guarantees that were instituted in the United States after the great depression in the 1930s (e.g., the New Deal). Indeed, they relate Hegel's ambivalent view that economic problems can only be dealt with through state intervention, though the free market is preferable,[81] to Keynes,[82] while at the same time taking Hegel's pessimism to cast doubt on the feasibility of that possibility. However, one must note that Hegel is specifically discussing private sector production of final *consumer goods* here, not capital goods (e.g., means of production) or public infrastructure. One must be cautious about the economic details in cases such as these. All he is saying is that the POU causes the problem in question.

Ultimately, Hegel concludes that the modern economic system in our modern society is unable to solve the economic POU, the problem of unemployment, poverty, and the "rabble", and

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[80] Hegel 1991a, 267 §§ 245. Translation modified.

[81] Cf. Hegel 1991a, 262 § 236: "At the opposite extreme to freedom of trade and commerce in civil society are public arrangements to provide for and determine the work of everyone. These included, for example, the building of the pyramids in ancient times, and other enormous works in Egypt and Asia which were undertaken for public ends, and in which the work of the individual [*des Einzelnen*] was not mediated by his particular arbitrary will and particular interest".

[82] Cf. Avineri 1972, 99-100, 151-2; cf. Mann 2015, Mann 2017a. However, I would argue that Hegel is actually closer to that of the Freiburg school of so-called Ordoliberalism (cf. Böhm 1979, Erhard 1955, Erhard 1958a, Erhard 1958b, Erhard 1958c, Erhard 1959), which informed the postwar policy of the Cristian Democratic Union.

that it is better to simply leave matters as they are on the level of political economy,[83] to transition to a discussion of the necessity of state intervention.[84] In his early lectures, he calls the situation one of "poverty for which it becomes impossible to do anything",[85] while in his later lectures he states that one can only "leave them to their fate".[86] Hegel is basically saying that overproduction and underconsumption of commodities are both inherent features of the same basic economic structure or process, and that, consequently, unemployment, poverty and ultimately the "rabble" are built into the very structure of modern bourgeois society (i.e., capitalism) from the start.

With Hegel's statements in the *Philosophy or Right*, one has his general view of the origin of the phenomenon of involuntary unemployment, modern poverty, and the "rabble" on the table, as it were. It is just the economic problem of overproduction or underconsumption (POU). Now it is necessary to step back and consider the circumstances in which these problems arise, according to Hegel, as well as some of his other, more detailed statements on the POU, which will support my interpretation, before considering a further negative consequence of the POU.

First, it is essential to appreciate that Hegel believes that the economic context in which the POU emerges, gives rise to involuntary unemployment, modern poverty, and thus the "rabble", is the context of capitalist profit-seeking. In his lectures, Hegel gives clear indications that he is concerned with capital (*Kapital*) and the capitalist class (*Klasse*),[87] that he thinks that the problematic division of rich and poor as to do with the accumulation of capital,[88] that capitalists

[83] Hegel 1974, 612; cf. Hegel 1991a, 267 § 245; cf. Avineri 1972, 109, 148, 153-4; cf. Wood 1990, 248.
[84] Hegel 1991a, 260-3 §§ 230-6. Cf. Hegel 1995, 209. Cf. Plant 1973, 111-3 and Plant 1973, Neocleous 1998, Herzog 2015.
[85] Hegel 1983a, 140.
[86] Hegel 1974, 612.
[87] Hegel 1974, 608-11.
[88] At Hegel 2000, 145 Hegel speaks of the accumulation of capital and rich and poor.

exploit the poor,[89] that poverty is *defined* in terms of people's lack of capital,[90] and that an excess of wealth in some hands and poverty in other corners of an economy means overproduction of commodities and excess capital.[91] While he is not entirely consistent, he does express the view that production and accumulation of wealth on the basis of capital becomes an end in itself in modern economies,[92] as I will briefly address again at the end of the next chapter, and that the aim of the capitalist is not consumption or satisfaction of needs, but rather profit.[93] It is this profit-oriented mode of production that is the basis of an over-production of goods (i.e., POU), which cannot profitably be consumed (i.e., effective demand), and which gives rise to the kind of modern poverty in which the "rabble" emerges (i.e., involuntary unemployment). Unfortunately, Hegel does not ultimately pursue these fruitful considerations in any conclusive or systematic way that could result in a satisfactory explanation of the problem. Yet he comes as close as possible to saying that the problem is just *capitalism* as such, without explicitly doing so. Indeed, his commitment to private property, individual initiative, and the "principle of civil [or bourgeois] society" prevent this.[94]

Yet this situation is not natural or unconditioned. In his published work, Hegel states that the needs which people have and the means which are produced in order to satisfy those needs are

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[89] In his lectures, Hegel writes: "When there is great poverty, the capitalist finds many people who will work for small wages, which increases his earnings; and this the further consequences that the smaller capitalists fall into poverty" (quoted in Wood 1990, 247).

[90] Cf. Hegel 1995, 210: "A poor person", Hegel states in his lectures, "is one who possesses neither capital [*Kapital*] nor skill" (my translation).

[91] At Hegel 2000, 147 Hegel claims that civil society is too rich *and* too poor, which means that too much has been produced and that there is too much capital in some hands, while not enough in others, for human needs to be met.

[92] Cf. Hegel 1995, 172, 174.

[93] Hegel claims at times that the aim of capitalist production is not consumption, but profit (Hegel 1995, 181 and 184) and at others that consumption is the ultimate aim of production (Hegel 1995, 182).

[94] Hegel 1991a, 267 § 245. Abstract Right, the actuality of modern freedom, *begins* with "property" (Hegel 1991a, 73f. § 41f.).

endlessly multiplied in order to produce a "**profit**" for capitalists in modernity.[95] And this exponential multiplication is the basis for the economic POU. In his *Philosophy of Right*, he writes:

> …the *means* employed by particularized needs, and in general the ways in which these are satisfied, are *divided* and *multiplied* so that they in turn become relative ends and abstract needs. It is **an infinite process of multiplication** which is in equal measure a *differentiation* of these determinations and a *judgment* on the suitability of the means to their ends – i.e. [a process] of *refinement*.[96]
>
> What the English call 'comfortable' is something utterly inexhaustible; its ramifications are infinite, for every comfort in turn reveals its less comfortable side, and the resulting inventions are endless. A need is therefore created not so much by those who experience it directly as those who seek to **profit** from its emergence.[97]

So, the creation of artificial needs, as it were, in order to produce profit, bears on the creation of artificial excesses and artificial or *socially produced* unemployment and poverty, which characterize the condition of the "rabble". Later, on the topic of division of labor, he continues:

> When the activity of civil society is unrestricted, it is occupied internally with *expanding its population and industry*. – On the one hand, as the association [*Zusammenhang*] of human beings through their needs is *universalized*, and with it the ways in which means of satisfying these needs are devised and made available, **the *accumulation of wealth* increases**; for **the greatest profit** is derived from this twofold universality. But on the other hand, the *specialization* [*Vereinzelung*] and *limitation* of particular work also increase, as do likewise **the *dependence* and *want*** [i.e., poverty] **of the class which is tied to such work** [i.e. the class of laborers, the working class]; this **in turn leads to an inability to feel and enjoy wider freedoms, and particularly the spiritual advantages, of civil society**.[98]

As the social division of labor exponentially increases in the course of profit-based production, so does the interdependence of all upon all and the capacity of society to produce more material wealth. But at the same time, it also concentrates wealth in the hands of a business class and so too the relative poverty of the working class in a particularly unfortunate portion of the would-be working class. The social division of labor and market interdependence of individuals increases

[95] Hegel 1991a, 229 § 191. Addition.
[96] Hegel 1991a, 229 § 191.
[97] Hegel 1991a, 229 § 191. Addition
[98] Hegel 1991a, 266 § 243.

the productivity of society, though it will not be for the sake of meeting human needs in the first instance, but rather the need of capitalists for profit. The satisfaction of human needs becomes a secondary consideration within modern property relations. Hence accumulation of wealth (i.e., capital) will proceed in a way which causes an unequal distribution of wealth, which, in turn, will create the principal problem for the functioning of the entire economic system (i.e., overproduction and underconsumption). In his early Jena lectures, he writes that this fact

> … condemns a multitude of people to a raw life, to stultification in labor and to poverty—in order to let others amass wealth and [then] to take it from them.[99]
> This inequality between wealth and poverty, this need and necessity, lead to the utmost dismemberment of the will, to inner indignation and hatred [i.e., the "rabble"].[100]

And in his later lectures on the *Philosophy of Right*, he writes:

> In the same proportion that wealth grows, so too does poverty, if not even further derivatives e.g. colonization.[101]
> The wealth of society on which the satisfaction of needs is based contains the aspect of contingency, specifically with respect to the participation of individuals in it. **The relation of the process in itself, on which wealth is based [i.e., accumulation of capital], produces the extremes of the rich and the poor**, i.e. of those who can easily satisfy their needs and those who cannot satisfy them.[102]
> That is the worm [that gnaws at] bourgeois society. Poverty, namely, is the general effect of bourgeois society in general.[103]

One aspect of the way in which increased productivity, which is subordinated to profit-seeking in capitalist economies and societies, also increases polarization and inequality has to do with the technological dimension of modern production. This consideration will be especially important for my argument in the chapters which follow. As early as his engagement with Adam Smith's work in his Jena period (1801-7), Hegel is concerned with the way in which technology in capitalism (i.e., innovation, efficiency maximization, cost cutting) can displace labor and create

[99] Hegel 1983a, 144.
[100] Hegel 1983a, 140.
[101] Hegel 1974, 494. My translation.
[102] Hegel 1974, 605. My translation.
[103] Hegel 2000, 144. My translation.

unemployment. By putting people out of work (so-called redundancies),[104] the automation and mechanization of the labor process creates involuntary unemployment and poverty, if workers are not quickly reemployed elsewhere. In his Heidelberg lectures of 1818-19, he states:

> The first contingency is that involved in the individual's participation in the general resources, since this participation presupposes health, skill, **capital** [*Kapital*] and so on, and also a major conjunction of factors far removed from the individual's own orbit. As born within civil society, individuals are [dependent] on these resources [i.e., health, skill, capital, etc.] for the actualization of their right to live [and] have to accept them as the inorganic nature and external conditions governing such a right.[105]
>
> **But whole classes, whole branches of industry can succumb to poverty when the means [i.e., goods, products] this sector of the population produces are no longer sold and their business stagnates.** The conjunction of the different factors involved goes beyond what the individual can grasp [i.e., a macroeconomic phenomenon], and here the state must provide [i.e., if it is to retain its legitimacy]. **The complexity of civil society itself also leads to poverty**, since the means of satisfying needs are too difficult [to obtain]. For very many people are invariably attracted by the possibility all have of earning their living among the numerous population of a wealthy country or town. For example, this far-reaching possibility draws many people into a capital city, but for the individual this possibility is a matter of chance, and **the rabble [*Pöbel*] increases by leaps and bounds along with poverty**.[106]

It is important to note here, as I will discuss much later, that even constant technological innovation, automation, and the rationalization of production, which *can* displace workers, might only give rise to a temporary or cyclical unemployment, which comprises a constantly rotating pool of persons. That would not give rise to the permanent, structural, and involuntary unemployment, which constitutes the impoverished part of society that Hegel calls the "rabble". So, the problem with capitalist production is more complicated than machinery and automation.

Second, in his lectures, Hegel emphasizes that the problem in question is not one of absolute needs (e.g., hunger), which is the problem in premodern history or in nature. Rather, it is the problem insufficient effective demand (i.e., disposable income) and involuntary

[104] Cf. Hegel 1991a, 272 § 253. Cf. Hegel 1983a, 140.
[105] Hegel 1995, 208-9.
[106] Hegel 1995, 210-11.

unemployment, which is an essentially modern phenomenon. In the following statement, he contrasts the natural situation of bare needs with the modern-social one and the conditions for satisfaction of needs. He states:

> Nature is fruitful, but limited, very limited, [while] the means of humans, by contrast are infinitely "more" fruitful, the wealth that can be produced by work [*Arbeit*] can increase infinitely. There is never a lack of such means that can be produced, though **there can indeed be a lack of consumers, of needs**.[107]

Elsewhere in his lectures, Hegel explicitly states that the economic problem of overproduction and underconsumption (POU) causes involuntary unemployment, an excess of workers' supply of labor over capitalists' demand for labor, and a lack of employment causes the kind of poverty he has in view with the "rabble". Regarding commodities generally, he states:

> It is **lack of employment** which is, as mentioned, **the main cause of poverty**. There always appears, under prosperous conditions of culture, an overpopulation. When the poor are given opportunities for work, all that happens is that the amount of commodities is increased. But **it is precisely the surplus of commodities which has caused unemployment. If [on the other hand,] the commodities are sold cheaper, production is ruined.** [Furthermore,] if the rich give direct assistance to the poor, they can spend less on their own needs, and thus another class suffers again because of this.[108]
>
> … poverty is the main ground of the rabble-mentality…[109]

The economic POU can "ruin" the capitalist enterprises which employ labor, if the economic POU results in an excessive supply that compels capitalists to sell products below their costs of production, eliminating profits and potentially causing bankruptcies, if not a chain reaction of them and therefore crises. And regarding capital itself, slightly later he similarly continues:

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[107] Hegel 1974, 507 (my translation). Cf. Raymond Plant (1977b), 112: "When industry produced goods to satisfy the incessantly increasing pressure of [people's] wants, it may well find that in such a particular case there are not enough consumers for its products. In such circumstances, the bottom will drop out of the market for a particular commodity; those who, because of the continuing refinement of the division of labor within the system of need [i.e. the economy], are entirely dependent upon the industry producing that particular product will be thrown into idleness. The poverty resulting from such an economic slump will have two distinct sides: the actual level of physical deprivation involved and the social attitudes of those who are deprived. […] Hegel found no solution…"

[108] Quoted in Avineri 1985, 207. This will be Sismondi's view, as I discuss in chapter 5.

[109] Hegel 1991a, 454.

> On the one hand, civil society is too poor to be able to maintain its own poor people. On the other hand, this means that civil society is too rich. For it is the case that **the poverty of the workers (*Arbeitenden*) consists in the fact that what they produce does not find a buyer. There is too much capital (*Kapital*), and more is being produced than the nation can consume.** Because of this surplus civil society must seek to extend its commerce [i.e., further investment]. In this way the poor return to work and can achieve their subsistence.[110]

So, an overproduction of consumer goods and capital goods or an overproduction or overaccumulation of capital in relation to effective demand *causes* the problem in question. If more goods are produced than can be profitably consumed, in a fundamentally capitalist economy, then the entrepreneurial business class may operate at a loss and scale back production in a way that creates unemployment (i.e., more poverty). Or, if more profits are generated and more capital is accumulated than can be reinvested in profitable avenues for further production, then the economy will similarly "stagnate", as Hegel recognizes. Here Hegel's view of political economy goes far beyond the orthodox view of classical political economy, as I discuss later, even if it does not go far enough to present a satisfactory theory (e.g., Keynes or Marx's), as I will argue much later.

In sum, I propose the following reconstruction of Hegel's view. He ultimately claims that the economic problem of overproduction or underconsumption gives rise to the problem of the "rabble" in modern, capitalist societies. And the argument would run as follows:

> 1. The POU → Unemployment ("…it is precisely the surplus of commodities which has caused unemployment".)
> 2. Unemployment → Poverty ("It is lack of employment which is, as mentioned, the main cause of poverty".)
> 3. Poverty → "Rabble" ("…poverty is the ground of the rabble-mentality…")
> ∴ Therefore, the POU → "Rabble" ("the evil [*Übel*] consists [*besteht*] precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive".)

Again, Hegel is not claiming that poverty as such gives rise to the "rabble" or its mentality in a group of people, but rather the situation of poverty which is caused by what modern economists

[110] Quoted in Avineri 1985, 208. This will be Malthus's view, as I discuss in chapter 5.

call “involuntary unemployment” (“supporting oneself by one’s own activity and work”), which Keynes called “poverty in the midst of plenty”, and which is uniquely modern. Nowadays we say that the economy operates at less than “full employment”, and thus there is a permanent pool of involuntarily unemployed persons who are simply forgotten. Yet one can already ask: if the POU gives rise to the “rabble”, what gives rise to the POU? And I stress that there is an economic explanation which can be presented here. Yet one will have to wait for Keynes or Marx, as I will argue, for an answer to this this question.

Third, and finally, there is another, further consequence, which follows from the economic POU, according to Hegel. In short, he thinks that the overproduction or underconsumption of commodities and capital that is inherent to modern economies necessitates their search for foreign markets and investment opportunities. A lack of effective demand for products domestically necessitates that capital finds or generates effective demand abroad, whether with the carrot or the stick, as it were. And regarding the lack of effective demand for labor or the involuntarily unemployed portion of European population (i.e., “rabble”), Hegel writes that “what happens in America has its origins in Europe. Europe has thrown its **surplus population** to America…”[111] The conflicted internal dynamic of economic activity necessitates an expansion that develops a world market and coordinates the entire world into a single economic system: trade becomes global in a way that has a “world-historical significance” (i.e., global capitalism).[112] And colonialism and

[111] Hegel 1988b, 86.

[112] Hegel 1991a, 268 § 247. Here it is worth considering, for example, that the regular system of synchronized clocks and time zones, and the idea of simultaneous points in space on the earth, is a social institution which cannot be understood independently of global capitalism. At some point in early modern Europe, not to mention the rest of the world, each village kept its own time or later set its clocks to a central belltower or church. Only with the dawn of international and global trade and transport schedules and contracts could the idea emerge of a single unified system of global time and space and then the practice of global synchronous coordination (i.e., clock-time).

imperialism are a further necessary consequence of the modern economic form of society, over and above poverty and the "rabble".[113] In the *Philosophy of Right*, Hegel writes:

> This inner dialectic of society drives it – or in the first instance *this specific society* – to go beyond its own confines and **look for consumers**, and hence the means it requires for subsistence [*Subsistenz*], in other nations [*Völkern*] **which lack those means of which it has a surplus** or which generally lag behind it in creativity, etc.[114]
>
> …***colonization***… to which the fully developed civil society is driven, and by which it provides part of its population with a return to the family principle in a new country [i.e., the state provides for its people by relocating to them where work is available and demand can be found], and itself with a new market and sphere of industrial activity.[115]
>
> **Civil society is driven to establish colonies**. The increase of population alone has this effect; but a particular factor is the emergence of a mass of people who cannot gain satisfaction for their needs by their work when production exceeds the needs of the consumers.[116]

This is arguably one of Hegel's most prescient, coherent, and valuable claims in his *Philosophy of Right*. In sum, the economic POU causes involuntary unemployment and modern poverty, which causes the "rabble", *but also* colonialism, imperialism, and further global conflict.[117]

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Before concluding, I briefly would like to address one other aspect of Hegel's account of the "rabble" which might seem *prima facie* not to sit well with my interpretation of it as the involuntarily unemployed, those who are subject to enforced idleness and receive whatever income they can passively without earning it for themselves. It is what has come to be called the "rich rabble" in the literature, or the phenomenon in which a mentality very similar or even analogous to the very poor and unemployed also appears among the incredibly wealthy, according to

[113] Cf. Hilferding 2012, Luxemburg & Bukharin 1972, Marx 1990, 782, 886, 935.
[114] Hegel 1991a, 267-8 § 246.
[115] Hegel 1991a, 269 § 248.
[116] Hegel 1991a, 269 § 248. Addition.
[117] Cf. Hirschman 1976, Serequebernham 1989, Pacquette 2012, Pradella 2014.

Hegel.[118] That is, Hegel thinks that the highest points of wealth and lowest points of poverty coincide in the respect which he calls the "rabble" mentality.[119] How can they be the same? Rather than discrediting an economic understanding of the "rabble", I claim that the rich variant only strengthens that interpretation. First, consider the following statement from his lectures on the *Philosophy of Right*. He writes:

> On the one hand, poverty is the ground of the rabble-mentality, the non-recognition of right; on the other hand, **the rabble disposition also appears where there is wealth. The rich man thinks that he can buy anything**, because he knows himself as the power of the particularity of self-consciousness. Thus wealth can lead to the same mockery and shamelessness that we find in the poor rabble. The disposition of the master over the slave is the same as that of the slave… These two sides, poverty and wealth, thus constitute the corruption of civil society.[120]

The "rich rabble" recognizes no standards beyond itself and its own particular judgment and opinion, because it can buy anything it likes, and wealth is power. Elevated beyond the ordinary sphere of everyday life in society, it simply does not have to abide by common mores

Second, in the *Philosophy of Right*, Hegel also briefly speaks of the ultra-wealthy person who belongs to no professional community in the ordinary sense that could provide any standards for quality of work, measures or success or recognition among peers (what Hegel calls *Korporationen*). There he suggests that the only task of the incredibly wealthy person is to obtain as much wealth or money as possible in any way possible, and this is indeed the only way for to "gain recognition" among other ultra-wealthy persons. This "isolation reduces him to the selfish aspect of his trade",[121] Hegel writes. Moreover, this quest knows no perfection or completion, because it is a quest "without limit", because there is always more money to be had in principle.

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[118] Cf. Hegel 1991a, 454; Hegel 1974, 608; Hegel 1983b, 196; Ruda 2011 and Ruda 2017; Brooks 2015; Heisenberg 2021.

[119] This should come as no surprise to readers of Hegel with a sense for his humor. Cf. Hegel 1977, 210: "Nature… combines the organ of its highest fulfillment, the organ of generation, with the organ of urination".

[120] Hegel 1991a, 545.

[121] Hegel 1991a, 272 § 253.

Now, despite the initial strangeness of Hegel's claim, there is a striking isomorphism or homology between the very poor and the very rich. Though it might at first seem paradoxical, it makes *more* sense, I argue, if one considers it closely in the context of economic theory. First, recall, in this chapter I have argued that there is more to the economic understanding of the "rabble" than its poverty, because there is more to economics than explaining wealth and poverty. "Involuntary unemployment" or enforced idleness causes poverty, but it also has deeper economic causes which can be explained (e.g., labor markets). Those who suffer from enforced idleness are at the mercy of whatever income they passively receive without earning it, which is never enough. Second, recall, the characteristics of the "rabble" mentality: envy, dissatisfaction, resentment, indignation, and the feeling that the society of which we are all a part and the duties of society, which correspond to our rights, are an external imposition which one would be better off without. Both enforced idleness and these complementary personality traits are also characteristic of what used to be called the "idle rich".

Consider in this connection the view of class found in classical political economy. According to Smith, Ricardo, Marx, and others, society consists of workers who receive wages, capitalists who receive profits, and landlords who receive rents.[122] Workers earn wages by producing real goods and services. Capitalists earn profits by coordinating investment, innovation, and production. But what do landlords do? From a classical perspective, nothing. As John Stuart Mill puts it: "They grow richer, as it were, in their sleep, without working, risking, or economizing".[123] Landlords are the archetypical "absentee owners" of real assets which legally entitle them (with the sanction of the police and the state) to a portion of other people's income in exchange for the use of the real assets which they own. That is, landlords receive what used to be

[122] Cf. Marx 1991, chapters 48 and 52. In what follows I will discuss this classical conception of class.
[123] Mill 1985, 169.

called “passive” or “unearned income”, or “something for nothing”, for which they do not need to *do* anything,[124] which contradicts the essential characteristic that Hegel calls the “principle of bourgeois society” in his discussion of the “rabble”. Similarly, in developed, capitalist economies, the owners of capital are not necessarily the same people who manage it. They are so-called *rentiers*, inactive bondholders, a so-called *leisure class*, in the words of Thorstein Veblen, which might live on interest, dividends, trust-funds or inheritances.

From this vantage point, it is easy to imagine how the ultra-rich owners of assets and recipients of passive or unearned income could develop a “rabble” mentality.

First, like the poor “rabble”, their socio-economic or class-situation puts them into a position analogous to *enforced idleness* akin to involuntary unemployment. While the poor “rabble” could not work if they *wanted* to, the “rich” rabble cannot find anything they *need* to do. They receive whatever income they can passively without earning it for themselves. It is easy to see how a distorted sense of entitlement can take root here. The involuntarily unemployed or “poor rabble” rightly feels that it has a right to a livelihood, which it nevertheless cannot provide for itself. Similarly, the “rich rabble” feels that it has a right to its livelihood, which it does not provide for itself, Hegel claims.

Second, the rich “rabble” might think that because they can buy anything they like with no effort of their own, they are also above the law which only applies to ordinary citizens beneath themselves. Society’s laws, taxes, duties, and other human beings in one’s community, for example, might seem like an external imposition which they would be better off without, despite the fact that their wealth accrues to them *only if* the greater part of society performs the task of producing the wealth which forms their income (e.g., rent, interest), on which they depend for their

[124] Cf. Veblen 1997.

existence. Such a standpoint presents motivations to undermine public institutions (e.g., contempt for the poor or uneducated and charity, tax evasion, buying politicians, etc.). Why should the wealthy have to pay taxes for public institutions or support for the misfortune of the lazy poor?

These are all the aspects of the poor "rabble" in another form: feeling outside of the law and social order, experiencing social mores and customs as an external imposition, hostility towards public institutions and participation in common activities, and the desire to escape ordinary duties. It is perfectly conceivable that rentiers or recipients of passive or unearned income can also develop a bitter mentality of entitlement which regards the society of which one is a part as a burden which one would be better off without (e.g., radical libertarianism) or perhaps just the kind of individualism that declares that "there is no such thing as society". So, while it is at the opposite end of the spectrum, an economic and class perspective can arguably equally well situate the poor as the rich "rabble".

6. Conclusion: The Problem with Hegel's Account

In this chapter, I have argued that Hegel believes that modern, capitalist economies give rise to the problem of overproduction or underconsumption (POU), which gives rise to involuntary unemployment (enforced idleness), which gives rise to the specifically modern kind of poverty, which he characterizes as the "rabble" (*Pöbel*), as well as further related political-economic problems (e.g., colonialism, imperialism). Anticipating what will come in the rest of this dissertation, in the following chapter I will address Hegel's complicated relationship with the orthodox, classical theory of political economy (OCT), which is expressed in the works of Adam Smith, Jean Baptiste Say, James Mill, and David Ricardo, the fundamental concepts or premises

(*Grundbegriffe*) of which Hegel seems to adopt.[125] Not only does he try to unite the *laissez faire* economics of the OCT and the latter's belief in automatic equilibrium of supply and demand or harmony of production and consumption with a state-interventionist approach to problems such as the "rabble" (e.g., the New Deal).[126] If one looks closely at the details of the OCT, one also sees that his view of the "rabble" is also completely *incompatible* with it. The advocates of the OCT reject the possibility of the POU or involuntary unemployment ("general gluts") *a priori*,[127] as I will address later. So, Hegel's view is extremely heterodox. On the one hand, his heterodoxy would arguably mark progress over the OCT from the viewpoint of Marx or Keynes. On the other hand, Marx also will point out that accounts such as Hegel's view of the POU ("underconsumptionism")[128] also suffer from their own theoretical problems ("pure tautology"),[129] and contemporary economists also agree that the economic POU cannot be an independent cause of involuntary unemployment, modern poverty, or the "rabble".[130] Hegel would have to — yet does not — address any deeper explanation of the POU in order to substantiate his view of the "rabble" such that it can make good sense. And so, one must examine the matter in further detail, as I pursue it in the rest of this dissertation.

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[125] Cf. Hegel 1991b, 30 § 16; Hegel 1991a, 227 § 189. The concepts that Hegel names in his discussion of "civil society" in his *Philosophy of Spirit* (Hegel 2007) are markets, or what Hegel calls the "system of needs" (§ 524); the social "division of labour" (§ 525); and "estates" or classes (§ 527).

[126] Cf. Hegel 1991a, 261-2 § 236: "The differing interests of producers and consumers may come into collision with each other, and even if, *on the whole*, their correct relationship re-establishes itself automatically, its adjustment also needs to be consciously regulated by an agency ["public authority"] which stands above both sides".

[127] Cf. Smith 1993, 223-4, II.v; Smith 1993, 232, III.i; Say 1821, 8; Say 1834, chapter 15; Mill 1808, 84-5; Ricardo 1951a, 291-2, XXI.

[128] Cf. Bleaney 1976.

[129] Cf. Marx 1992, 486.

[130] Cf. Schumpeter 1954, 739.

Chapter Two: Hegel and the Limits of Classical Political Economy

1. Introduction: Hegel and Political Economy

In the previous chapter, I argued that Hegel recognizes the problem of overproduction or underconsumption (POU) as an empirical fact. He thinks that it is the cause of modern poverty and the "rabble" (*Pöbel*),[1] which later economists call involuntary unemployment, or "the paradox of poverty in the midst of plenty".[2] In later chapters, I will locate the POU and involuntary unemployment or the "rabble" within the larger historical-theoretical context of the political economy—how it relates to the orthodox, classical theory (OCT, i.e., Smith, Say, Mill, and Ricardo), heterodox, classical theories (e.g., Sismondi, Malthus, "underconsumptionism"), and more radical alternatives to the classical theory (e.g., post-Keynesian macroeconomics, Marx's theory). In this chapter, meanwhile, I will locate political economy itself within the context of Hegel's view of the sciences and the way in which Hegel's own philosophical project relates to the science of political economy as he understands it—his *Realphilosophie.* Doing so will orient the larger argument which I present in the rest of the dissertation which I will state momentarily.

Hegel's philosophical project, expressed in his *Encyclopaedia of the Philosophical Sciences*, is an attempt to take up the "fundamental concepts" (*Grundbegriffe*) contained in the various special sciences (e.g., physics, chemistry, biology, anthropology, psychology, political economy, etc.) and to present a unified, coherent picture of the world as a whole. Only a universal science or first philosophy can present such an account, according to Hegel. Given that his ambition is to address the way in which all sciences hang together, he will obviously also address

[1] Cf. Hegel 1991a, 267 § 245: "it is precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive that the evil [*Übel*] consists [*besteht*]…"
[2] Keynes 1964, 30.

the special science of political economy and what he takes to be its "fundamental concepts", which he takes up in his own account. They are markets or the "system of needs" (*System der Bedürfnisse*), the social division of labor, and classes (*Stände*, *Klassen*). It is with these three concepts that Hegel intends to give his account of civil or bourgeois society, which culminates in the POU and the "rabble", which motivates the "transition", in his argument, from "civil society" to "the state", which would have to enter the picture in order to address such problems with policy.[3]

In this chapter I argue that the specific points of reference in the theory of political economy are those of the OCT, which Hegel names ("Smith, Say, and Ricardo"), and which present the "fundamental concepts" that he adopts. But markets, the social division of labor, and classes, are not enough to give rise to the specific phenomenon which Hegel has in view under the label of the "rabble" (i.e., POU, involuntary unemployment). The "fundamental concepts" of the OCT will not be able to license his conclusion, which is in fact extremely heterodox. And, moreover, the OCT in fact *rejects* the possibility of the POU, involuntary unemployment, and therefore the "rabble".[4] Indeed, the assumptions of the OCT (e.g., "Say's Law") will rule out the very possibility of the POU *a priori*. So, there is a problem with Hegel's account. He must choose between his orthodox assumptions or premises and his heterodox conclusion. And so, the question will be, which concepts *would* one have to adopt in order for his heterodox conclusion to follow? Which premises *would* one have to assume, such that the empirical phenomena of the POU, involuntary unemployment, and "the rabble", which Hegel (among others) recognizes as actual empirical facts, could be possible and be explained? As the young German idealists posed their problem a

[3] Hegel 1991a, 273 § 256.

[4] It denies that so-called *general gluts* of unsold commodities are possible. Cf. Smith 1993, 223-4, II.v; Smith 1993, 232, III.i; Say 1821, 8; Say 1834, chapter 15; Mill 1808, 84-5; Ricardo 1951a, 291-2, XXI.

generation earlier, the conclusion is in place, but the premises are missing.[5] In the rest of this dissertation, I will therefore argue that *Marx* provides the premises (i.e., heterodox concepts of value and capital) which are required for Hegel's heterodox view to have any sense, and Marx will be able to explain the problem Hegel recognizes.

Before proceeding to my discussion in this chapter, it is important to distinguish my approach from others, which I will take together here, despite the relative differences between them. In my approach, as I mentioned in the previous chapter, I will treat Hegel's recognition of the economic POU, involuntary unemployment, modern poverty, and the "rabble", as a topic from the history and philosophy of social science, as a problem of political economy, in a way which is very different from the approach which often finds in the literature. Many accounts address Hegel's view in terms which are either primarily philosophical or which address his statements e.g., about the "rabble" in *ethico-political* terms (e.g., policy). Poverty and the "rabble", on this view, present a *philosophical problem* for Hegel's *philosophical project* concerning the actuality of the idea of freedom. For example, a pressing question or contention for these sorts of views might be whether Hegel's "transition" from "civil society" to "the state" is legitimate or not, or whether it succeeds or fails to solve the problem of the "rabble" (e.g., his discussion of "corporations"), and just what this would mean for his project. Such views take Hegel's statements on political-economic issues in relative isolation from actual political economic theories (i.e., explanations), and try to find an independent significance in them such that political economy itself is not at the center of attention.[6] For example, even some commentators who recognize and stress the importance of political

[5] Cf. Schelling: "'Philosophy is not yet at an end. Kant has given results; the premises are still missing. And who can understand results without premises?' Such was Schelling's expression of this mood in a letter to Hegel on January 6, 1795" (quoted in Forster 2012, 154).

[6] Cf. Ruda 2011 & 2017. A similar yet very different account in this camp is Herzog 2013, Herzog 2015. Cf. Avineri 1972, 109, 148, 153-4; Teichgraber 1977, Fraser 1996, Whitt 2013, Hudson 2014, Kain 2014, Heisenberg 2017.

economy have not gone into the specifics of heterodox economic theory (e.g., Sismondi, Malthus, Keynes, Marx), and the way in which it can illuminate the problems which Hegel recognizes, as I argue later in this dissertation.[7] It must also be remarked that "solving" concrete political problems is not Hegel's obligation. As he emphasizes in the *Philosophy of Right*, telling the world how it *ought* to be or trying to *make* so is not the task of philosophy, but a task of real politics. Philosophy must understand the way the world actually *is*.[8]

2. Hegel's Philosophical System of the Sciences

Hegel's view of science is a controversial topic on which opinions differ. A principal critic of Hegel, Marx, claims early on in his critical writings, that philosophy cannot conduct itself independently of the special empirical sciences (i.e., *apriorism*), but rather only in relation to them, and this claim is often understood as a jab against Hegel.[9] Yet the two are closer than it might appear. The claim that Hegel is philosopher of science in some sense akin to those who claim that "philosophy of science is philosophy enough" might seem preposterous to many of his readers today.[10] Yet I will argue something along these lines. Hegel himself thinks that philosophy — and therefore his own philosophical project — must be conducted in relation to the special empirical sciences. A universal or first philosophy formulated in total isolation simply would be a reversion to dogmatic, scholastic metaphysics (i.e., apriorism).[11] Philosophy can legitimately occupy its

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7 Hirschman 1976 and Avineri 1972 do so to a limited extent. Fatton 1986 comes close to the straightforwardly political economic approach I present here by claiming that Hegel expresses the limits of classical political economy, yet still remains primarily preoccupied with *ethico-political* philosophical concerns. Cf. Mann 2015 and Mann 2017a, who relates Hegel to Keynes, but nevertheless neglects the specific details of a lack of "effective demand" or "involuntary unemployment" as a cause of the "rabble".

8 Cf. Hegel 1991a, 20-4.

9 Cf. *The German Ideology*: "When reality is depicted, philosophy as an independent branch of knowledge loses its medium of existence" (Marx and Engels 1978, 155).

10 Quine 1953, 446.

11 Cf. Kant 1996, Bxiv, Bxxx, Bxxxv; Ladyman and Ross 2007, 15-17ff.

position *only if* it succeeds at understanding and unifying the various empirical, special sciences into a unified picture of the world as a whole.[12] Marx also claims that Hegel adopts the "standpoint" of "modern political economy".[13] And indeed, I will argue, Hegel does straightforwardly adopt the foundational assumptions of the orthodox, classical theory of political economy (OCT).[14] This is of a piece with his program.

2.1. Special Sciences and Universal or First Philosophy

In many corners of the philosophical world, Hegel's philosophical system has a bad reputation for being the kind of *a priori* metaphysics which tries to spin empirical facts out of conceptual thin air, and which Kant rejected as "dogmatism" (i.e., *apriorism*).[15] However, this interpretation is mistaken. If one closely considers the statements which Hegel makes about the relation between philosophy and sciences, one gets a very different picture. All of Hegel's works are preoccupied with science and full of concepts from the sciences of his day, from his *Phenomenology of Spirit*, which opens with the preface "On the Scientific Mode of Cognition [*Erkenntnis*]", to his *Science of Logic*, first book of which (the Doctrine of Being) consists of conceptual determinations from mathematics, and the second and third books of which (the Doctrines of Essence and the Concept) contain concepts from the sciences (e.g., force, mechanism, chemism, organism, etc.),[16] to his *Encyclopaedia of the Philosophical Sciences*. In the last case, for example, he discusses the

[12] Perhaps needless to say, this presents an incredibly demanding conception which few if any could satisfy today. Though the idea is attractive, coherent, and compelling, I by no means suggest that Hegel actually succeeds.

[13] Cf. *Economic and Philosophic Manuscripts of 1844*: "Hegel's standpoint is that of modern political economy" (Marx and Engels 1978, 112).

[14] Cf. Avineri 1975: "Hegel's concept of civil society, and hence his whole political philosophy, is premised on an integration of the major tenets of modern political economy into his philosophical system" (78). Cf. Avineri 1972, 90.

[15] Kant 1996, bxxxv. Representatives of a much stronger, metaphysical reading of Hegel include Taylor 1975, Rosen 1984, Beiser 2005, Houlgate 2005b, and Horstmann 2006, though each from various angles.

[16] Cf. Wolff 2013, 89.

interpretation of Newton's theory in relation to Kepler[17] and the debate of the concept of "caloric" in the theory of heat,[18] as well as the theories of Bichat[19] and Pinel,[20] but also the concepts of political economy, which I principally address in this chapter. Even in his so-called practical philosophy, his *Elements of the Philosophy of Right*, moreover, he states it is a work of "political science".[21] So, it is hardly an overstatement to say that his primary concern is *scientific* and that understanding his general view of philosophy in relation to the sciences is important for understanding it, as well as the limitations of his account of political economy, I will argue.[22]

Philosophy with a capital "P", in the sense in which Hegel calls it "science" (*Wissenschaft*), is a second-order examination of the first-order sciences of the world (e.g., physics, chemistry, biology, anthropology, psychology, political economy, etc.). It is an attempt to give an account of various kinds of account-giving which one finds in the sciences which are directed towards the world in which we live, or to know the various kinds of human knowledge in a unified way.[23] It is a science of sciences, as it were.[24] In each of his works, Hegel begins with an examination of what immediately appears to be given from some specific scientific standpoint or other, and he shows that it presupposes a whole host of other "mediating" assumptions or frameworks, propelling his discussion through a systematic account of how all the various scientific perspectives hang

[17] Hegel 1970, 62-84 §§ 269-270.
[18] Hegel 1970, 148-58 §§ 303-8 301f.
[19] Hegel 2007, 29-34 § 398; 65 §398, 79 §401.
[20] Hegel 2007, 114-30 § 408.
[21] Hegel 1991a, 21.
[22] To be clear, I am not claiming that Hegel's view of any particular empirical science is *true* or *correct*. Indeed, nearly all its content is false or misguided by contemporary standards. The general view alone is what I address.
[23] Cf. Moore 2011, 170: "The result is that sense-making comes to make sense of sense-making, and knowledge comes to know knowledge". For a discussion of Hegel's relation to the natural sciences along the lines I have presented here, cf. Buchdahl 1993.
[24] Cf. Rockmore 1989. While I accept that Hegel adopts a "unity of science program", I deny that the Vienna Circle or logical positivism is the best point of comparison here. The unity of science program is as old as Aristotle. Contemporary Hegel-scholars (Bowman 2013, 163-5; Varnier 2020, 75f.) argue that the view which Hegel presents is a kind of *ontic structural realism*, which one finds in contemporary philosophy of science. On that view, cf. Ladyman 1998. Ladyman 2001, Ladyman 2012, and Ladyman and Ross 2007, 65, 251-2. In what follows I return to this comparison and largely accept it.

together, ultimately culminating in the act of account-giving itself (i.e., philosophy). What propels his account is the inadequacy which each kind of account-giving suffers from, when it is taken in isolation. Namely, some individual kind of account-giving (e.g., biology) might give an account of the world, but it cannot give an account of the way in which it itself fits into the world of which it gives an account, how it coheres within a unified world-picture, or it cannot give an account of its own account-giving, of itself in relation to the world (e.g., psychology). Only philosophy (the act of universal account-giving itself) will be ultimately adequate to itself in this sense.[25] So, first philosophy is an attempt to construct a systematic view of the way in which the special empirical sciences cohere into a single, coherent view of the world as an ordered whole. In the words of Wilfrid Sellars, it is meant to provide a "synoptic view" of the world—how the partial views of the special sciences of things "hang together" generally.[26] It is not simply a baroque hierarchy of conceptual classifications or an *a priori* blueprint of the world.[27]

Hegel carves out a third way, as it were, between two the extremes of sheer positive naturalism, on the one hand, and pure *a priori* metaphysics, on the other. So, philosophy, in Hegel's sense, will be both *like* and *unlike* both, albeit in different ways.

On the one hand, what philosophy has in common with the special empirical sciences, unlike *a priori* metaphysics, is that it cannot be conducted in completely independent isolation

[25] Cf. Pinkard 1979 and Pinkard 2001, 348-51; Wolff 2013.

[26] Sellars 1963, 9. Cf. Sellars 1963 and 1990, 7: "The aim of philosophy, abstractly formulated, is to understand how things in the broadest sense of the term hang together in the broadest possible sense of the term". "Here the most appropriate analogy is stereoscopic vision, where two differing perspectives on a landscape are fused into one coherent experience" (ibid., 10). Cf. Ladyman and Ross 2007, 1, 65, 251-2. Similarly, Hegel claims in the preface to his *Phenomenology of Spirit* that "The True is the whole" (Hegel 1977, 11).

[27] The following ambiguous and therefore quite unfortunate analogy with which Hegel characterizes his *Science of Logic* has typically been taken (wrongly, I believe) as proof that Hegel is not doing what I claim: "… logic is to be understood as the system of pure reason, as the realm of pure thought. This realm is truth as it is without veil and in its own absolute nature. It can therefore be said that this content is the exposition of God as he is in his eternal essence before the creation of nature and a finite mind" (Hegel 1969, 50). For a better statement (i.e., methodological holism), cf. Hegel 1991b, 38-9 §§13-15.

from some concern with the way in which the world actually is (i.e., *apriorism*). Yet what philosophy does not have in common with the special empirical sciences is that its own content is not the empirical data of experience, or the immediate appearances in empirical explanations. The special sciences have their own "objects… and method" (e.g., atoms, forces, elements, organisms, agents, etc.). Philosophy does *not* have its own "objects…and method".[28] Philosophy takes the first-order cognitive content of the special sciences (e.g., laws, categories) "for **its own content**".[29] The content of philosophy is the "the **fundamental concepts of the particular sciences**".[30] So, the content of philosophy is just the first-order accounts and notions which thought presents of the world, seen from the second-order level of observation, as it were. Philosophy lets the first order empirical data fall away, but it retains and adopts the general representations or notions (*Vorstellungen*) which the sciences employ. It comprehends (*begreift*) them in a way which develops them into explicit concepts of the world in coherence with one another as a totality.[31] The content of philosophy is presented to the mind of the philosopher not directly by the world, but by the mind of the scientist involved in the special empirical sciences of the world.[32]

On the other hand, what philosophy has in common with *a priori* metaphysics, is that it is concerned with pure concepts. Yet what philosophy does not have in common with *a priori* metaphysics is that its concepts are fundamentally concepts of the ways in which the world is as

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[28] Hegel 1991b, 24 § 1.

[29] Cf. Hegel 1991b, 33 § 9: "...the relationship of the speculative science [i.e., philosophy] to the other sciences is simply the following: speculative science does not leave the empirical content of the other sciences aside, but recognizes and uses it, and in the same way recognizes and employs what is universal in these sciences, [i.e.] the laws, the classifications, etc., for its own content..."

[30] Cf. Hegel 1991b, 30 § 16: "As an *Encyclopaedia,* science [i.e., philosophy] is not presented in the detailed [historical] development of its particularization; instead, it has to be restricted to the [logical] beginnings [i.e., principles] and fundamental concepts [*Grundbegriffe*] of the particular sciences. […] The whole of philosophy genuinely forms *One* science; but it can also be considered a whole made up of several particular sciences".

[31] Cf. Hegel 1991b, 26 § 3, 33 § 9, 37 § 13.

[32] Here Hegel is arguably in the company of Plato and Aristotle, as comparison to the former's 'divided line' at the end of book six of *The Republic* might show or to the latter's division of the sciences in book six of the *Nicomachean Ethics.*

we know it from our scientific explanations of the latter. So, the sciences' frameworks provide the content for our ontology, albeit in a raw or disintegrated form, which philosophy refines and integrates. Philosophy will *depend* in some sense upon the development of the special empirical sciences, though it is not *identical* with the latter. As Hegel puts it in his *Encyclopaedia*:

> ...the development of philosophy is due to experience. ...the empirical sciences… have prepared the material for philosophy by finding universal determinations, genera, laws. ...philosophy does owe its development to the empirical sciences...[33]

> The relation of philosophy to the empirical sciences was discussed in the general introduction [to the *Encyclopaedia*]. Not only must philosophy be in agreement with our empirical knowledge, but the *origin* and *formation* of the Philosophy of Nature presupposes and is conditioned by empirical physics.[34]

When philosophy turns to the special empirical sciences, in order to develop their accounts into a unified and coherent view of the world as a whole, it finds before itself *completed* scientific theories. So, it might seem that theories are born into the world *ready-made*, much as the *a priori* metaphysician imagines that philosophy levitates a sphere of pure, independent thought. And yet this impression would be mistaken, give a distorted and thus misleading view of both the special empirical sciences and philosophy itself, according to Hegel. On the one hand, completed scientific theories, which might appear to philosophers to be pure *a priori* constructions, are in fact retrospective *reconstructions*, the production of which is the principal business of philosophy, for Hegel. And, on the other hand, the *a priori* standpoint of philosophy as a unified, scientific perspective, is itself also just a "rational reconstruction" of the conceptual achievements and assumptions of the special sciences as they develop historically.[35] Though it might not be entirely reducible to them, it would not exist as it does without them. It was not already or independently given at the historical outset (i.e., *apriorism*), but rather is a synthesis of the conceptual

[33] Hegel 1991b, 37 § 12.
[34] Hegel 1970, 6 § 246. For accounts of Hegel's view here, cf. Buchdahl 1993; Posch 2011, Wandschneider 2013.
[35] Cf. Lakatos 1970, 99f. for a similar discussion of "internal" (logical) and "external" (temporal) history of theories.

presuppositions of the sciences. In Hegel's jargon, "absolute knowledge" (*absolutes Wissen*) is just the knowledge of conclusions fused with the belated "recollection" of the path by which thought has arrived at them.[36] In his *Lectures on the History of Philosophy*, he states:

> If the science is perfected the Idea must certainly issue forth of itself; science as such no longer commences from the empiric. But in order that this science may come into existence, we must have the progression from the individual and particular to the universal — an activity which is a reaction on the given material of empiricism in order to bring about its reconstruction. The demand of **a priori knowledge**, which seems to imply that the Idea should construct from itself, **is thus a reconstruction only**… **Without the working out of the empirical sciences on their own account, Philosophy could not have reached further than with the ancients.** The whole of the Idea in itself is science as perfected and complete; but the other side is the beginning, the process of its origination. This process of the origination of science is different from its [logical] process in itself when it is complete, just as is the process of the history of Philosophy and that of Philosophy itself. In every science principles are commenced with; at the first these are the results of the particular, but if the science is completed they are made the beginning [i.e. principle]. The case is similar with Philosophy; the working out of the empirical side has really become the conditioning of the Idea, so that this last may reach its full development and determination. For instance, in order that the history of the Philosophy of modern times may exist, we must have a history of Philosophy in general, the process of Philosophy during so many thousand years; mind must have followed this long road in order that the Philosophy may be produced. In consciousness it then adopts the attitude of having cut away the bridge from behind it; it appears to be free to launch forth in its other only, and to develop without resistance in this medium; but it is another matter to attain to this ether and to development in it. We must not overlook the fact that **Philosophy would not have come into existence without this process, for mind is essentially a working upon something different [from it]**.[37]

The completed conception of science and therefore philosophy at which one arrives at the end of a process of human historical development was precisely *not* already given at the outset. The Hegelian claim that philosophical thought "gives itself its own content"[38] and can proceed conceptually through mere concepts alone in dialog with itself is therefore potentially quite misleading, because it is extremely qualified. For, it can do so *only* once it has already collected

[36] Hegel 1977, 493. Cf. Hegel 1977, 141.
[37] Hegel 1896, 176-7. For another discussion of Hegel's distinction between historical and logical senses of priority, cf. Hegel 1991a, 60-2 § 32.
[38] Pippin 2019, 90.

the conceptual resources of the sciences at its disposal, which is to say only *after* they have been historically developed and completed and transformed into an *a priori* construction. Thus, the history of sciences mediates the relation of pure thought to itself in philosophy at any present moment ("what lies before science [i.e. philosophy] is the rich content that hundreds and thousands of years of cognitive activity have brought forth for itself").[39] This is just the meaning of Hegel's claim that "the owl of Minerva begins its flight only with the onset of dusk".[40] In this light it is clear that the commonly held opinion that Hegel's view of history is simply the triumphal unfolding of a pre-established rational plan is a metaphysical caricature that could not be more mistaken.[41]

Hegel's conception of philosophy in relation to the special sciences amounts to a kind of holism. Any kind of holism rejects any kind of "substance dualism" or "elimiminative reductionism", because any kind of holism will rule out the views either that what there is consists of two different kinds of beings (e.g., mind and matter) or that what there appears to be from one perspective (e.g., economy, biology) is really just another kind of thing which is all that really exists (e.g., physical entities), respectively. Kenneth Westphal has argued that Hegel's view is a kind of "subtle emergentism", which is meant to rule out a reductively mechanistic conception of the world (e.g., billiard-ball atomism) *and* offensively metaphysical-holist views (i.e., theology), and I argue for this interpretation.[42]

As the term is used in the philosophy of science, an "emergent order" or "complex system" is a set of elements, the interactions between which give rise to what we perceive as the whole

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[39] Hegel 1991b, 14. Cf.
[40] Hegel 1991a, 23.
[41] Cf. Redding 1997: "[Hegel] is perhaps most well-known for his teleological account of history, an account that was later taken over by Marx and 'inverted' into a materialist theory of an historical development culminating in communism".
[42] Westphal 2008, 305. For a popular and accessible discussion of such a view, cf. Johnson 2001.

system or properties of the whole system, though they emerge "without central control" (e.g., the flight-pattern of a flock of birds), and we are never quite able to directly perceive the whole system itself (e.g., an economy).[43] On the one hand, the parts of the system are only what they are within the context of the whole system or in their mutual relations to one another, which thereby determine their individual properties, and hence the parts depend upon the whole system. On the other hand, however, the whole system consists of nothing other than the parts, does not exist independently of the parts, and so the whole system also depends upon the parts. The properties of the whole system are called "emergent" and the system is called "complex" because the properties of the individual elements (i.e., micro-scale) and the aggregate-level effects or properties of the system (i.e., macro-scale) cannot directly explain one other or be reduced to one another or simply equated, without succumbing to a *fallacy of composition*.[44] (For example, the parts of an object [e.g., a bag of sand] might be "light", though the whole object [bag of sand] is not "light"; the whole is "heavy", though the parts are not.) Emergent properties of complex systems are "scale-relative",[45] because they only obtain within the context of the set of relations between the elements of which the system consists. So, scientific ontologies are bound to explanatory contexts.

[43] Ladyman and Wiesner 2020, 45.

[44] Cf. Broad 1925, 61: "*Emergent Theories.* Put in abstract terms the emergent theory asserts that there are certain wholes, composed (say) of constituents A, B, and C in a relation R to each other; that all wholes composed of constituents of the same kind as A, B, and C in relations of the same kind as R have certain characteristic properties; that A, B, and C are capable of occurring in other kinds of complex where the relation is not of the same kind as; and that the characteristic properties of the whole R(A, B, C) cannot, even in theory, be deduced from the most complete knowledge of the properties of A, B, and C in isolation or in other wholes which are not of the form R(A, B, C). The mechanistic theory rejects the last clause of this assertion". For a popular discussion of "emergence", see Johnson 2001.

[45] Cf. Ladyman and Ross 2007, 199-200ff., 251-2. Bowman 2013, 163-5 and Varnier 2020, 75f. argue that Hegel's view is substantially like this *ontic structural realist* view (cf. Ladyman 1998, Ladyman 2001, Ladyman 2012). For discussion of the application of ontic structural realism to economics, cf. Ross 2006.

In Hegel's view, as he puts it at various points throughout his works, "whole" and "part" are reciprocal determinations.[46] The part is not an independent individual which exists independently of the whole (e.g., atomism),[47] but neither is the whole is anything other than the result of the process of the interaction of its parts (e.g., theological cosmology).[48] The "whole", for example, could not exist independently of its parts, as one often finds in wildly metaphysical interpretations or caricatures of Hegel's view. On this point, Whestphal writes:

> To say that Hegel is an emergentist is to reject strongly holistic interpretations of Hegel's views, according to which 'the whole' has ontological priority over its parts and determines their characteristics, or at least, more so than vice versa. Hegel's holism is moderate because he insists, *inter alia*, that any 'substance' and its 'accidents' are thoroughly mutually interdependent for their existence and characteristics... Hegel inverts philosophical tradition by insisting that there is nothing more to any 'substance' than the totality of its 'accidents'…[49]

This point applies in two distinct senses. The first pertains to the objects of sciences, while the second pertains to the sciences themselves as well as philosophy. First, to hold an emergentist or moderately holistic view about some object within a specific science such as political economy, for example, will mean a commitment to the view that a more complex (i.e., whole) phenomenon (e.g., the POU) emerges at an aggregate-level scale of description from the interaction of individual elements (i.e., parts), and no adequate explanation of the phenomenon could reduce

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[46] Cf. Hegel 1991b, 204-6 §§ 135-6; Hegel 1969, 513-18.

[47] Hegel 1991b, 70 § 32. *Zusatz*: "It often happens in philosophy that a one-sided view sets itself up beside the totality, claiming to be something particular and fixed vis-a-vis the latter. But, in fact, what is one-sided is not fixed and does not subsist on its own account; instead, it is contained within the whole as sublated. […] these determinations are not valid when they are isolated from one another [i.e., in abstraction] but only when sublated".

[48] Cf. Hegel 1977, 10-11: "only this self-*restoring* sameness—not an *original* or *immediate* unity as such—is the True. […] The True is the Whole. But the whole is nothing other than the essence [*Wesen*—the being] consummating itself through its development. Of the Absolute it must be said that it is essentially a *result*, that only in the *end* is it what it truly is; and that precisely in this consists in nature, viz. to be actual, subject, the spontaneous becoming of itself" (cf. Hegel 1969, 554f.).

[49] Westphal 2008, 305 fn. 71. Cf. PR 97, §67: "a power is the totality of its manifestations, just as substance is the totality of its accidents and the universal is the totality of its particularizations". Cf. PR 90, §61a: "A force exists only insofar as it manifests itself; the field is only a field insofar as it produces a crop"; Hegel 1991b, 213, §142: "The utterance of the actual is the actual itself." Hegel 1991b, 228, §153: "[I]t is only in the effect that the cause is actual, and is [truly] cause". The interpretation of in Brandom 2002 (chapter 6) and Brandom 2008 is weaker still than Westphal's.

either the aggregate or the individual scales of description to the other without simply assuming away that which is supposed to be explained. Second, to hold an emergentist or holistic view about *all* special sciences and philosophy will mean a commitment to the view that philosophy is just the emergent unity or structure of the special sciences as they hang together. In neither case will it be possible to hold that the complex whole or the simple parts would be what they are independently of one another. Such a view rules out any *a priori* metaphysical view of what there is, but it also rules out any *apriorist* view of philosophy (i.e., strong metaphysics). Hegel seems to think of the unity of the sciences and the way in which they hang together as a series or ascension beginning with the more abstract and proceeding to the concrete (e.g., from physics to chemistry to biology, etc.) until one has reached the thought which gives the account of all kinds of account-giving (i.e., philosophy), which is meant to be thought of their concrete unity. Nevertheless, the ontologies and claims of the sciences will be "scale-relative", which is to say that they will all be valid within their respective domains of explanation, and none can be simply *reduced* to another, single, simple domain of explanation, though some have explanatory priority over others as the case may be.[50]

2.2. An Historical Example

Before considering Hegel's view specifically of the science of political economy and its "fundamental concepts" (*Grundbegriffe*), it is worth considering an example from the history of science in which Hegel thinks that things have gone wrong, when scientific accounts veer into strong *a priori* metaphysics. Considering Hegel's example will be helpful later, because it will

[50] In the view of Ladyman and Ross 2007, 251-2, sciences or explanations are related to each other in terms of the way in which they constrain one another in modal terms. For example, physics constrains biology in a way in which the latter does not constrain the former, though the "real patterns" investigated by the latter cannot simply be reduced to the former. Within the framework of common sense and everyday life, we are entitled to assume that 'persons' exist, because we need that concept in order to explain phenomena at that scale of description, rather than 'quarks'. Clearly, though, 'persons' do not exist in the frame of fundamental physics, or *vice versa*. It is less than entirely clear how Hegel might relate to this view specifically.

provide an important analogy for the shortcomings of his own view of political economy, as I will argue in rest of the dissertation. It is Hegel's view of the concept of "caloric" (*Wäremestoff*).

The theory of caloric was a theory of heat, or rather the way in which one warmer body heated another, colder body, by transferring its heat to the latter, the process of heat passing from the one to the other. In many ways, it was the successor theory to Joseph Priestley's "phlogiston" theory of combustion, corrosion, and respiration (i.e., oxidation),[51] which was ultimately displaced by Antoine Lavoisier's theory, when the latter discovered the concept of oxygen, and which was later expressed in the term "caloric".[52] The theory of phlogiston conceived of combustion in terms of some *substance* within things which is flammable, rather than an interaction of elements (e.g., fuel, oxygen, ignition). Similarly, the theory of caloric also conceived of heat as a *substance* that inhered in bodies and passed between them, though it was not meant to be a *physical* substance.[53] From Hegel's perspective at least, caloric is simply an ontological posit which scientific understanding (*Verstand*) made in order to make sense of things, to present explanations. In the attempt to make sense of the transfer of heat from one body to another, the caloric theory assumed or pictured (*Vorstellung*) that there was an ontological *substance* of heat, which moved from one body to another. Yet Hegel rejects the notion of caloric because, in his view, it is a piece of common-sense, *a priori* metaphysics (cf. "occult qualities") which does not do sufficient work or stand up to critical scrutiny of further scientific developments. Indeed, later more developed explanations would show that it is superfluous entity that can be done away with, like "phlogiston". Thus, "caloric" is a kind of theory which is on the threshold of discovery, which is inadequate by itself, though it does admittedly mark some progress over its predecessors.

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[51] Cf. Priestley 1796 and Priestley 1799.
[52] Cf. Lavoisier 1777, Lavoisier 1778; Lavoisier and Best 2015 and Lavoisier and Best 2016.
[53] For contemporary discussions, cf. Ladyman 2002, 100, 231, 244, 245, 247, 248, 252–3; Ladyman and Ross, 2007, 88f.

In his discussion of caloric, Hegel objects that "the Understanding [*Verstand*] makes [for itself] itself substrates [i.e., metaphysical or ontological posits] which are not recognized through the Notion [*Begriff*]".[54] By this he means that, in the course of attempting to explain phenomena such as what seems to be transference of heat from one body to another, the human intellect makes the supposition that there is an "independently existing" entity, which is the basis of the phenomenon in question. It substitutes an abstraction of its own creation for the phenomena which it sets out to explain. It mistakes its own supposition for a piece of furniture of the world, as it were.[55] With "caloric" human understanding goes beyond the merely methodological postulation of theoretical entities which are used in predictions to capture the structure or real patterns of phenomena, and it supposes that the category which it employs in its theory names a *thing which exists*.[56] Science reverts to metaphysics in a way which became clear when the stronger, successor theory of heat rendered "caloric" redundant. Hegel thinks this idea is unfalsifiable and thus unscientific. He writes:

> As *imperceptible*, such a determination lacks the warrant of *observation* and *experience*, and as inferred, it rests on the *assumption of a material self-subsistence* of heat (cf. Remark § 286 and *Zusatz).* **This assumption, precisely because it is itself non-empirical, serves in its way to make the self-subsistence of heat as a material substance *empirically* irrefutable.** […] The metaphysics of self-subsistence is *opposed* to the said *experience* and is indeed presupposed *a priori.*[57]

[54] Hegel 1970, 152 § 309. Zusatz.

[55] Hegel 1970, 150 § 309: "The conception of heat as having a separate existence of its own, as *heat-matter* or *caloric,* rests mainly on two things: first, on the fact that heat can be transmitted, and so appears to be separable from the body in which it is present in the first instance, and therefore as existing independently of it, and also as coming to the body from *outside*; secondly, on the various mechanical determinations connected with this which can be introduced into the *transmission* of heat (e.g. reflection by concave mirrors), and also on the quantitative determinations which occur in connection with heat" (cf. § 286, Remark). Hegel later discusses oxidation (Hegel 1970, 240 § 238. *Zusatz*).

[56] Cf. Hegel 1970, 151 § 309. Zusatz: "The assumption of such a caloric, like that of a sound-matter, rests on the category that what makes a sensible impression must also have a sensible existence".

[57] Hegel 1970, 153 § 304. Remark. Like contemporary philosophers of science, Hegel also engages with the problem of "demarcation" of genuine science from pseudo-science (e.g., astrology and psychology or astronomy). Cf. Hanson 2008; Hegel 2007, 35-9 § 392.

If we properly comprehend what it means that heat seems to move between bodies, Hegel thinks, then we ought to understand that what we have before us is an inherently relational determination of the concept, a relational structure of phenomena, rather than the supposition of some abstract entity which would ostensibly exist independently of the physical forms in which it is manifest.[58]

The use of the concept of "force" among Hegel's contemporaries is a helpful illustration of what he means here. (e.g., Blumenbach's *Bildungstrieb* or "*vital force*").[59] Hegel addresses the way in which some thinkers picture (*vorstellen*) a force "as if" it were an independent or self-subsistent substratum of its expressions,[60] or as if it were a substance standing behind or "beyond" the empirical body in which it is manifest.[61] Yet that is a mistaken, metaphysical conception, which Hegel criticizes: "This metaphysical monstrosity of a self-subsistent force, centrifugal or centripetal is a [mere] presupposition… [They] are fictions of the Understanding [*Verstand*]".[62] In Newton's view at least, the forces that bodies exert upon one another are determined in their relation to one another by the inverse proportion between them regarded as masses (i.e., quantities) at distances. So, no body *independently* exerts any force upon any other. There is no force which exists in abstract isolation of every other or exerts itself *independently*. Each force is intrinsically relational. Each determination is what it is in relation to every other.[63] Thus what appear to be

[58] Cf. Hegel 1970, 155 § 305. Zusatz: "That sort of thing is an empty thought-figment; the transmissibility of heat would, moreover prove that this transmission is, in fact, not self-subsistent". Cf. Hegel 1970, 154 § 304. Remark: "Here, as throughout the whole of the Philosophy of Nature, all that we have to do is to substitute for the categories of the Understanding the thought-relationships of the speculative Notion, and to grasp and determine the phenomenon in terms of the latter".

[59] Cf. Blumenbach 1789, 24-5.

[60] Hegel 1970, 53 § 266 fn., 68-9 § 270. Force is what Hegel calls a "determination of reflection" (*Reflexionsbestimmung*) (Hegel 1969, 407-8).

[61] Hegel 1977, 87f. Force is "*its own expression*" (Hegel 1969, 521; Hegel 1991b, 205 § 136; Hegel 1977, 86).

[62] Hegel 1970, 69 § 270. Newton famously refuses to posit such metaphysical substrata (Leibniz and Clarke 2000, 105): "I feign no hypotheses".

[63] They have an "immanent connection" (Hegel 1970, 76 § 270, addition).

opposite forces are not two independent things, but rather two sides of the same relation as a whole (i.e., gravity).[64]

The value of these reflections for the argument that I will advance later in this chapter and the rest of this dissertation has to do with the ways of thinking about political economy and the way in which they will apply to Hegel's own view of the economic POU, involuntary unemployment, and the "rabble". Hegel's account of political economy will arguably occupy a position that is analogous to that of the theory of caloric or phlogiston. And here there is a massive amount of irony which Hegel himself would doubtless appreciate. Namely, I will argue, that his own view of the "rabble" recognizes an actual phenomenon, which is an "anomaly" for the "normal science" of his day,[65] which it tries to explain and thus makes some progress towards the explanation of the latter. However, because it is so deeply embedded in orthodox assumptions which are at loggerheads with the requirements of an adequate explanation, it remains on the threshold of science, but never enters that domain.

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[64] Cf. Newton's own statement on gravity and force here (Quoted in Stein 2002, 287-8. Emphasis in original): "*One body may be considered as attracting, another as attracted; but this distinction is more mathematical than natural. The attraction really is of each body towards the other*, and is thus of the same kind in each. [/] *And hence it is that the attractive force is found in each.* The Sun attracts Jupiter and the other Planets, Jupiter attracts the Satellites; and by parity of reason, the Satellites act among themselves reciprocally and upon Jupiter, and all the Planets mutually among themselves. *And though the mutual actions of two Planets may be distinguished from one another, and considered as two actions, by which each attracts the other: yet in so far as these* [*actions*] *are intermediate, they are not two, but a single operation between two terms.* […] the action is likewise twofold in so far as it is upon two bodies; but *as between two bodies it is sole and single. It is not one operation by which the Sun for instance attracts Jupiter, and another operation by which Jupiter attracts the Sun, but it is one operation by which the Sun and Jupiter mutually endeavor to approach one another*. […] *the Sun is not attracted towards Jupiter by a double action, nor Jupiter by a double action towards the Sun, but it is one intermediate action by which both approach nearer together*. […] *the action… is considered as single by the Philosophers*... Conceive a single operation arising from the conspiring nature of both to be exerted in this way between two Planets; and this will be disposed in the same way *towards* both: hence being manifestly proportional to the matter in one of them, it will be proportional to the matter in the other". In Hegel's words, gravity is therefore the "essence" of the material bodies in which it appears, or they are the forms of appearance of the totality of gravitational relations. He calls fully developed gravitational relation to be the genuinely speculative "concept of [physical] matter" (Hegel 1970, 62 § 269; cf. Hegel 1970, 46 § 262) and a profound thought in itself", which recognizes the "rational identity and inseparability of these moments, which elsewhere are conceived as independent" (ibid. 63 § 269; cf. Hegel 1970, 80 § 270. Addition).

[65] Cf. Kuhn 1996, 10, 24-34, 62-4, 67, 80-2, 87, 113.

3. Hegel on Political Economy

Having considered Hegel's view that philosophy is meant to be a second-order examination of the foundations of the first-order sciences, now it is essential to consider his own view of the first-order science of political economy.[66] It is essential to recognize which "fundamental concepts" (*Grundbegriffe*) Hegel adopts from political economy because, as I will argue in the final section of this chapter, there ultimately will be a massive problem with Hegel's account. Namely, Hegel adopts the "fundamental concepts" of the orthodox, classical theory (OCT). And they do not license his extremely heterodox view of the POU, involuntary unemployment, modern poverty, and the "rabble". Not only do Hegel's conclusions not follow from those concepts, but the advocates of the OCT even claim that the POU is *impossible a priori*, as I discuss below. So, something will have to give.

3.1. The Science of Political Economy: "Smith, Say, and Ricardo"

Hegel discusses political economy in the context of "civil" or "bourgeois society" (*bürgerliche Gesellschaft*). Though civil society is an order which is more complex than the fundamentally individualistic perspectives of "abstract right" (i.e., property-holding) or "morality",[67] it nevertheless describes the interactions of individuals among one another. It is a specifically modern form of social organization in which individuals relate to one another not primarily as public citizens (*citoyen*) of a republic, but rather as private, self-interested, practical agents (*bourgeois*) in an economy. In the *Philosophy of Right*, he writes:

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[66] Cf. Priddat 1990 for an assessment of Hegel as an economist. For various discussions of Hegel in relation to political economy, cf. Avineri 1972, chapters 5 and 7; Wood 1990, 247-53; Herzog 2013, 55f. & 101-11; Henderson and Davis 1991, Davis 1989, Ver Eecke 1983, Plant 1977a and 1977b. To my knowledge, there is no discussion in the literature of the problem with Hegel's account which I point out in this dissertation.

[67] Cf. Hegel 1991a, §§ 34-104, §§ 105-141. Cf. Westphal 1993, IV. Hegel's emergentism or holism will come into conflict with the classical political economists, who have a much more reductively individualist view.

> …the creation of civil society belongs to the modern world… If the state is represented as a unity of different persons, as a unity which is merely a community [of interests], this applies only to the determination of civil society.[68]
> In right, the object [*Gegenstand*] is the *person*; at the level of morality, it is the *subject*, in the family, the *family-member*, and in civil society in general [i.e., "at the level of needs"], the *citizen* [*Bürger*] (in the sense of *bourgeois*).[69]

Hegel will characterize the interactions and outcomes of individuals' behaviors in "civil society" in terms of a tension or conflict between what he calls two "principles", as I have already suggested in the previous chapter. On the one hand, there is the principle of the particular individual who seeks the satisfaction of his or her personal needs (*Bedürfnisse*), while on the other hand individuals can only do so in interaction with other such individuals, which gives rise to a universal dimension of "civil society" ("mediation").[70] On the one hand, he holds that the economic sphere, for individuals who act within it, is one of "contingency" [*Zufälligkeit*] and "arbitrariness" [*Willkür*].[71] On the other hand, however, he also thinks that a *complex* or universal order or *system emerges* out of the "mediation" of those individual interactions which is not simply contingent or arbitrary, but rather objective, necessary, and explicable.[72] Explanation is political economy's task.

Hegel's single most succinct statement on what he takes the science of political economy to be is contained in his *Philosophy of Right.* His discussion there epitomizes his view, as I will address it in what follows. He writes:

> ***Political economy*** is the science which… must… **explain mass relationships** and mass movements in their qualitative and quantitative **determinacy and complexity**. – This is one of the sciences which have originated in the **modem age** as their element [*Boden*]. The development of science is of interest in showing how *thought* extracts from the endless multitude of details with which it is initially confronted the simple principles of the thing [*Sache*], the understanding which works within it and controls it (see ***Smith, Say, and Ricardo***). – To recognize, in the sphere of needs, this manifestation [*Scheinen*] of

[68] Hegel 1991a, 220 § 182.
[69] Hegel 1991a, 228 § 190.
[70] Hegel 1991a, 220 § 182.
[71] Hegel 1991a, 230 § 194, 227 § 189.
[72] Hegel 1991a, 220 § 182, 222 § 185, 224 § 187. Cf. Ladyman & Wiesner 2020, 45, 50. I return to this point later and throughout the dissertation.

> rationality which is present in the thing [*Sache*] and active within it has, on the one hand, a conciliatory effect; but conversely, this is also the field in which the understanding, with its subjective ends and moral opinions, gives vent to its discontent and moral irritation.[73]

Note how Hegel specifically refers to "Smith, Say, and Ricardo". He concurs with classical political economists that the science of political economy concerns the way in which individual productive activities and needs are coordinated with one another through a system of exchange (i.e., markets); modern economies are social systems of production of wealth in which labors are differentiated and related in a complex way; they entail a stratification of classes. This is how political economy would explain the "complexity" of "mass relationships". Hegel continues:

> There are certain universal needs, such as food, drink, clothing, etc., and how these are satisfied depends entirely on contingent circumstances. The soil is more or less fertile in different places, the years are more or less productive, one man is industrious and the other lazy. But this proliferation of arbitrariness generates universal determinations from within itself, and this apparently scattered and **thoughtless activity is subject to necessity which arises of its own accord. To discover the necessity at work here is the object [*Gegenstand*] of political economy**, a science which does credit to thought because **it finds the laws underlying a mass of contingent occurrences**. It is an interesting spectacle to observe here how all the interconnections have repercussions on others, how the particular spheres fall into groups, influence others, and are helped or hindered by these. This interaction, which is at first sight incredible since everything **seems** to depend on the **arbitrary** will of the individual [*des Einzelnen*], is particularly worthy of note; it bears resemblance to the **planetary system**, which presents only irregular movements to the eye, yet whose **laws** can nevertheless be recognized.[74]

So, the modern science of political economy, according to Hegel, presents an explanation of economy as a complex, law-governed system which emerges from what otherwise seems to be a chaotic mass of individual details and interactions. It finds the "principles" or necessary "laws" in the mass of apparently "contingent" or "arbitrary" details, much as physical-astronomical explanations view the heavens ("the planetary system").[75] What seems contingent and arbitrary at

[73] Hegel 1991a, 227 § 189.
[74] Hegel 1991a, 227-8 § 189. Addition.
[75] Cf. Montes 2003. Cf. Smith 1993, 56, I.vii: "The natural price, therefore, is, as it were, the central price, to which the prices of all commodities are continually gravitating".

an individual-level scale of description is determinate and necessary at an aggregate-level scale of description. It must also be remarked that Hegel only refers to the orthodox, classical school of political economy ("Smith, Say, and Ricardo"), without referring the heterodoxy school (e.g., Malthus or Sismondi), which holds very similar views of the POU or the "rabble", here or anywhere else.[76] Below I will argue below that his views are closer to the latter than the former.

3.2. "Fundamental Concepts" (*Grundbegriffe*) of Classical Political Economy

The place in which Hegel discusses political economy in the greatest depth is his *Elements of the Philosophy of Right* and its corresponding lectures. But the account that Hegel presents there falls within a specific sphere of the larger philosophical system that he definitively presents in the final part of his *Encyclopaedia of the Philosophical Sciences*, his *Philosophy of Spirit*—within "civil society" (§§ 523-34), within "ethical life" (§§ 513-52), within the sphere of "objective spirit" or "mind" (§§ 483-552). There Hegel singles out for attention what he takes to be the three "fundamental concepts" of political economy, as he promised in his introduction. They are markets, or what Hegel calls the "system of needs", the social "division of labour", and "estates" (*Stände*) or classes (*Klassen*).[77] And it is important to consider these concepts, because he will employ them in his account of the POU, involuntary unemployment, modern poverty, and the "rabble" in his *Philosophy of Right*, as though the latter could be derived from them, though the

[76] It is well documented in the literature that Hegel was well acquainted with the political economic theory of Adam Smith and Sir James Stuart (cf. Henderson and Davis 1991, Davis 1989, Ver Eecke 1983, Plant 1977a and 1977b). The depth of his familiarity with David Ricardo is less clear; and there is some speculation that he may have read the heterodox theory of Sismonde de Sismondi, though I have been unable to establish this with any real philological certainty (cf. Stedman Jones 2001 and 2006, 212). Hegel owned the works of Smith, Say, and Ricardo, but did not appear to own those of the heterodox thinkers at least in late life (cf. Hegel 2017a and 2017b).

[77] Cf. Hegel 2007, 230-1 § 524, 231 §§ 525-6, 231-2 §§ 527-8.

orthodox standpoint of political economy[78] will ultimately *disagree* with Hegel and conflicts with his findings of the social facts of political economy.[79]

3.2.1. Markets or the "System of Needs"

The first "fundamental concept" of political economy that Hegel names in his *Encyclopaedia* is the "system of needs", which in more common terms could be called *markets*. In markets, individuals relate to one another indirectly, mediating the satisfaction of their needs by exchanging the goods which they produce through their labor, by exchanging them for one another. (Note, however, that this assumes somewhat unrealistically that individuals trade goods which *they produce*, rather than being employed by capitalists who pay workers and exchange those goods themselves.[80]) Hegel also calls this social institution "the system of atomism" or the "external state", because it is a social organization in which individuals appear to be the fundamental units which are only secondarily or externally related to one another in exchange.[81] There he writes:

> In this way, the [social] **substance becomes only a universal mediating interconnection of independent extremes** and their particular interests. The internally developed totality of this interconnection [i.e., the market] is the state as civil society or as *external state*.[82]

That is, the "substance" of sociality, in market economies, is just the mediation of exchange of the goods and services individuals need into order to live. In the following paragraph, he continues:

> Their acquisition [i.e., individuals' acquisition of objects or property that are needed] is, on the one hand, conditioned and mediated by the will of their possessors, which, as particular will, has as its aim the satisfaction of variously determined needs, just as, on the other hand, it is conditioned and mediated by the ever renewed production exchangeable means by one's *own labour*; this mediation of satisfaction by the labour of all constitutes the general resources [*Vermögen*—wealth].[83]

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78 Hegel 1991a, 227-39 §§ 189-208.
79 Hegel 1991a, 259-74 §§ 230-55.
80 Cf. Smith 1993, 31-2, I.iv.
81 Hegel 2007, 230 § 523.
82 Hegel 2007, 230 § 523.
83 Hegel 2007, 230-1 § 524.

That is, one person obtains the goods and services that he or she needs in order to live *only if* he or she produces some good or service *and* another person wills to give the other goods or services that he or she produces and services up in exchange for the former. There is a transfer the articles of private property. And each person obtains what he or she needs *only if* he or she engages in the productive labor that produces what others need. And so, the procurement of what is needed is "mediated" in a double sense (i.e., by labor and exchange).

In the *Philosophy of Right*, Hegel elaborates on this idea in a similar way which is very similar if not virtually identical to that of Smith, as I discuss shortly. First, he writes:

> In civil society, each individual is his own end, and all else means nothing to him. But he cannot accomplish the full extent of his ends without reference to others; these others are therefore **means** to the end of the particular [person]. But through its reference to others, the particular end takes on the form of **universality, and gains satisfaction by simultaneously satisfying the welfare of others**. …the whole [of civil society] is the sphere [*Boden*] of **mediation**…[84]

And slightly later, he continues:

> Individuals, as citizens of this state, are *private persons* [i.e., *bourgeois*] who have their own interest as their end. Since this end is **mediated** through the universal, which thus *appears* to the individuals as a *means*, they can attain their end only in so far as they themselves determine their knowledge, volition, and action in a universal way and make them selves ***links*** in the chain of this *continuum* [*Zusammenhang*].[85]

And finally, he concludes:

> Needs and means, existing in reality [*als reelles Dasein*], become a being [*Sein*] for *others* by whose needs and work their **satisfaction is mutually conditioned**. That abstraction which becomes a quality of both needs and means (see § 191) also becomes a determination of the **mutual relations [*Beziehung*] between individuals**. This universality, as the *quality of being recognized*, is the moment which makes isolated and abstract needs, means, and modes of satisfaction into *concrete,* i.e. *social* ones.[86]

[84] Hegel 1991a, 220 § 182.
[85] Hegel 1991a, 224 § 187.
[86] Hegel 1991a, 229 § 192.

Needs become "social" thought exchange. Individuals with particular ends participate in a social institution—markets—which mediates their satisfaction in a universal way, which is not the primary, explicit or conscious objective of those individuals. They satisfy their needs by providing for the satisfaction of the needs of others in general, in a manner which "abstracts" from the particular needs of all individuals understood as individuals. This coincidence of *individual* needs and activity with the *general* need and activity already gives an indication of the peculiar social dynamic that will ultimately give rise to complex or emergent phenomena (e.g., POU).

In his *Wealth of Nations*, Adam Smith presents a view of the market which is evidently the same view to which Hegel refers. Smith characterizes markets in terms of a "natural" tendency of humans to "truck, barter, and exchange one thing for another",[87] that which they have but do not need for that which they need but do not have.[88] Smith concurs that there are two dimensions of markets, which overlap with one another, as it were. There is an individual and a collective dimension. In the individual dimension, individuals exchange goods with one another because of their own selfish motivations, and hence they must relate to each other's self-interest. Smith writes:

> It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, bur from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages.[89]

And then there is the social or collective dimension of markets which individual acts of exchange comprise when they are taken together as an aggregate phenomenon. Much later, Smith writes:

> As every individual, therefore, endeavors as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value [i.e., profit]; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the publick interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that

[87] Smith 1993, 21, I.ii.
[88] Cf. Smith 1993, 31-2, I.iv.
[89] Smith 1993, 22, I.ii. Cf. Smith 1993, 31-2, I.iv.

> industry in such a manner as its produce may be of the greatest value, **he intends only his own gain, and [yet] he is this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention**. Nor is it always the worse for society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectively than when he really intends to promote it.[90]

While individuals act with the intention of their own gain in a market, they also thereby unintentionally contribute to an aggregate gain of their society, according to Smith. And they do not act twice over, as it were, once for themselves and once for the whole. As his other follow enlightenment, Scottish philosopher put it, it is the "result of human action, but not the execution of any human design".[91] Particular, self-serving individuals who act by themselves yet nevertheless do so *en masse* give rise to a general or aggregate-level outcome which was not the aim of their intention. Indeed, the market itself can only be understood as a complex phenomenon that occurs as an unintended consequence of individual behaviors. It is an aggregate-level outcome of individual behaviors that is not reducible to them, though it fundamentally consists of relations between individuals and their actions. As Hegel puts it, "that reason which is immanent in the system of human needs and their movement articulates this system into an organic whole composed of different parts".[92] And as Schlomo Avineri puts it: "This is the role political economy plays in Hegel's system".[93]

However, one must be cautious here. There are in fact two very different ways of reading Smith's statement. *First*, contemporary philosophers of science have perhaps somewhat hastily called Smith's conception here a view of a "complex system" or "emergent order".[94] By this is

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[90] Smith 1993, 191-2, IV.ii. For contemporary assessments of Smith's conception, cf. Rothschild 1994, Bishop 1995, Riesman 1998, Grampp 2000, Rassekh 2009, Oslington 2012.

[91] Cf. Ferguson 1767, 205. Cf. Hayek 1969. Cf. Hegel 1988b, 30-1.

[92] Hegel 1991a, 234 § 200.

[93] Avineri 1972, 147.

[94] Cf. Ladyman & Wiesner 2020: "Adam Smith's 'invisible hand' is a metaphor for emergent order without central control" (45). "Macroeconomics studies whole economies and their emergent properties of growth, inflation and unemployment as well as the effects of government policy" (ibid. 50).

meant that the properties of individual actions and properties of the whole emergent order which they constitute are not always the same and cannot be equated without succumbing to a *fallacy of composition*. But this interpretation is arguably far more robust than Smith's actual view, and the notion of an emergent order or complex system is either very weak or absent in Smith, if one pays close attention to his view, as I will address momentarily. *Second*, close attention to Smith's account shows that what he has in mind is the view that every pound which capitalists save is automatically invested in production and therefore also spent on consumption by the workers whom they employ, which means that there is always also an equal amount of consumption for every amount of production, though it may merely be distributed differently. This means that markets are therefore always fundamentally in equilibrium, for Smith, which would *rule out* the possibility of unintended, emergent, or complex phenomena such as the POU, involuntary unemployment, modern poverty, and the "rabble", as I will argue later.[95] Another reason to believe that Smith is not actually presenting a robust view of complex systems or emergent orders is that Smith (as well as Ricardo) actually *equates* the individual-level or microeconomic and aggregate-level or macroeconomic scales of description in a way which is at loggerheads with the more robust view of complex systems or emergent orders.[96] (In following chapters I return to this point.)

Ultimately, the first view (emergent orders, complex systems) is what Hegel seems enthusiastically to take from his reading of Smith, and it is certainly the more apt, interesting, and productive view for thinking about capitalist economies. Yet the more robust view which Hegel

[95] Cf. Bleaney 1976, 209: "the classical assumption that all savings are at all times automatically invested, which of course removes any possibility of such a deficiency [of effective demand]" (cf. ibid. 16, 23). Cf. Bleaney 1976, 16, 20. Cf. Bernanke 2000, 24. Cf. Sherman 1979, 4: "All savings are *not* invested, so aggregate demand does *not* equal aggregate supply, except by accident". Cf. Keynes 1964, 96-7; Hudson 2015, 168.

[96] Cf. Smith 1993, 293, IV.ii: "What is prudence in the conduct of every private family, can scarcely be folly in that of a great kingdom". Cf. Ricardo 1951a, 248, XXVII: "That which is wise in an individual is wise in a nation".

takes up (and Marx develops more radically) is *not* exactly what Smith has in mind. Smith's view is much thinner, in a way which presents the limits of the OCT, as I will argue much later.

3.2.2. The Social Division of Labor

The second "fundamental concept" to which Hegel refers in his *Encyclopaedia* is the social "division of labor" (*Teilung der Arbeit*).[97] To a certain extent, markets and the division of labor seem to be simply two sides of the same coin, as it were, the one producing products, the trading them. Both markets and the social division of labor are meant to contain a complex or emergent dimension that exceeds the intentions of individuals or the properties of the individual parts. The social division of labor gives rise to an exponentially increased productive capacity of humans, when they work in concert, which is greater than the arithmetical sum of individuals' capacities.[98] Smith's example, which I address shortly, makes this point much clearer. Though, as I stressed above, here too one must be cautious.

In his *Philosophy of Spirit*, Hegel addresses the social division of labor. He writes: "this mediation of satisfaction by the labour of all constitutes the general wealth [*Vermögen*—translation modified]".[99] And in his *Phenomenology of Spirit*, he similarly describes the relation of "wealth" and "work" as follows. He writes:

> Although [wealth] is indeed something passive, something devoid of inner worth, it is equally the perpetually produced **result of the labour and activity of all, just as it is dissipated again in the enjoyment of all.** It is true that in the enjoyment, the individuality develops an awareness of himself as a particular individual, but this enjoyment itself is the result of the **general activity**, just as reciprocally, the wealth produces universal labor and enjoyment for all.[100]

[97] Hegel 2007, 231 § 525.
[98] Cf. Marx 1990, 447, 451.
[99] Hegel 2007, 231 § 525.
[100] Hegel 1977, 301.

An individual is not just a particular person but an integral working part of the entire productive system of which it is a part. Elsewhere he similarly writes:

> The *labour* of an individual for his own needs is just as much a satisfaction of the needs of others as of his own, and the satisfaction of his own needs he obtains only through the labour of others. As **the individual in his *individual* work already *unconsciously* performs a *universal* work**, so again he also performs he universal work as his *conscious* object; the whole becomes, as *a* whole, his own work, for which he sacrifices himself and precisely in doing so receives back from it his own self. There is nothing here which would not be reciprocal…[101]

In his *Philosophy of Spirit*, Hegel describes the way in which individual productive activity is increasingly restricted to a single, particular task, while the society as a whole is generally capable of more efficiently producing more goods of a uniform nature, as the social organization of labor and the development of productive technology develop. Each individual performs a single kind of task on a single kind of object, rather than each individual producing a complete object by him or herself. In addition to an increase in productivity, the other obvious consequence, Hegel notes, is that in a more productively organized society, laboring individuals now all depend on one another for the products they need in order to live. In his *Philosophy of Spirit*, he writes:

> Labour too [i.e., in addition to "culture"] thus becomes more abstract, and leads on the one hand by its uniformity to ease of labour and to **increased production**, on the other hand to restriction to *one* skill, and thus to a **more unconditional dependence on the social system.** The skill itself becomes in this way mechanical, and develops to the point where the machine can take the place of human labour.[102]

And in his *Philosophy of Right*, Hegel elaborates this thought further. The more complex societies and economies become, the narrower the task an individual must perform, the more productive society as a whole becomes, and the more and more each individual depends on every other (i.e., interdependence). He writes:

> The universal and objective aspect of work consists, however, in that [process of] *abstraction* which confers a specific character on means and needs and hence also on

[101] Hegel 1977, 213. Cf. Hegel 1977, 118.
[102] Hegel 2007, 231 § 526.

> production, so giving rise to the ***division of labour*.** Through this division, the work of the individual [*des Einzelnen*] becomes *simpler*, so that his skill at his **abstract** work becomes **greater**, as does the **volume of his output**. At the same time, this abstraction of skill and means makes the ***dependence* and *reciprocity*** of human beings in the satisfaction of their other needs complete and entirely necessary. Furthermore, the abstraction of production makes work increasingly *mechanical*, so that the human being is eventually able to step aside and let a *machine* take his place.[103]

As Smith will also seem to hold, in both texts Hegel claims that human labor becomes "abstract" in the social division of labor.[104] (Below I will return to this thought.) And slightly later, Hegel relates this consideration about the differentiated organization of labor in the production process to the Smithian conception of the market. Hegel writes:

> In this dependence and reciprocity of work and the satisfaction of needs, ***subjective selfishness* turns into a *contribution towards the satisfaction of the needs of everyone else*. By a dialectical movement, the particular is mediated by the universal so that each individual, in earning, producing, and enjoying on his own account [*für sich*], thereby earns and produces for the enjoyment of others.** This necessity which is inherent in the interlinked dependence of each on all now appears to each individual as the form of *universal and permanent wealth* [*Vermögen*—translation modified] (see § 170) in which, through his education and skill, he has an opportunity to share; he is therefore assured of his livelihood, just as the universal wealth [*Vermögen*—translation modified] are maintained and augmented by the income which he earns through his work.[105]

What Hegel adds here is that the increased productive capacity that accompanies the social division of labor is not only inherently connected with markets, but also with property and the unequal accumulation of wealth. This will be Hegel's segue to class and ultimately the kind of inequality which, he will claim, gives rise to the POU, involuntary unemployment, modern poverty and the "rabble".

Similarly, in the *Wealth of Nations*, Smith presents the very concept of the division of labor that Hegel refers to above. Early on, he states:

> … the improvement of the dexterity of the workmen, necessarily increases the quantity of the work he can perform; and the **division of labour**, by reducing every man's business to

[103] Hegel 1991a, 232-4 § 198. On the impact of machinery on workers, cf. Hegel 1974, 612, Hegel 1983a, 140.
[104] Hegel 1991a, 232-4 § 198; Hegel 2007, 231 § 525.
[105] Hegel 1991a, 233 § 199; Cf. VHI, 188. Note, however, the universal is also mediated by the particular in markets.

> some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman.[106]

The example Smith gives provides a helpful and more convincing illustration of the way in which labor becomes simpler ("abstract") and a complex or "emergent order", which cannot be reduced to individuals, can result from individual behavior seen from an aggregate-level or macro-scale of description. Smith's example of a pin factory, which Hegel quotes as early as his Jena lectures,[107] clearly shows how the aggregate result of individuals' productive activity in the social division of labor is not just an arithmetical sum of individual activity, but rather an exponential product. For, an individual cannot even make *one* pin in a day, while even just several can make thousands in a few hours. Smith writes:

> To take an example, therefore, from a very trifling manufacture, but one in which the **division of labour** has been very often taken notice of, the trade of a pin-maker: **a workman** not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), **could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty**. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straights it; a third cuts it; a fourth points it; a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. […] **Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day**.[108]

[106] Smith 1993, 15 (I.i). For contemporary assessments of Smith's conception, cf. Loasby 1996, Negishi 1999, Vincent-Lancrin 2003.
[107] Hegel 1988a, 247-8; Hegel 1983a, 121 & 140.
[108] Smith 1993, 12 (I.i).

While Smith, Hegel, and Marx will all celebrate the level of productivity that the modern social division of labor enables and its ability to satisfy human needs, they all also worry about the damage it has on individuals, and Hegel and Marx point to this passage to make their case.[109]

As noted above however, a word of caution is necessary. There are two ways of understanding the way in which labor might become "abstract". *First*, Smith and Hegel both seem to think that labor becomes "abstract" within the social division of labor, which reduces human labors to an increasingly narrow function vis-à-vis one another in a process of production that exists in relative isolation from the process of exchange on the market. Elsewhere Smith writes that "a **quantity of labour**… [is] **an abstract notion, which**, though it **can be made sufficiently intelligible**, is not altogether so natural and obvious".[110] And again, he writes that "the division of labour… **reduce[es]** every man's business to some one simple operation, and… mak[es] this operation the sole employment of his life…"[111] *Second*, Marx will demand and present a different and more detailed explanation of the way in which labor becomes "abstract" or a homogeneous quantity. The concrete labor that occurs in the production process is not and indeed cannot become

[109] Cf. Hegel 1988a, 248, Hegel 1983a, 121, 140; Marx 1990, 483f.; Smith 1993, 429-30, V.i: "In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations, frequently to one or two. But the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects are perhaps always the same, or very nearly the same, has no occasion to exert his understanding or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life. Of the great and extensive interests of his country he is altogether incapable of judging, and unless very particular pains have been taken to render him otherwise, he is equally incapable of defending his country in war. The uniformity of his stationary life naturally corrupts the courage of his mind, and makes him regard with abhorrence the irregular, uncertain, and adventurous life of a soldier. It corrupts even the activity of his body, and renders him incapable of exerting his strength with vigour and perseverance in any other employment than that to which he has been bred. His dexterity at his own particular trade seems, in this manner, to be acquired at the expense of his intellectual, social, and martial virtues. But in every improved and civilised society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall, unless government takes some pains to prevent it".

[110] Smith 1993, 38, I.v.

[111] Smith 1993, 429-30, I.i.

an "abstract quantity" in a labor process which is independent of market exchange, but rather only through specifically monetary exchange on the market: "it is only exchange that performs this reduction to the abstraction of equal human labor, and which factually equates the products of different labors".[112] (I will address this point in detail in the following chapter.) Additionally, it is worth noting that Smith thinks that the social division of labor emerges out of market exchange historically,[113] while it is not clear that historical priority is what is at issue for Hegel, but rather perhaps only logical priority in the series of conceptual analysis of presuppositions.[114] Yet Marx, by contrast, will definitely claim that the social division of labor is the real basis of contemporary market exchange of products of labor.[115]

3.2.3. Classes or "Estates"

The final "fundamental concept" of political economy which Hegel mentions in his *Encylopaedia* is that of the "estates" (*Stände*) or "classes" (*Klasse*).[116] Classes make up a political-economic system through which the labor, goods, and services that are produced within the social division of labor are allocated through markets. In his *Philosophy of Spirit*, Hegel states that the "concrete division of general resources [i.e., wealth] … gives rise to the difference of estates".[117] This is to say, the unequal distribution of wealth is the basis of the differentiation of classes. And Hegel distinguishes three classes in a way which resembles the view of the pre-Smithian Physiocrats

[112] My translation: "…, et c'est l'échange seul qui opère cette réduction en mettant en présence les uns des autres sur un pied d'égalité les produits des travaux les plus divers" (Marx 1965, 607). "Die Reduktion der verschiednen konkreten Privatarbeiten auf dieses Abstraktum gleicher menschlicher Arbeit vollzieht sich nur durch den Austausch, welcher Producte verschiedener Privatarbeiten thatsächlich gleichsetzt" (Marx 1987, 41) Cf. Heinrich 2012, 50; Heinrich 2021, 153-7.
[113] Smith 1993, 21, 23, I.ii; 26, I.iii
[114] Cf. Hegel 1991a, 60-2 § 32.
[115] Marx 1990, 132, 165.
[116] Hegel 1991a, 234 § 201. Hegel tends to use "classes" more often in the case of the "rabble" than otherwise.
[117] Hegel 1977, 231 § 527.

more than Smith,[118] only *very* roughly mapping onto developed capitalist societies, which quickly developed shortly after he is writing.[119] He distinguishes an agriculturally productive class,[120] a commercial class of trade and industry, which is the quintessence of "bourgeois" or "civil society" (*bürgerliche Gesellschaft*),[121] and a so-called universal class, which consists of state bureaucrats entrusted with the government of society.[122] These three classes, according to Hegel, constitute a "whole complex".[123] Yet what is most important is the way in which Hegel thinks that markets, the social division of labor, and classes "necessarily" culminate in economic *inequality*. He writes:

> The *possibility of sharing* in the universal **resources** [i.e., wealth] – i.e. of holding *particular* resources – is, however, ***conditional* upon one's own immediate basic assets (i.e. capital)**, on the one hand, and upon one's **skill** on the other; the latter in turn is itself conditioned by the former, but also by contingent circumstances whose variety gives rise to *differences* in the *development* of natural physical and mental [*geistigen*] aptitudes which are already **unequal** in themselves [*für sich*]. In this sphere of particularity, these differences manifest themselves in every direction and at every level, and, in conjunction with other contingent and arbitrary circumstances, **necessarily result in *inequalities in the resources* [i.e., wealth] *and skills* of individuals**.[124]

And in his Heidelberg lectures, he similarly describes class and inequality of wealth as follows:

> …the **essential inequality** based on this system of needs and means constitutes the *difference of classes or estates* [*Stände*]—the difference of the particular subsystems contained in the universal system of needs, the different kinds of means they have and work they do.[125]

In short, inequality *defines* classes, which group individuals according to the type of economic activity in which they engage. What and how much one gets from production ("sharing") depends on what and how much one already has ("assets", "capital", "wealth"). So, Hegel thinks that inequality is not a bug, but rather a feature that is hardwired into modern economies, as it were.

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[118] Mazzucato 2018, 28-33.
[119] Hegel 1977, 232 § 528. Cf. Böhme 1978, chapter 2; Kocka 2016, chapter 4.
[120] Hegel 1991a, 235 § 203.
[121] Hegel 1991a, 236 § 204.
[122] Hegel 1991a, 237 § 205.
[123] Hegel 1991a, 234 § 201.
[124] Hegel 1991a, 233 § 200.
[125] Hegel 1995, 177-8. Cf. Hegel 1995, 102.

Individuals may face "contingent circumstances", but, on the whole, inequality is "necessary" or "essential". And so, the sense in which Hegel regards it as a problem is not the same sense in which an individual in society or an egalitarian moralist might regard it as a problem. Hegel's issue is one which is theoretical and descriptive. It is an *economic* problem which must be explained.

Finally, Smith's conception of class also coheres with Hegel's in significant respects. They differ slightly, however, in two ways. First, the three fundamental classes that Smith distinguishes are not entirely the same as in Hegel's account. And second, Smith distinguishes inequality and poverty differently. In Smith's discussion, like Hegel's, the fundamental classes of society are distinguished along the lines of the market allocation of the wealth and forms of revenue that is produced in the social division of labor. There is the class of workers (i.e., wages), capitalist entrepreneurs (i.e., profit) and landlords (i.e., rents).[126] But Smith also believes that inequality is essential to nations that are wealthy and healthy, while those societies in which there is "universal equality" are those in which there is "universal poverty" (i.e., primitive and undeveloped economies).[127] In his most succinct statement on wealth and inequality, Smith writes:

> it is **in the progressive state**, while the society is advancing to the further acquisition, rather than when it has acquired its full complement of riches, that **the condition of the labouring poor, of the great body of the people, seems to be the happiest and the most comfortable.** It is hard in the stationary, and miserable in the declining state. The progressive state is, in reality, the cheerful and the hearty state to all the different orders of the society; the stationary is dull; the declining melancholy.[128]

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[126] Cf. Smith 1993, 50, I.vi: "Wages, profit, and rent, are the three original sources of all revenue as well as of all exchangeable value". Marx will engage with this view specifically (cf. Marx 1991, 953f.; Marx 1991, chapters 48 and 51).

[127] Smith 1993, 410, V.i.

[128] Smith 1993, 81, I.viii. For contemporary assessments of Smith's conception, cf. Gilbert 1997, Boucoyannis 2013, Rasmussen 2016. In his earlier *Lectures on Jurisprudence*, Smith writes: "In a Civilized Society the poor provide both for themselves and for the enormous luxury of their Superiors. The rent, which goes to support the vanity of the slothful Landlord, is all earned by the industry of the peasant. The monied man indulges himself in every sort of ignoble and sordid sensuality, at the expence of the merchant and the Tradesman, to whom he lends out his stock at interest. All the indolent and frivolous retainers upon a Court, are, in the same manner, fed cloathed and lodged by the labour of those who pay the taxes which support them. Among savages, on the contrary, every individual enjoys the whole produce of his own industry. There are among them, no Landlords, no usurers, no taxgatherers… [Yet] with regard to the produce of the labour of a great Society there is never any such thing as a fair and equal division. In a Society of an hundred thousand families, there will perhaps be one hundred who don't

Thus, Smith not only thinks that inequality is essential to *the modern society which we have*, but also to the *best possible* society, which is not exactly the same as Hegel's view. According to Smith, in any society in which there is any wealth, there is also inequality, but those who are relatively poorer than the wealthy nevertheless have an absolutely better standard of living. So those who are poorer are better off with relative inequality, which is therefore *good* on the whole.

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To conclude, in this section I have tried to show that Hegel adopts what he takes to be the "fundamental concepts" (i.e., premises) of the orthodox, classical political economy, to which he explicitly refers ("Smith, Say, and Ricardo") at the beginning of his reflections on political economy in the *Philosophy of Right* (§§ 182-208). All these concepts are undoubtedly present within the OCT. The question is simply whether they present an explanation which licenses Hegel's conclusion about the POU, involuntary unemployment, modern poverty, and the "rabble". And the answer is negative. So, what follows argues something would have to be changed or added to the theoretical premises ("fundamental concepts") of orthodox, classical political economy, if it is to be able to recognize the POU and the poverty and "rabble" that the POU arguably causes.

4. Problems and Prospects

Now I will now address the problem with Hegel's account of political economy, at which I already hinted at the end of the previous chapter, and which will propel my own argument throughout the rest of this dissertation. A close reader might note how Hegel attempts to unite the *laissez faire*

labour at all, and who yet, either by violence, or by the more orderly oppression of law, employ a greater part of the labour of the society than any other ten thousand in it. The division of what remains too, after this enormous defalcation, is by no means made in proportion to the labour of each individual. On the contrary those who labour most get least" (Smith 1978, 563).

view of the OCT with his recognition of the fact that the POU and the "rabble" are products of modern economies and the belief that state-intervention will be *necessary* to deal with those problems.[129] One might note that Hegel's contention about public policy is inconsistent with the view of the OCT. But this inconsistency is relatively superficial, and Hegel's transition to public policy arguably just changes the topic or dodges the issue. The problem is on the level of *political economic theory itself*. The "fundamental concepts" of the OCT do not license Hegel's conclusion about the POU or the "rabble", which is inconsistent with the views of "Smith, Say, and Ricardo".

4.1. The Problem with Hegel's View of Political Economy and the POU ("Rabble")

On Hegel's view of political economy, it is the science which is tasked with explaining complex social phenomena such as the economic POU. What is therefore so strange is the lack of a deeper explanation of it either in Hegel's own writings or, more troublingly, though in a very different way, in the writings of the advocates of the OCT to which Hegel refers ("Smith, Say, and Ricardo"), from whose work he draws those "fundamental concepts" (*Grundbegriffe*) upon which he focuses. Namely, if the POU causes the "rabble", then what causes the POU? This is a deep problem. And it has two dimensions, the first of which pertains to the OCT, and the second of which pertains to Hegel's view.

First, the advocates of the OCT whom Hegel names think that the economic POU to which he refers in his account of the "rabble" is *impossible*. Both Hegel and commentators seem to have

[129] Cf. Hegel 1991a, 261-2 § 236: "The differing interests of producers and consumers may come into collision with each other, and even if, *on the whole*, their correct relationship [of production and consumption or supply and demand] re-establishes itself automatically, its adjustment also needs to be consciously regulated by an agency ["public authority"] which stands above both sides" [i.e., state bureaucracy]. To be fair, Smith does claim that the social division of labor can destroy the minds and bodies of the working class "unless government takes some pains to prevent it" (Smith 1993, 429-30, V.i). Smith also leaves room for public goods and government organization of certain services that would be too costly and thus inefficient for each individual to procure for him or herself (e.g., roads). It is not clear if Smith and Hegel could agree on the extent of intervention.

overlooked the wrinkle (to put it mildly) which a sober appreciation of this fact introduces into Hegel's account. The advocates of the OCT call the economic POU a "general glut" of unsold commodities. Adam Smith presumes that any unsold products will simply be *exported* without any further ado.[130] So, he does not recognize or really consider any possible domestic problem. Jean Baptise Say claims that "I cannot conceive that the products of the labour of an entire nation can ever be overabundant [i.e., general glut] since one good provides the means to purchase the other".[131] James Mill, who transmitted Say's view to the Anglophone discourse, similarly writes: "**a nation** may easily have more than enough of any one commodity [i.e., particular glut], though she **can never have more than enough of commodities in general** [i.e., general glut]. […] there can be no superfluity of commodities, none for which a market will not be ready".[132] Finally, Ricardo writes: "Too much of a particular commodity may be produced, of which there may be such a glut in the market, as not to repay the capital expended on it; but **this cannot be the case with respect to all commodities**… [i.e., general glut]";[133] " …there is no limit to demand…"[134]

As it turns out, the OCT makes more assumptions or adopts more premises than the "fundamental concepts" (*Grundbegriffe*) which Hegel extracts from it. In a way which I will address over the course of the next two chapters, the OCT also conceives of exchange as though it were a matter of direct barter of goods for goods, excluding money entirely (i.e., the method of "real analysis").[135] Consequently, the OCT believes that production and consumption or supply and demand always immediately coincide in principle in the so-called long run, if not in the immediate short run (i.e., "Say's Law").[136] And this means that harmonious equilibrium reigns in

[130] Cf. Smith 1993, 223, II.v; Smith 1993, 224.
[131] Quoted in Baumol 1977. Cf. Say 1821, 8; Say 1834, chapter 15.
[132] Mill 1808, 84-5.
[133] Ricardo 1951a, 291-2, XXI.
[134] Ricardo 1951a, 296, XXI.
[135] Cf. Schumpeter 1994, 277.
[136] Cf. Mitchell, Wray, Watts 2019, 170, 481; Say 1834, 138-9, I.xv; Keynes 1964, 18, 21-2, 26.

the market and the POU is impossible. More specifically, the advocates of the OCT assume that every ounce of capital stock which is saved by capitalists is also automatically re-invested in productive industrial employments (e.g., wages), such that there can be no fundamental disequilibrium between production and consumption or supply and demand (Smith's "invisible hand").[137] The same amount of consumption would simply be redistributed when capitalists save or invest their capital stock. And so, the advocates of the OCT, to whom Hegel refers, *deny that the POU and therefore the "rabble" is possible in principle*. Their basic assumptions, which Hegel claims to adopt, in fact rule out *a priori* the possibility of the POU on which Hegel's account of the "rabble" rests. Hegel's account is in fact an extremely heterodox view, which the heterodox members of the classical school (i.e., Robert Thomas Malthus, Simonde de Sismondi), whom Hegel nowhere mentions, also advocate. So, Hegel has some explaining to do, and his view is in dire need of support, to say the least.

Second, the problem with Hegel's account is therefore that his conclusion about the "rabble" and the POU is a *non sequitur*, if it is meant to be derived from the "fundamental concepts" of the OCT, as he does indeed present matters. To be as clear as possible here, Hegel seems to present the following account:

1. Markets
2. Social Division of Labor
3. Classes (i.e., unequal accumulation of wealth)

∴ Overproduction or Underconsumption and the "Rabble"

Yet one simply cannot get that conclusion from those premises. They are not enough. There is no reason to think that, *by themselves*, markets, the social division of labor, and classes would give

[137] Cf. Bleaney 1976, 209: "the classical assumption that all savings are at all times automatically invested, which of course removes any possibility of such a deficiency [of effective demand]" (cf. ibid. 16, 23). Cf. Bleaney 1976, 16, 20. Cf. Bernanke 2000, 24. Cf. Sherman 1979, 4: "All savings are *not* invested, so aggregate demand does *not* equal aggregate supply, except by accident". Cf. Keynes 1964, 96-7; Hudson 2015, 168.

rise to the economic POU, involuntary unemployment, or the "rabble". Why should anyone be unemployed, if anyone is needy or hungry, and if economies are only fundamentally concerned with meeting human needs (*Bedürfnisse*) rather than accumulating aggregate profits as capital? Indeed, the advocates of the OCT think that there is and can be no problem here. And if one grants their premises, then it would appear that their conclusion that there is no problem at all is valid.

Moreover, one must also note that Hegel's account of the POU and the "rabble" is inadequate as it stands for other reasons which subsequent economists have noted, as I will address in chapter 5 of this dissertation. Hegel's claim that the POU causes involuntary unemployment, modern poverty, and the "rabble"[138] begs the question or mistakes a part of the problem (i.e., effect) for an independent variable (i.e., cause), because these are all just different descriptions of *the same general economic phenomenon.* Hegel seems to regard the POU in a way which is very similar to the theory of caloric, which he rightly criticizes for *reifying* an aspect of the phenomenon of heat and treating it as though it were an independent cause of phenomenal changes. So, Marx will call heterodox theories of the kind which Hegel advances (i.e., underconsumptionism *a la* Malthus and Sismondi) "tautological".[139] And Schumpeter too remarks that the economic POU does not present a fully formed causal explanation.[140] Yet Hegel is clearly onto something important, and hence the theory must be revised to save the phenomenon.

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[138] Cf. Hegel 1991a, 267 § 245: "it is precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive that the evil [*Übel*] consists [*besteht*]…"

[139] Marx 1992, 486: "It is a pure tautology to say that crises are provoked by a lack of effective demand or effective consumption. The capitalist system does not recognize any forms of consumer other than those who can pay [i.e., effective demand], if we exclude the consumption of paupers and swindlers. The fact that commodities are unsaleable means no more than that no effective buyers have been found for them, i.e. no consumers (no matter whether the commodities are ultimately sold to meet the needs of productive or individual consumption)". It must be noted that Marx's criticism of underconsumptionism here repeats the same criticism that Hegel makes of deficient modes of explanation (Cf. Hegel 1977, 94-5; Hegel 1991b, 190 § 121 addition; Hegel 1969, 458-9).

[140] Cf. Schumpeter 1954, 739: "…however large the phenomenon of overproduction may loom in the picture of historical crises, no causal explanation can be derived from it: there is no sense in saying that there is a crisis *because* 'too much' has been produced all around".

In sum, the problem is not that Hegel does not "solve" the problem of the "rabble", which at any rate would be a practical policy question beyond the purview of philosophy and social science. The problem is also not that there is any *a priori* reason why Hegel could not explain the POU, but rather simply that his view requires deeper engagement with the science of political economy. The problem is that Hegel presents a conclusion about political economy which is incompatible with the theory he presents. His avowed view of political economy is in the utmost tension with his conclusion about the fact of the economic POU, which he himself recognizes (to his merit). As one commentator puts it, Hegel's commitments and economic view are therefore ultimately "ambivalent" in the final analysis.[141] Hegel would have to choose between his orthodox assumptions and his heterodox conclusion. And heterodox assumptions will have to be provided externally, such that Hegel's heterodox conclusion is conceivable, possible, and can be explained. And I will opt for the latter of both cases. Indeed, I argue, Marx will provide here where Hegel does not.

4.2. The Heuristic Value of Hegel's View

Having just considered the theoretical limits of Hegel's ability to account for the phenomenon of the economic POU which he recognizes in the case of the "rabble", it would not be unreasonable for one to ask at this point why we should even bother with Hegel here at all. Why not just skip straight to a better explanation of the phenomenon? However, in what follows I will argue that his account nevertheless performs an invaluable service for appreciating the issue. It provides a helpful heuristic function. Much like the theory of "caloric" (*Wärmestoff*) is an explanation that stands on the threshold, as it were, between two scientific paradigms, which marks explanatory progress over

[141] Priddat 1990, 73.

the former, yet is ultimately inadequate seen from the standpoint of a more articulate successor theory, I will argue that Hegel's view of the POU, involuntary unemployment, modern poverty, and the "rabble" present just such a threshold-theory. It similarly stands between two paradigms. Even though it is inadequate, its heuristic value consists *precisely* in the way in which it combines orthodox premises (*Grundbegriffe*), with his heterodox conclusion (i.e., POU), which does not follow, and thus invites one to ask, which assumptions would one have to make such that his conclusion is possible? Thus, its very flaw is what makes it instructive.

Here it is worth considering Friedrich Engels's assessment of Marx's theory in the context of the history of science because it presents a similar analogy to my own proposal. Engels writes: "The history of chemistry offers us a parallel".[142] "Marx is related to his predecessors in the [economic] theory of surplus-value [i.e., aggregate profit] as Lavoisier is to Priestly and Scheele [in chemistry]".[143] That is, Marx is presenting a theory of oxygen, as it were, whereas his predecessors present a theory of phlogiston. The theory of phlogiston was meant to explain the correlative phenomena of combustion, corrosion (oxidization of metals, e.g., rust) and organisms' aspiration, which was later better captured by a complete theory of oxygen. It supposed that there was an inflammable physical substance ("phlogiston") which laid latent, as it were, within physical entities, until it were released through various processes such as combustion, rather than supposing that there was a chemical particle called "oxygen", which was involved in all these processes.[144] In combustion, the body which was supposed to be saturated with phlogiston released the latter until the non-phlogisticated air (i.e., oxygen) surrounding it became saturated with phlogiston, causing combustion to cease, unlike later theory of oxygen's view that combustion ceases when

[142] Marx 1992, 97.
[143] Marx 1992, 98.
[144] Cf. Lavoisier 1777, Lavoisier 1778; Best 2015 and Best 2016.

there is no longer any oxygen to burn the fuel. (The theory arrived at this conclusion when it noted that mice in a chamber with a candle that had gone out, because the air in the chamber had been fully "phlogisticated", which is to say that all the oxygen had been burned up, died.)

Engels suggests that Marx's predecessors (e.g., Smith, Say, Mill, Ricardo) present economic theories which grope blindly, as it were, at the phenomenon which Marx clearly apprehends and explains (i.e., aggregate profit, surplus-value). He thinks that Marx's predecessors' theories involve assumptions which are at loggerheads, as it were, with the phenomenon which they ought to explain. Thus, like Priestly, "[John Stuart Mill] remains a captive of the economic categories just as he finds them".[145] The only solution, according to Engels, and many 20th century theorists of science after him, is to discard the explanatory framework which impedes further explanation, because progress can be made *only if* one replaces that framework which is misguided (though it might intuit an important anomaly) with a stronger successor framework, like Marx's.

Stepping back from Engels's analogy, it is worth considering it in a broader context. In the history and philosophy of science since Thomas Kuhn and Paul Feyerabend, the theory of phlogiston has been taken as the epitome of the case in which it is clear that different explanatory frameworks or scientific paradigms, which employ different assumptions or fundamental concepts, are somehow "incommensurable".[146] The thought is that the theories are so different on a fundamental level (e.g. ontologies), that only *theory change* comes between the one and the other, leaving little or nothing in common between them. The notion of scientific progress is thus either doubted or discarded. But this is not the only view of science which one can adopt.

[145] Marx and Engels 1989b, 388; Marx 1992, 95.
[146] Cf. Kuhn 1996, 53-6, 57-9l, 70-2, 79, 85, 99-100, 102, 106, 107, 121-2, 126, 129, 157. Cf. Feyerabend 1981, chapter 4; Feyerabend, 1993, chapters 15, 16, and appendix 2. Cf. Carnap 1950.

Hegel certainly thinks that there can be "progress" in science.[147] Contemporary philosophy of science presents an alternative which is called "structural realism". It is the view that, though the assumptions, fundamental concepts, and even ontological posits ("reference") of theories may change, predecessor and successor theories both identify a real structure or pattern of phenomena, which both are getting at, of which both *do* present explanations and recognitions of correlations and patterns, though the latter simply capture it better or come closer to it.[148] While the theories of phlogiston and oxygen are almost diametrically opposed, each captures the phenomenon, though the more modern theory does so better. Successor theories simply let mere details aside, as it were, separating the wheat from the chaff, which is to say that the real structure of phenomenon is better preserved or "saved" in the more effective theory. It would be a miracle if the sciences presented progressively better explanations of phenomena and were not actually getting at the real structure of the world, and there are no miracles, so science progresses to a knowledge of the structure or relations of the world as it actually is, even though this might mean occasionally discarding the ontological posits of scientific theories (e.g., phlogiston, caloric, or luminiferous aether).

There is a better analogy for understanding the sense in which Hegel "remains a captive of the economic categories just as he finds them". In order to appreciate the role which Hegel plays in the history of science and political-economic thought by analogy, it is worth considering another, different figure: the Austro-Hungarian physician and obstetrician, Ignaz Semmelweis.[149] In the 1840s an inexplicable mass of deaths of mothers and newborn infants, which was called

[147] Hegel 1970, 6 § 246, Remark. For example, Hegel thinks Goethe's approach to botany, which broke with scholastic conceptions and regarded plant-life as a phenomenon *sui generis* marked progress. Cf. Hegel 1970, 311 § 345, Remark: "Goethe's *Metamorphose der Pflanzen* marks the beginning of a rational conception of the nature of plant-life, in that it has forced attention away from a concern with mere details to a recognition of the *unity* of life".

[148] Cf. Worral 1989; Ladyman 2002, 100-2, 231, 237; Ladyman 2011. For a more detailed account of this view of *ontic structural realism*, cf. Ladyman 1998, Ladyman 2001, French and Ladyman 2011, Ladyman 2012.

[149] Cf. Semmelweis, 1981. For a classic account of Semmelweis, cf. Hempel 1966, chapter 2; for a more recent, Kuhnian approach, cf. Gillies 2005.

"childbed" or "puerperal fever", was occurring in a specific ward of the Vienna General Hospital, unlike a general epidemic. Mothers and children in one ward were dying at a rate that was remarkably greater than the mortality rate of the other ward and even greater than the mortality rate among the homeless who lived and gave birth in the streets. Semmelweis's colleagues made several extravagant speculations on the basis of the crude theories which were at their disposal, yet they were ultimately unable to discover the cause of the problem and explain the latter. Semmelweis, by contrast, recognized the nature of the problem in rough outline in 1847 and inferred its cause, albeit crudely. He compared the similarities and differences of all the possible circumstances. In the ward in which there were remarkably higher mortality rates, physicians were also being trained to perform autopsies before examining pregnant mothers and delivering babies, while in the other ward, which had lower mortality rates, nurses were being trained only in care for pregnant mothers and delivering babies, without any direct contact with the morgue. Then, after a friend and colleague was cut on the hand by a scalpel during an autopsy and subsequently died of a mysterious sickness (i.e., blood poisoning), Semmelweis concluded that the cause of the problem must have been the same. Semmelweis drew what has been called an "inference to the best explanation" or an "abductive" inference.[150] It was the presence of what he called "cadaverous matter" or "cadaveric particles" in both cases. The hands of the physicians physically communicated "cadaverous matter" from the decaying bodies of the dead to living the bodies of

[150] Cf. Harman 1965. Cf. Peirce 1955, 151: "By a *hypothesis*, I mean, not merely a supposition about an observed object… but also any other supposed truth from which would result such facts as have been observed… an inferential step which I propose to call *abduction* [or *retroduction*]. […] Namely, the hypothesis cannot be admitted, even as a hypothesis, unless it be supposed that it would account for the facts or some of them. The form of inference, therefore, is this:

> The surprising fact, C, is observed;
> But if A were true, C would be a matter of course,
> Hence, there is reason to suspect that A is true".

mothers and children.[151] Then Semmelweis understandably enforced a strict regimen of disinfection (i.e., hand washing with chlorinated lime), and mortality rates immediately dropped drastically. Yet Semmelweis was marginalized, dismissed, and ultimately died in poverty in a Hungarian asylum before his views were understood.

Semmelweis's view ran in complete opposition to the reigning opinion of the time. So, with the theoretical resources at their disposal, his contemporaries could not understand his claims, recognize the pattern of the problem, or its cause. Indeed, his cognition may have only been possible because he *did not share* the orthodox theoretical premises of his time. Even though he did not have the proper theoretical resources (i.e., assumptions, concepts) at his disposal to articulate an adequate theory, and even though he had no proper concept of the cause at all, he recognized *that* there was a problem pertaining to a specific cause, without knowing *how* or *why* it had its fatal effect, or even *what* that cause actually was.[152] As it later became clear, "childbed" or "puerperal" fever is not even a single communicable disease, but rather simply an ordinary outcome of an infection of various bacteria. And "cadaveric matter" is not a single entity which could cause the problem, as he suspected. Semmelweis ultimately mistook an observable entity ("cadaverous matter") for an unobservable and unknown cause (i.e., germs) of an observable effect, because lacked the concept of "germs". He nevertheless outlined an explanation that was stronger than the reigning view of his day, even though it ultimately fell short of the adequate theory of bacteria (i.e., germ theory) that could substantiate it, which would only be developed 20 years later by Pasteur.[153] So, he had the correct conclusion, but not the true premises.

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[151] Semmelweis and Murphy 1981, 811; cf. Wylicky and Skopec 1983. Holmes 1843 claimed that the doctors were transmitting puerperal fever from one infected patient to another, which is half correct and half false, as it were, because the transmission was from the dead to the living, not from the living to the living, via doctors.

[152] On the distinction between knowing *that* and knowing *how* or *why*, cf. Cohen 2000, 266, 271, 280.

[153] Cf. Pasteur 1910: "Under the expression puerperal fever are grouped very different diseases… but all appearing to be the result of the growth of common organism which by their presence infect the pus naturally formed on injured surfaces, which spread by one means or another, by the blood or the lymphatics, to one or another part of the body,

Much as will be the case regarding Hegel in my argument about political economy, Semmelweis remains interesting and important because he presents an example of the way in which an ultimately inadequate explanation can nevertheless mark theoretical progress, while remaining on the threshold of adequate explanation, thereby clearly depicting the limits inherent to the orthodox science of its day. The empirical phenomenon or problem which he clearly recognized was an "anomaly" from the standpoint of the "normal science" of his day, which could neither properly recognize nor accept nor explain, and thus the latter had to oppose or resist Semmelweis.[154] Hegel's predicament of the POU and the "rabble" is analogous to Semmelweis's predicament of "puerperal fever" and "cadaverous matter" in the respect that both recognize an empirical fact and draw a causal inference about it, which is *approximately* true, yet which is neither adequate nor consistent with the theoretical premises of the prevailing theoretical orthodoxy of their day. Both recognize *that* there is a problem without being able to explain precisely *why* it happens or *how* it works. Their recognitions and conclusions require a set of theoretical premises that were missing in the orthodox theory of their time or were considered extremely heterodox. They illustrate the necessity of revision or modification of theoretical premises. So, what is therefore surprising about their accounts is not that they are inadequate, but rather that they succeed in recognizing the problem at all, to their credit.

Finally, it is worth acknowledging the possibility that Hegel might be waging a subtle, esoteric ("immanent") critique of classical political economy.[155] But this possibility his hard to prove because he never directly states as much himself and because he never names any heterodox

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and there induce morbid changes varying with the condition of the parts, the nature of the parasite, and the general constitution of the subject".

[154] Cf. Kuhn 1996, 62-4, 67, 82, 87, 113. Cf. Kuhn 1996, 10: "Normal science, for example, often suppresses fundamental novelties because they are necessarily subversive of its basic commitments" (cf. 10, 24-34, 80).

[155] Cf. Hegel 1969, 580-1; Hegel 1977, 36f. Cf. McCumber 1986.

accounts which are similar to his own conclusion.[156] It is also important to recognize the possibility that Hegel simply (perhaps carelessly) accepts the "normal science" of his day *and* recognizes the empirical facts that were obvious to anyone living in the context of the post-Napoleonic recession,[157] leaving it to the so-called experts to sort out the details. These questions probably cannot be settled. And for the purposes of my argument, they are irrelevant. What is important is the way in which Hegel's peculiar account illustrates the limits of the orthodox theory by providing a convenient comparison of orthodox premises and a conclusion, which are inconsistent with one another, thereby throwing some light on what *would* have to change in the orthodox theory (i.e., premises), if one *were* to have a working argument from which that conclusion followed.

4.3. The Way Forward

This section anticipates what will come in the rest of this dissertation. Much as Semmelweis's recognition of his anomalous problem signaled a crisis in the normal science of his day, Hegel's view of the economic POU, involuntary unemployment, modern poverty, or the "rabble", signals a "crisis in traditional economics", which requires a revision or modification of the fundamental concepts or assumptions of political economy.[158] Hegel recognizes that the phenomenon of the POU and thus the "rabble" is an actual fact, which suggests that it is also possible. Yet the OCT to which Hegel refers ("Smith, Say, and Ricardo") claim that it is impossible. Orthodox assumptions (i.e., Say's Law) rule out *a priori* the possibility of the empirical phenomenon which Hegel seems to recognize. It is as though the OCT asserts "the impossibility of what was actually happening"

[156] It is unclear whether Hegel read the heterodox political economy of Malthus and Sismondi, which came to the same conclusion about the POU (cf. Stedman Jones 2001 and Stedman Jones 2006, 212). It is clear that Hegel did not possess their works in his library at his time of death (cf. Hegel 2017a and 2017b).
[157] Cf. Böhme 1978, 22.
[158] Sweezy 1953, 258.

(i.e., the POU),[159] as Hegel sees it. And this invites one to ask, what would one have to suppose in order for the phenomenon of the POU, involuntary unemployment, modern poverty, or the "rabble" to be conceivable, possible and explicable? The rest of the dissertation will accordingly attempt to provide here in the manner of an abductive inference to the best explanation or something akin to a so-called transcendental argument.[160] The question which the rest of this dissertation addresses: what would one have to assume, such that the fact of the "rabble" (i.e., involuntary unemployment) would follow as "a matter of course", rather than a merely temporary anomaly?[161]

As I will argue in the following three chapters, Marx provides the alternative or modified premises or "fundamental concepts" which one would require for Hegel's conclusion to be sensible. The "fundamental concepts" which Hegel highlights (i.e., markets, the division of labor, and classes) are not the proper loci of attention after all. Rather, the concepts of value and capital require closer scrutiny, and they are where Hegel should be looking. They are concepts which he does intermittently address, though he does not devote as much systematic attention to them as others, and he does not sufficiently do so in the essential passages relating to the POU and the "rabble". Hegel's own views of value and capital ultimately remain somewhere between the OCT and heterodox views or those of Marx, which I address later. And he does not develop any

[159] Sweezy 1953, 258. He makes this comment about Keynes, but it arguably equally applies to Hegel here as well.

[160] Cf. Stern, 2000, 6: "As standardly presented, transcendental arguments are usually said to be distinctive in involving a certain sort of claim, namely that 'For *Y* to be possible, *X* must be the case', where *Y* is some [ostensibly] indisputable [*actual*] fact about us and our mental life (e.g. that we have experiences, use language, make certain judgements, have certain concepts, perform certain actions, etc.), but where it is left open at this stage exactly what is substituted for *X*". Cf. Brueckner 1999, 925: "transcendental argument, an argument that elucidates the conditions of possibility of some fundamental phenomenon whose existence is unchallenged or uncontroversial in the philosophical context in which the argument is propounded. Such an argument proceeds deductively, from a premise asserting the existence of some basic phenomenon (such as meaningful discourse, conceptualization of objective states of affairs, or the practice of making promises), to a conclusion asserting the existence of some interesting, substantive enabling conditions for the phenomenon. The term derives from Kant's Critique of Pure Reason, which gives several such arguments".

[161] Peirce 1955, 151. Cf. Harman 1965.

systematic theory of them, though he does make many interesting and suggestive statements. Ultimately, his view is simply inconclusive and would have required more engagement with political economy to better understand the POU. For example, at times Hegel's statements about value express a view closer to the heterodox view which holds that money is an essential form of value which cannot be neglected, while at other times his statements express a view closer to the orthodox view which reduces value to physical goods and treats money as a mere means for satisfying needs;[162] or, on wealth and capital, at times his statements treat it as a mere physical means to produce goods to satisfy needs, which is an orthodox view, while more often he expresses an extremely heterodox view on which the accumulation of profit as capital becomes an end in itself, anticipating Marx's concept.[163]

As I have just suggested Marx's concepts of value and capital will provide the modified premises or assumptions, the basis from which Hegel's view of the "rabble" might follow, as Marx's account of the accumulation of capital, its changing "organic composition", and involuntary unemployment will similarly argue, and as I address much later. Thus, my account can thus be formulated as follows:

1. Marx's Concept of Value (i.e., macroeconomic and monetary analysis)
2. Marx's Concept of Capital (i.e., macroeconomic and monetary analysis)
3. Marx's View of the Changing Composition of Capital Investment (i.e., machinery-labor)

∴ Overproduction and Underconsumption (i.e., POU, "rabble")

[162] For his heterodox statements on money, cf. Hegel 1991a, 93 § 64, Hotho's addition; Hegel 1991a, 111 § 80; Hegel 1991a, 338 § 299; Hegel 1969, 429. For orthodox statements, cf. Hegel 1991a, 92, § 63; Hegel 1991a, 93 § 64. Hotho's addition. On value, cf. Hegel 1991a, 107 § 77; Hegel 2007, 218 § 486; Hegel 2007, 221 § 494; Hegel 1991a, 128 § 101; Hegel 1991a, 245 § 214; Hegel 1991a, 333 § 294.

[163] On capital, cf. Hegel 1991a, 229 § 191; Hegel 1991a, 228-31 §§ 190-5; Hegel 1991a, 231 § 195; Hegel 1991a, 266-8 §§ 243-6; 266 § 243; Hegel 1995, 172 § 98; Hegel 1995, 174 § 100; Hegel 1995, 180-4 § 104; Avineri 1985. On the relation of labor to value, cf. Hegel 1983b, 161-2.

Framed in this way, it is conceivable that what Marx calls the "relative surplus population or industry reserve army" of the unemployed can emerge,[164] which Keynes will call "involuntary unemployment" or "poverty in the midst of plenty",[165] and which Hegel calls the "rabble".

To be clear, the issue I address here and in what follows is not one of empirical explanation of the phenomenon of overproduction or underconsumption in the world. This is not a dissertation in empirical political economy, and I do not presume to be able to adjudicate between the contending empirical theories. The point is not to prove that the OCT's claim that it is impossible is false, that heterodox views which claim that it happens are true, or least of all that it actually happens in fact. There will be no question beginning here. The contention is on the level of principle, theory, and interpretation of theory rather than fact. Indeed, heterodox voices claim that the POU happens while the OCT claims that it is impossible in principle. They both point to the same phenomenon and call it something different (viz. POU or anomaly). All that is required to turn the tide of this dispute is to show that it is possible in principle or at least not inconceivable, regardless of whether it occurs in empirical fact at all. Ultimately, either one can accept the premises of the OCT and its concepts of value and capital, from which Hegel's heterodox conclusion about the POU and the "rabble" does not follow, and which contradict or exclude the very possibility of his conclusion; or one can accept alternative premises from Marx, which will allow a version of Hegel's conclusion to follow and present a theory on which it is possible and explainable. In the following chapters I will address Marx's alternative premises or "fundamental

[164] Marx 1990, 781. Accounts which hold that a relevant point of comparison for understanding the "rabble" is Marx's concept of the "proletariat" (e.g., Ruda 2011 and Ruda 2017) are as misguided, in my view, as those who compare capitalists or the bourgeoisie and workers or the proletariat to Hegel's account of the "lordship and bondage" or "Herrschaft und Knechtschaft" (e.g., Kojève 1969) in the *Phenomenology of Spirit*. It is what Marx calls the "dangerous class" (Marx and Engels 1978, 482) or "lumpenproletariat" (Marx and Engels 1978, 615-16).

[165] Cf. Keynes 1964, 6, 15, 26, 30.

concepts" and spell out what they mean, such that a version of Hegel view can make sense. Perhaps obviously, I will hold that the alternative which Marx provides makes the best sense here.

Chapter Three: The Concept of Value

1. Introduction

The purpose of this chapter is to distinguish two different kinds of theories of value, to shed light on the controversy around the economic problem of overproduction and underconsumption (POU), to which I return chapter five. On the one hand, there is the orthodox, classical theory (OCT), represented by Smith, to which Ricardo's more specific labor theory of value (LTV) also belongs. (When I refer to the OCT, I usually also refer to the LTV, unless I am addressing the respect in which they differ, in which case I will simply refer to the LTV.) On the other hand, there is Marx's theory of value. The fundamental differences between the kinds of theories which the OCT and Marx's theory are — their different assumptions or fundamental concepts — explain why the former can neither recognize nor explain the POU, while the latter can. Or so I will argue.

Marx is often said to belong to the "classical" school of political economy and hold the "labor theory of value" (LTV). The overwhelming majority of interpretations consistently contend that Marx is basically just a "minor post-Ricardian", as one influential economist put it,[1] though Marx already complained in his lifetime that interpreters "burden me with all of Ricardo's limitations".[2] Mainstream economists after the canonization of neoclassical economics (i.e., general equilibrium theory plus the marginal-utility theory of value) indiscriminately labelled Marx as well as the OCT that he critiques "classical political economy".[3] However, *none* of the

[1] Samuelson 1962, 12. Cf. Mandel 1990, 11; Mandel 1971, chapters 3 and 6; Sweezy 1970, 85; Wolff 1984; Böhm-Bawerk 1949, 77, 83-4; Samuelson 1971; Schumpeter 1954, 85, 114, 130; Schumpeter 1994, 390, 598; Schumpeter 2008, 22-3; Keynes 1982, 43.

[2] Marx and Engels 1942, 234.

[3] For Marx, Petty, Smith, Ricardo and Mill constitute "classical political economy" (Marx 1990, 174-5). From the Alfred Marshalls neoclassical standpoint ("marginal utility"), Smith, Ricardo, Mill *and* Marx belong to the so-called classical school. Keynes refers to neo-classical theory as "classical theory", because he reacted critically against the latter in his *General Theory*, yet he recognizes the difference between pre- and post-marginalist views and includes Marx in "the classical school" (Keynes 1964, 3).

classical theorists or Marx used the term "LTV" to describe their own theories. And Marx's value-theory in *Capital* takes Ricardo's LTV as the point of departure for his "critique of political economy", in relation to which Marx forms his own positive view. So, in what follows, I will argue that the common understanding of Marx as a kind of Ricardian is mistaken.[4] While the LTV uses ratios of quantities of labor to explain exchange-values or prices, Marx uses labor to explain the production of aggregate profit (i.e., surplus-value), as I will address in this and the next chapter.[5]

In this dissertation, I will proceed in a manner which is somewhat different from many approaches to Marx. Commentators often address Marx's theory *Capital* in exegetical terms that are peculiar to the interpretation of Marx. For example, they speak of the various "levels of abstraction"[6] that Marx employs throughout the course of his analysis, the various "windows" or "perspectives" on capitalist society that he presents,[7] or the series of successive "approximations" in which Marx continually revises his assumptions at various points in his "dialectical" analysis.[8] Yet I will insist in what follows that Marx's theory can be presented in terms which are not peculiar to him. The reconstruction of Marx's theory which I will present will abstract from all independently philosophical considerations to focus on his economic theory (i.e., explanation) and contrast the latter with that of the OCT. To clearly distinguish the OCT from Marx's value-theory, I relate both to economic categories that contemporary economists or perhaps even laymen might recognize. The most important of which will be the difference between what economists call "real analysis" and "monetary analysis" and "microeconomic" and "macroeconomic" scales of

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4 Cf. Veblen 1906; Sowell 1963, Sowell 1967, Sowell 1972. Sowell 2006, Mohun 1994, Harvey 2018c, 144-5; Harvey 2018d.

5 Cf. Roemer 1990, 257: "For Marx, the labour theory of value was not a theory of price, but a method for measuring the exploitation of labour. The exploitation of labour, in turn, was important for explaining the production of a surplus in a capitalist economy". Cf. Robinson 1966, 16: "The fact of exploitation makes profit possible…"

6 Cf. Sweezy 1970, 18-9; Rozdolsky 1977, 41-50; Ollman 2003, 86-98; Moseley 1995, 2009, 2016.

7 Cf. Harvey 2018, 44; Harvey 2018a, 12 & 356; Harvey 2018b, 2, 16, 22, 69, 56, 208, 446.

8 Cf. Sweezy 1970, 11; Sowell 1967, Sowell 2006, 155-186; Heinrich 1989; Heinrich 2012, 9, 31, 81.

description of social phenomena. In short, I argue, the OCT is what I will characterize as a "micro-real" theory, while Marx's is what I will characterize as a "macro-monetary" theory,[9] both of which I explain shortly. The important difference between these two kinds of theories for the purpose of my argument is that the OCT and LTV present a picture of the economy which is fundamentally harmonious, in which the economic POU or Hegel's "rabble" could not occur, and the reason they conceive of matters in that way, as I address below, is their fundamental assumptions about the way in which economies work (e.g., Say's Law). For Marx, who makes very different assumptions, turbulence and disequilibria such as the POU or the "rabble" are endemic to capitalist economies and follow "a matter of course".[10]

A methodological word of warning for my reader is in order here. The reconstruction of Marx's theory of value which I present in this chapter and of capital in the following chapter might not look like what one is accustomed to from reading volume I of *Capital*. Despite Engels' plea to make his theory more accessible,[11] Marx does not always make matters easy for his reader, and the work published by him in his lifetime does not present his theory in an accessible manner,[12] while the works that were edited and published posthumously by others are more accessible.[13] For the sake of (what I take to be some) clarity, in what follows I adopt an analytical distinction between the mode or manner in which Marx's theory is presented and the theoretical content or explanatory framework which his theory *is* and which can be presented in various ways. That is, I will abstract entirely from Marx's "dialectical… method of presentation" of his theory

[9] I borrow the latter expression from Moseley 2016 and similarly coin the former for the sake of clear distinction.
[10] Peirce 1955, 151. Cf. Harman 1965.
[11] Cf. Marx and Engels 1942, 220-3.
[12] I.e., *The Poverty of Philosophy* [1847], *A Contribution to the Critique of Political Economy* [1859], and volume I of *Capital* [1867/73].
[13] I.e., volumes II [1885] and III [1894] of *Capital*, by Engels, and *Theories of Surplus Value* [1905-10], by Kautsky.

(*Darstellungsweise*), or his "method of analysis" in volume I of *Capital*.[14] And I will focus entirely upon what I take to be the theoretical kernel of his view of economy and society, or the explanatory *model* that he presents in his mature works.[15] Admittedly, such a distinction of form and content would be illegitimate in certain domains, for instance interpretations of literature, poetry especially, or Hegel's *Science of Logic*, which is meant to be thought's exposition of itself. Yet Marx's *Capital: A Critique of Political Economy* is nothing if not a theory (i.e., explanation) of capital *and* a "critique of political economy" as it was conducted before him.[16] It is neither poetry nor speculative philosophy. His prefaces declare the scientific and prosaic ambition of his work, which can easily be obscured by the literary quality of his text and his mode of presentation of his theory. "What I have to examine in this work is the capitalist mode of production…";[17] "the ultimate aim of this work [is] to reveal the economic law of motion of modern society…"[18] "There is no royal road to science…"[19]

For example, one can easily distinguish between the order in which a literary narrative presents a sequence of events to its audience (*sujet*) and the sequence of narrated events in the fictional world that it represents for its audience (*fabula*).[20] The sequence of a storytelling does not

[14] Marx himself makes the distinction between his mode of inquiry (*Forschungsweise*) and method of presentation (*Darstellungsweise*). Cf. Marx 1990, 102-4.

[15] Cf. Mitchell, Wray, Watts 2019, 12: "A model is just an organizing framework and represents a simplification of the system that is being investigated".

[16] In part I agree with Moishe Postone's claim that "Contrary to common interpretation, then, Marx does not take over Ricardo's labor theory of value, render it more consistent, and use it to prove that profit is created by labor alone" and that Marx critiques the OCT or LTV (Postone 1993, 56). Yet I cannot agree that Marx's value-theory is *only* a "*critique* of political economy, an immanent critique of the classical labor theory of value". Marx also clearly takes himself to be presenting a positive economic explanation of capitalist society (cf. Marx 1990, 89-90, 92, 102). Cf. Postone 1993, 56: "Marx takes the categories of classical political economy and uncovers their unexamined, historically specific social basis. He thereby transforms them from transhistorical categories of the constitution of wealth into critical categories of the specificity of the forms of wealth and social relations in capitalism".

[17] Marx 1990, 90.

[18] Marx 1990, 91.

[19] Marx 1990, 105.

[20] Cf. Shklovsky 1990, chapters 1 and 2.

always correspond to the sequence of narrated events. Many works begin *in media res* or even start at the end of a series of events and work backward to the beginning (i.e., analepsis). Similarly, one can distinguish the order in which Marx presents and discusses topics and ideas in *Capital* (*Darstellungsweise*) from the explanatory model of the world which Marx has constructed and presents in *Capital*. Though it may be sacrilege in some corners of Marx scholarship, I claim that the theoretical core or explanatory model that that Marx presents in *Capital* is distinct from the narrative series or way in which he presents it.[21] His *presentation* in *Capital* begins with "the commodity" and proceeds to consider each aspect and puzzle from every angle, being propelled onward for instance by the purported "contradiction" between use-value and exchange-value.[22] But, on the reconstruction I present, Marx's explanatory model begins with a macroeconomic standpoint and monetary analysis of the capitalist economy, which only really appears for the first time in chapters four through six and part seven of volume I of *Capital*. (That model is M-C-M' or, more fully, M-C…P…C'-M', which I will only be able to address in in the next chapter.[23])

In this chapter I will consider value in terms of the process of exchange of commodities of equivalent values in abstraction or isolation from the accumulation of capital, which I discuss in the following chapter. The former Marx calls "simple circulation" (C-M-C), and the latter he calls the "valorization" of value (M-C-M'). I separate these processes and deal with them in their own respective chapters for the sake of clarifying the OCT, Marx's theory, and the difference between

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[21] Godelier 1972 and Heinrich 2006 both similarly claim that this distinction cannot be made with Marx's work.

[22] Marx 1990, 125. Cf. Marx 1976b 40, Marx 1970, 41, 48. It is worth noting already, however, that even in *Capital*, Marx already begins with a macroeconomic or aggregate-level view front and center in the first sentence of the first chapter of the first volume of *Capital*: "The wealth of societies in which the capitalist mode of production prevails appears as 'an immense collection of commodities'; the individual commodity appears as its elementary form. Our investigation therefore begins with the analysis of the commodity".

[23] Cf. Marx 1992, 109. Cf. Moseley 2016, XIII: "the logical framework of the theory is not a physical quantities input-output matrix, but is instead the *circuit of money capital*, expressed symbolically as M – C ... P ... C′ – M′, which implies that the initial money capital M is the starting point of Marx's theory and is *taken as given* as known data, both in the macro theory of the production of surplus-value and in the micro theory of the distribution of surplus-value".

them, but also because the OCT conceives of value and capital as though it were a matter of such "simple commodity exchange". Yet here I am making an analytical or *methodological* distinction which is not meant to suggest that the circulation of commodities (C-M-C) and the accumulation of value as capital (M-C-M') really are different processes or that the former *precedes* the latter historically. From Marx's perspective they are ultimately two sides of the same coin, as it were, while the OCT seems to believe they are separable and mythologizes about precapitalist barter.

Clarifying the difference between the OCT or LTV and Marx's views of value will make it easier to understand how their views of capital and economic growth are also fundamentally different in the following chapter. And finally, from that vantage point, it will ultimately be possible later to see how and why the OCT or LTV can neither recognize nor explain the economic problem of overproduction and underconsumption (POU), while Marx's theory can indeed do both, due to their different concepts of value and capital. That is, it will be easier to understand how it is possible for the productivity of a capitalist economy to increase, while the effective demand for the products of labor decreases, and a mass of involuntarily unemployed people appears in society (i.e., "rabble"). Marx's concepts of *value* and *capital* present the heterodox premises which are missing in Hegel's account of the "rabble", which he would need for his conclusion that the POU causes the "rabble" to follow, instead of the orthodox premises he adopts from the OCT (i.e., "Smith, Say, Ricardo"), which exclude the possibility of the POU *a priori*.

2. Two Kinds of Theories: Micro-Real or Macro-Monetary

To present the difference between their views of value as clearly as possible, I distinguish the possible positions that the OCT and Marx's theory adopt in terms of opposed contemporary economic categories. In what follows I characterize the OCT (i.e., Smith and Ricardo) or LTV

(i.e., Ricardo) as a "micro-real" theory (A) and Marx's theory as a "macro-monetary" theory (B),[24] which adopt fundamentally opposed foundations for their views:[25]

1. Regarding the consistency of value, one could conceive of it either (A) in exclusively physical terms (e.g., method of real analysis), or (B) in quantitative terms which I will call value-theoretic terms (e.g., method of monetary analysis); in the former case, monetary exchange is inessential, while in the latter case it is essential to value.

2. Regarding the measurement of value, one could conceive of it either (A) in exclusively relative terms (e.g., a ratio), or (B) also in absolute terms (e.g., numerical value or quantity).

3. Regarding the scope of one's view of value, one could adopt either (A) a fundamentally individual-level perspective, or (B) an aggregate-level perspective for one's explanation; in what follows I will call these microeconomic and macroeconomic "scales" of description, respectively.

4. Regarding the determination of economic value, one could adopt either (A) the view that labor in production independently predetermines the values of products as commodities on the market *ex ante*, or (B) the view that exchange is a necessary condition of value which qualifies it *ex post* and undermines any independent or *ex ante* influence which production might have.

2.1. Real Analysis or Monetary Analysis of Value

The first point on which the OCT or LTV and Marx's value-theory differ is the way in which they conceive of the consistency of value and whether they think that monetary exchange is an essential aspect of value. The distinction which contemporary economic theory draws between "real analysis" and "monetary analysis" is helpful here, and I will continually refer to it in what follows. The influential economist and historian Joseph Schumpeter defines "real analysis" as follows:

[24] I borrow the latter expression from Moseley 2016 and similarly coin the former for the sake of clear distinction.
[25] Certainly, there are other respects in which the OCT and Marx's theory might differ, but I restrict my account here for the purposes of the argument of this chapter and dissertation.

> **Real [i.e., non-monetary] Analysis** proceeds from the principle that all the essential phenomena of economic life are capable of being described in terms of goods and services, of decisions about them, and of relations between them. Money enters the picture only in the modest role of a technical device that has been adopted in order to facilitate transactions. This device can no doubt get out of order, and if it does it will indeed produce phenomena that are specifically attributable to its *modus operandi*. But so long as it functions normally, it does not affect the economic process, which behaves in the same way as it would in a **barter economy**: this is essentially what the concept of **Neutral Money** implies. Thus, money has been called a **'garb' or 'veil'** of the things that really matter, both to households or firms in their everyday practice and to the analyst who observes them. Not only *can* it be discarded whenever we are analyzing the fundamental features of the economic process but it ***must* be discarded just as a veil must be drawn aside if we are to see the face behind it.** Accordingly, **money prices must give way to the exchange ratios between the commodities that are the really important thing 'behind' money prices**; income formation must be looked upon as an exchange of, say, labor and physical means of subsistence; saving and investment must be interpreted to mean saving of some real factors of production and their conversion into real capital goods, such as buildings, machines, raw materials; and, though 'in the form of money,' it is these physical capital goods that are 'really' lent when an industrial borrower arranges for a loan.[26]

This is not polemic or hyperbole. Real analysis discusses economic activity in terms of physical "goods and services" behind prices, the monetary expression of exchange ratios or exchange-values of goods. It considers economies in terms of real production without reference to money, which it regards as merely "nominal", a dependent variable (i.e., the "classical dichotomy").[27] It abstracts from money and intentionally ignores it, claiming it is "neutral" with respect to normal economic activity. Important and incredibly influential mainstream economists before and after Schumpeter have claimed that money is an inessential "veil"[28] and economies basically boil down to "barter" of goods for goods.[29] When they *do* think of money, they call it "neutral", claim it is "neutral" in the "long-run",[30] or treat it *as though* it were another commodity (e.g., gold) that

[26] Cf. Schumpeter 1994, 277.
[27] Cf. Green 2008, 2; Mitchell, Wray, Watts 2019, chapter 12.
[28] Cf. Pigou 1949, 14: "Monetary facts have no significance for economic welfare. In this sense, money clearly is a veil. It does not comprise any of the essentials of economic life"
[29] Cf. Samuelson 1976, 55: "Even in the most advanced industrial economies, if we strip exchange down to its barest essentials and peel off the obscuring layer of money, we find that trade between individuals or nations largely boils down to barter…" Cf. Edgeworth 2018.
[30] Cf. Patinkin 2008 on the so-called "neutrality of money". Cf. Mankiw 2021, 620.

facilitates barter, *as though* it emerged from the process of barter itself.[31] It can be difficult for non-economists to believe or imagine that someone, especially economists, might actually think money is not an essential aspect of the modern economy or even an "illusion".[32] They infer this from the fact that only real goods and services can be literally consumed, not money, and from the admittedly significant fact that money prices can be altered (e.g., inflation or deflation), without thereby altering the real goods and services "behind" those money-prices. For example, in 1960, a gallon of milk cost $.36 and a gallon of gas cost $.31, and these contemporary prices must be adjusted to present prices to reflect the buying power of wages and the real standard of living at that time. So, there is some undeniable good sense to the real-monetary distinction, though the further step of throwing money out altogether and conceiving economy as barter is questionable.

The alternative to real analysis is what economists call "monetary analysis".[33] It denies the claims that only real goods and services are relevant for economic analysis; that money is "neutral" with respect to normal economic activity; that money is a mere "veil" that must be ignored; and, that exchange is the same as direct "barter" of goods for goods. Again, Schumpeter writes:

> Monetary Analysis, in the first place, spells denial of the proposition that, with the exception of what may be called monetary disorders, the element of money is of secondary importance in the explanation of the economic process of reality. [/] **Monetary Analysis introduces the element of money on the very ground floor of our analytic structure** [i.e., explanatory model or framework] **and abandons the idea that all essential features of economic life can be represented by a barter-economy model.** Money prices, money incomes, and saving and investment decisions bearing upon these money incomes, no longer appear as expressions—sometimes convenient, sometimes misleading, but always nonessential—of quantities of commodities and services and of exchange ratios between them: they acquire a life and an importance of their own, and it has to be recognized that **essential features of the capitalist process may depend upon the 'veil' and that the 'face behind it' is incomplete without it**.[34]

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[31] Cf. Menger 1892; Samuelson 1976, 274-81.

[32] On the so-called "money illusion" in contemporary mainstream economics, cf. Shafir, Diamond, Tversky 1997; Howitt 1989. For other accounts of money cf. Tobin 2008, Green 2008, Desai 1989.

[33] This view must not be mistaken so-called monetarism (e.g., Milton Friedman).

[34] Schumpeter 1994, 278.

Monetary analysis is founded upon the thesis that money is essential for normal economic activity, the production and exchange of commodities for money (e.g., profits). It does not abstract from real factors but attempts to integrate both commodities and money into a richer model. Money serves the various functions of being a means of exchange, a means of (deferred) payment, a store of value, and more importantly got my account, a measure of value or unit of account. Those who adopt it, for example, Keynes and Post-Keynesians, speak of the modern, capitalist economy "in which we actually live" as a "monetary economy".[35] Its principal advantage is that it enables us to speak of the heterogeneous goods that furnish an economy in a unified and coherent way as quantities of homogeneous units (i.e., values). Schumpeter continues: "…monetary aggregates are homogeneous, whereas most nonmonetary ones are but meaningless heaps of hopelessly disparate things; and if we wish to work with a small number of variables, we can hardly help resorting to monetary ones".[36] So, monetary analysis is not really just about empirical pieces of money so much as it is about value understood as a pure numerical quantity.

As I argue below, the OCT adopts the method of real analysis. It holds that the exchange of products of labor is basically a direct barter of goods for one another and that money is an inessential mediator or mere means of exchange. Marx's value-theory, by contrast, adopts the method of monetary analysis. He calls the modern capitalist economy a "money economy".[37] From

[35] Cf. Keynes 2015, 174-5: "An economy, which uses money but uses it merely as a neutral link between transactions in real things and real assets and does not allow it to enter into motives or decisions, might be called – for want of a better name – a *real-exchange economy*. The theory which I desiderate would deal, in contradiction to this, with an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot be predicted, either in the long period or the short, without a knowledge of the behaviour of money between the first state and the last. And it is this which we ought to mean when we speak of a *monetary economy*". Cf. Keynes 1979, 81, 89; Keynes 1964, vii; Mitchell, Wray, Watts 2019, 183. Schumpeter adopts a monetary analysis of credit and capital (cf. Schumpeter 2017, 95).

[36] Schumpeter 1994, 278. Leontief 1951 presents an unwieldy aggregate-level view of "real" input-output tables.

[37] Marx 1992, 298, 195. Cf. Keynes 2015, 174-5; Keynes 1979, 81, 89; Mitchell, Wray, Watts 2019, 183.

the Marxian and post-Keynesian standpoint, the method of real analysis is a "pre-monetary" conception of value. Commodity exchange is not direct barter of goods, and money is essential.[38]

2.2. Relative Value or Absolute Value

The second point on which the OCT or LTV and Marx's value-theory differ is the way in which they conceive of the measurement of economic value. The distinction between the concepts of relative and absolute values (i.e., quantities) is very helpful here, and I use it in what follows.

Value understood in a *relative sense* is a quantity understood in relation to another quantity, for example divided by another quantity or as a mere component in a ratio. Understanding some commodity's value in a relative sense in economics means understanding it as a component in the ratios in which it trades for other commodities on the market (i.e., so-called exchange-values, relative prices). Relative value or exchange-values can be expressed in money as *price*, though this is not supposed to be essential, because it merely represents the relation or ratio in which some commodity or commodities stand(s) to all others.[39] The relative conception of value is the one found in the method of real analysis, which abstracts from the sum of money (veil) for which commodities actually exchange in the market to focus upon the direct relation to quantities of other goods on which it focuses (e.g., commodity x and commodity y exchange at 2:1).

Value understood in an *absolute sense* is a sheer quantity considered as an aggregate *per se*. "Absolute" does not mean anything mysterious, but rather just "the actual magnitude of a numerical value or measurement, irrespective of its relation to other values" (e.g., the population

[38] Here I am in agreement with Heinrich 2012, 63-4 and Moseley 2016. Cf. Bellofiore 1985, Reuten 1988, Milios 2002, Moseley 2005, Bellofiore 2005, Nelson 2005, Williams 2000.

[39] Cf. Vaggi 2008 and Vaggi 2018.

of the United States).[40] An absolute value clearly need not exclude the relative conception of value. It *may also* be a component in some ratio with other quantities (e.g., US per capita income), though it is not merely a relative component of any ratio or relation. So, one can have both. In an economic context, an absolute value might be the monetary value of the aggregate sum of products of labor which are produced and exchanged for money in a given period of economic activity (e.g., gross domestic product, GDP). Or, similarly, the value of aggregate growth or the aggregate profit generated between two periods of economic activity, which Marx refers to as "surplus-value", is a value in the absolute sense of the term, as I discuss in the next chapter. It is the monetary value (i.e., quantity) of net aggregate returns (i.e., aggregate gross returns minus aggregate expenses).[41] The fact that the absolute value is denominated in money is *essential* here, as Schumpeter notes.

As I argue below, the OCT or LTV adopts the relative concept of value (i.e., exchange-values).[42] Marx's value-theory, by contrast, accepts a more inclusive view. When he speaks of "value", he speaks of an aggregate or absolute quantity. When he speaks of "exchange-value", he speaks of relative quantities. When he speaks of the "values" of commodities, he speaks of the fraction of an aggregate or absolute quantity that they express. Marx is primarily interested in absolute values (e.g., GDP, aggregate profit or surplus-value), as I also discuss in the next chapter.

2.3. Microeconomic or Macroeconomic Scales of Description

The third point on which the OCT or LTV and Marx's value-theory differ is the way in which they conceptually frame the domain of economic explanation differently. They present fundamentally

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[40] Cf. Lexico. By "absolute value" I also do not mean the immediate physical properties of some goods, utility, or use-value, as this term is sometimes used in some business literature.

[41] Cf. Marx's *Theories of Surplus Value:* "*ABSOLUTE PROFITS* (*=SURPLUS VALUE*)" (Marx and Engels 1989b, 63). The discussion of the latter term must be postponed until the following chapter, in which I discuss the concept of capital in the OCT or LTV and Marx's theory. Cf. Mitchell, Wray, Watts 2019, 52, 218, 423, 436, 482.

[42] Cf. Eatwell 2008.

different kinds of explanatory *models* or representations of the world, which take different features of the world, seen from different scales of description, as their basic starting points for economic explanation. And by "model" I mean "an organizing framework that represents a simplification of the system that is being investigated".[43] Here it helps to consider the distinction which contemporary economists draw between "microeconomics" and "macroeconomics", to which I will continually refer. Mitchell, Wray, and Watts define these terms as follows:

> In microeconomics our focus is the behaviour of individual consumers and firms, whereas in macroeconomics the focus is the aggregate impacts of these decisions on outcomes at a national [or aggregate] level, including total output and employment and the rate of inflation [for example].[44]

The difference of "focus" of these two discourses is the scale of description which they adopt for their object of explanation. One can start from the representation of individual agents pursuing physical goods (i.e., real analysis), regard them as explanatorily primitive, and then aggregate them up to a macroeconomic picture. "Orthodoxy… [adopts] the methodological approach that aggregates up from individuals (in extreme versions, from a representative agent)".[45] Or one can start from the representation of aggregate economic outcomes of individual behaviors and explain economic phenomena from a macroeconomic standpoint. "Heterodox macroeconomists begin with the determinations of output and employment as a whole…"[46] And a macroeconomic perspective fundamentally requires a monetary perspective of absolute values (e.g., GDP).

How do these two scales of description relate to one another? Mainstream economists today tend to insist on providing "microfoundations" for every kind of macroeconomic explanation.[47]

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[43] Mitchell, Wray, Watts 2019, 12.

[44] Mitchell, Wray, Watts 2019, 8. Cf. Keynes 1964, 293; Howitt 1987; Varian 1987; Dimand 2008. The archetypical definition of economics from a microeconomic perspective is Robbins 1945, 16: "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

[45] Mitchell, Wray, Watts 2019, 441.

[46] Mitchell, Wray, Watts 2019, 481.

[47] For surveys of views regarding so-called micro-foundations in economics, cf. Weintraub 1977, Rizvi 1994, Jassen 2008, Barney and Felin 2013, Denis, 2016.

Yet post-Keynesian macroeconomists point to an irreducible a *gap* between the individual or microeconomic and aggregate or macroeconomic perspectives or scales of description and explanation, which must be approached with caution. Mitchell, Wray, and Watts claim that logical problems arise if one simply *equates* the different scales of description, reduces one to the other, or attempts to derive direct conclusions about the one from the other. They write:

> [A] methodology, which relies on 'aggregating up' from individual behaviour, suffers from **fallacies of composition**.[48]
> …any approach that attempts to explain macroeconomic (aggregate) behaviour by starting out with individual behaviour is exposed to the problems of **fallacies of composition** when it attempts to extrapolate findings [that apply to individuals] to the economy as a whole.[49]
> …in an attempt to ground macroeconomics on what are believed to be good 'microfoundations', modern mainstream theory uses constructs such as the single representative agent [i.e., household or firm] to stand in for society. This has led to a set of claims which are blighted by the '**fallacy of composition**'.[50]

For example, if one inferred that a pile(grain) of sand is "light"("heavy") because a constituent grain(pile) of sand is "light"("heavy"), one would commit a fallacy of composition. Gilbert Ryle's notion a "category-mistake" is very helpful here.[51] He gives the examples of someone visiting "Cambridge or Oxford" who claims to see the "colleges" but not the "University", someone watching a military parade who sees the soldiers but not the army, or someone watching a cricket game who sees the players but not the teams. In each of these cases, the failure is conceptual, not perceptual. Aggregate-level concepts such as "university", "army", or "team" do not refer to physical entities that are different from those to which the individual-level concepts refer (i.e., colleges, soldiers, players). Rather, they all refer to the same empirical world. But they do so from the standpoints of two different scales of description. So, the aspects of the world which are salient when we perceive the world at different scales of description do not always correlate in a 1:1

[48] Mitchell, Wray, Watts 2019, 409; cf. 411.
[49] Mitchell, Wray, Watts 2019, 490.
[50] Mitchell, Wray, Watts 2019, 560. Cf. Howitt 1987.
[51] Ryle 2009, 6-8.

fashion. The properties of entities seen from the perspective of a macro-scale of description are not always the properties of entities seen from the perspective of a micro-scale of description, or *vice versa*. We commit a category error when we fail to mind the gap between scales of description.

Contemporary philosophers of science have also addressed this concern with respect to economics. Ladyman and Wiesner claim that macroeconomists study what philosophers of science call a "complex system" or an "emergent order without central control".[52] "Macroeconomics studies whole economies and their **emergent properties** of growth, inflation and unemployment as well as the effects of government policy".[53] By "system" or "order" here they mean a set consisting of individual elements, the interactions of which give rise to effects which we might perceive as properties of the whole system. These properties are called "emergent" because the properties of the individual elements and the aggregate effects or properties of the system cannot directly explain one other or be reduced to one another or simply equated without giving rise to nonsense. The properties in question are "scale-relative",[54] because they only obtain in the context of the whole set of relations between the elements of which the system consists.[55] Consider, for example, money, which I will discuss in this chapter.[56] The immediate physical properties of money (e.g., green paper, gold coins, digital ones and zeros etc.) can neither explain nor be equated with the function which money performs (i.e., its social actuality) or the macro-scale effects that monetary interactions can give rise to (e.g., "inflation"), even though any monetary system clearly depends ontologically or consists of individual physical elements. (It does not exist independently of them.) What this ultimately means is that the immediate experience of individuals, which adopts

[52] Ladyman and Wiesner 2020, 45.
[53] Ladyman and Wiesner 2020, 50.
[54] For a discussion of the "scale-relativity" of epistemology and ontology, cf. Ladyman and Ross 2007, 199-200ff. For discussion of the application of ontic structural realism to economics, cf. Ross 2006. For a popular discussion of this issue in terms of "emergence", see Johnson 2001.
[55] Cf. Broad 1925, 61.
[56] Cf. Marx 1993, 100-109 for similar reflections by Marx on categories like "money" or "labor".

a micro-level scale of description of individual properties, will not necessarily be relevant, informative, or provide epistemic access to any object which requires a macro-level scale of description.[57] Understanding the *very large* by analogy to the *very small* is a problematic method.[58]

A classic albeit contentious example of a fallacy of composition in economics is the so-called "paradox of thrift" or "saving" (non-spending). It demonstrates that a methodological distinction must be drawn between micro- and macroeconomic scales of description.[59] Hoarding a reserve of money (liquidity) can be *rational* behavior for some individuals in times of economic prosperity. But if it is universally performed by everyone at once it is catastrophic at the aggregate-level because it would entail a collapse of aggregate spending, effective demand for products, and profitability for firms.[60] So, the same behavior is not "rational" at both scales of description.

The clearest and least contentious example of the difference between microeconomic and macroeconomic scales of description is the difference between their respective views of income or revenue and expenditure. Seen from a microeconomic scale of description, income can be characterized as the *positive addition* to the assets of some individual, household or firm (minus expenses), and expenditure can be characterized as *negative deductions* from those assets. Yet seen from a macroeconomic scale of description, this characterization does *not* hold. Take, for example, the concept of gross domestic product (GDP). Mitchell, Wray, and Watts write:

> GDP is the measure of all final goods and services evaluated at market prices which are produced per period of time, say a quarter or year.[61]

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[57] Cf. e.g., Mitchell, Wray, Watts 2019, 15: "…our own personal budget experience generates no knowledge that is relevant to the consideration of government matters". In the following chapters I will return to this point.

[58] In this respect I do not accept the view of "analytical Marxism" defined in the "narrow" sense by Cohen 2000, xvii, xxiii, though I otherwise accept it in the "broad" sense. A theory must only explain its object.

[59] Cf. Foster and Catchings 1926; Hayek 1931; Keynes 1964, 84-5, 210-11; De Marchi 2008; Mitchell, Wray, Watts 2019, 20-22, 418, 481-483, 490.

[60] Cf. Elster 1986, 37-9.

[61] Mitchell, Wray, Watts 2019, 50.

> The **total value** of goods and services produced in any period [i.e., GDP] **is equal to the total spending and the total income** generated (wages, profits, rent and [financial] profit [i.e., interest]) in that same period.[62]

At the aggregate-level of an entire economy, the expenditure of one person or group *is* the income of another person or group. Total income *equals* total expenditure (i.e., consumption plus investment).[63] And so, at a single point or within a single period of economic activity (i.e., production and exchange), there are neither positive additions nor negative deductions in the microeconomic sense of these terms. Similarly, John M. Keynes, who is usually credited with the invention of modern macroeconomics, writes:

> …**for the nation as a whole**, leaving on one side transactions with foreigners, its **income is exactly equal to its expenditure** (including in expenditure both consumption-expenditure and new capital-expenditure [i.e., investment], but excluding intermediate exchanges from one hand to another); – the two being simply two **different names for the same thing, my expenditure being your income**.[64]

While microeconomic fundamentalists demand all macroeconomic explanations bottom out in individual actions, it is important to note that the macroeconomic and monetary perspectives, which are natural complements of one another, do not deny or simply exclude the microeconomic perspective or method of real analysis. They simply leave the explanation of individual behavior in relation to real goods to the microeconomic domain of explanation, where it may indeed be valid within scale-relative limits. As Schumpeter puts it:

> …analysis of this type does not do away with real analysis, but only confines it to the description of the behavior of individual households and individual firms [i.e., microeconomics]. The point is, to repeat, that the social totals that result from this behavior are then dealt with as such and without referring back again, at every step, to the individual acts or decisions behind them. For instance, investment as a social total is the algebraic sum of a great many individual—positive or negative—investments. **Monetary Analysis**

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[62] Cf. Mitchell, Wray, Watts 2019, 52: "GDP is the most commonly used measure [of economic output] and it does have one big advantage: it focuses largely on the monetary value of output. As we have discussed, the profit motive drives capitalistic production. It can be characterized [in Marx's terms] as M-C-M'; that is, it begins with money (M) to produce commodities for sale (C) for more money (M'). For that reason, GDP is an appropriate measure for the capitalist sphere of production because it focuses on production for sale in exchange for money".

[63] I.e., "Y = C + I". Cf. Mitchell, Wray, Watts 2019. 55; Keynes 1964, chapter 6; Keynes 2015, 359-71.

[64] Keynes 2015, 366. Cf. Dimand 2008.

> **leaves the explanation of these to the Theory of Individual Households or Firms** [i.e., microeconomics], **and concerns itself only with that algebraic sum on the hypothesis *that this is all that matters for the economic process as a whole*** and that all the effects on the economic process as a whole that emanate from the multitude of individual investment decisions are measured by their algebraic sum.[65]

As I argue below, the OCT adopts a fundamentally microeconomic scale of description, whereas Marx's theory adopts a fundamentally macroeconomic scale of description.[66] By this I do not mean that the OCT is not concerned with macroeconomic phenomena at all, or that Marx is not concerned with microeconomic phenomena at all. Rather, I mean that the OCT takes as the starting point of its economic explanation a representation of individual economic agents (e.g., natural individuals, households, or firms) seen from the scale of an individual level of description. The representation of individual actors, actions (e.g., labor, production, exchange, consumption), and products are the primitive constituents or analytical building-blocks, as it were, upon which it then constructs its further macroeconomic or aggregate-level perspective. Then it analyses macroeconomic phenomena in terms of its fundamentally individual-level model. And so, it has adopted a microeconomic scale of description from the start, in its very theoretical make-up. Marx's value-theory, by contrast, starts from a macroeconomic foundation or aggregate level of analysis (e.g., branches of production, entire lots of products, the total social capital), and then moves to the individual or microeconomic level. As Fred Moseley puts it: "Modern macroeconomics has been in recent decades obsessed with the 'micro foundations' of macroeconomics. Marx's logical method is the opposite – the macro-foundations… of

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[65] Schumpeter 1994, 279.

[66] Mitchell, Wray, Watts 2019 (213-14) suggest that Marx was a pre-Keynesian pioneer of the distinctly macroeconomic approach. Cf. Elster 1986, 37-9. On the relation of the theories of Marx and Keynes, cf. Fan-Hung 1939, Ward 1939, Alexander 1940, Klein 1947, Mattick 1969, Erdös 1975, Kenway 1980, Mátyás 1983, Dillard 1984, Sardoni 1986 and 1997, Zinn 1986, Tsuru 1994, Behrens 1991, Campbell 1997, Skidelsky 2010, Howard & King 2014, Halevi 2016. Cf. Hein 1997 and Hein 2019 for a Post-Keynesian assessment of Marx.

microeconomics";[67] "there is only one system in Marx's theory, the actual capitalist economy… which is first analysed at the aggregate level and then at the individual industry level".[68]

2.4. *Ex Ante* or *Ex Post* Determination of Value

The fourth point on which the OCT or LTV and Marx's value-theory differ, I will argue, is the way in which they understand the determination of value on the market in relation to labor. It is important to note that this is the only point on which I will not regard the OCT and LTV as the same. Smith, who is arguably the founder of the OCT, sketches a version of the LTV, though he ultimately abandons it, while Ricardo takes it up and completes it. So, while the LTV belongs to the OCT in most respects, their ultimate views on the determination of value in relation to labor are not ultimately the same, because only Ricardo persists with the LTV while other members of the OCT (e.g., Smith and Say) continue without it. Indeed, it is abandoned by all economic theories after Marx. So, there is little to point to in in terms of contemporary economic theory. To distinguish the LTV and Marx's value-theory as clearly as possible, I propose the term "direction of determination" of value.[69] And I argue that the direction of determination of value runs in opposite directions, as it were, according to the LTV and Marx.

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[67] Moseley 2016, 6, fn. 6.

[68] Moseley 2016, 17. Both Heinrich 2012 (63-5) and Moseley 2016 (chapter 1) agree that Marx's value-theory is a "monetary" theory of value. Where they *appear* to disagree concerns the characterization "macroeconomic". At one point, Heinrich claims that it is not possible to apply the contemporary distinction of "micro- and macroeconomics" to Marx's "presentation" (*Darstellung*) in *Capital* (Heinrich 2006, 193). My argument disregards all questions of "presentation" of Marx's theory and focuses solely on Marx's theoretical model itself. It seems to me that any other concern is relatively extraneous and leads us down gratuitous, esoteric paths. There is no better way to characterize Marx's theory from within the spectrum of economic theories that we have than with the conventional term "macroeconomic". Moreover, Heinrich himself argues that Marx's theory concerns different *levels of description* (Cf. Heinrich 2012, 149, 234, fn. 40) which that distinction precisely captures.

[69] Here I would like to thank Brian Leiter for helping me to formulate the matter in terms of a "direction of determination" and Michael Heinrich for suggesting the formulation of determination as either *ex ante* or *ex post*. In this respect I agree more with Heinrich 2012 (48, 50, 153) than with Moseley 2016, with whom I otherwise usually agree, because the former understands the "reduction" of concrete to abstract labor as a "real abstraction" that occurs belatedly in market exchange, while the latter is silent on this topic and remains closer to the LTV.

In the first instance, the LTV sets out to explain the ratios or relative values at which the real individual products of labor exchange on the market.[70] Its further aggregate-level analyses are built on this analytical basis. The fundamental thesis of the LTV is that the ratios between homogeneous quantities of labor independently determine the exchange ratios and relative values of the products of labor *ex ante* on the market.[71] That is, the OCT or LTV holds that the ratios between quantities of labor which occur in the process of production determine the exchange ratios and relative values of individual products *before* those products enter the market. In the terms that I propose, the OCT or LTV holds that the direction of determination of economic value runs from the labor that occurs in the process of production to values of the products of labor on the market.

The most important feature of the LTV is that the "unit of account" (*numeraire*) is "the unit of labor time"[72] or "hours of labor",[73] which are sometimes called "labor values" in the literature,[74] rather than a monetary unit of value. And, for the LTV to work, three conditions must be met. (1) The labor with which it is supposed to explain exchange-values must be "**all of one kind**",[75] which is to say that it must consist of a sum of homogeneous units, or one must be able to "**reduce different qualities of work [e.g., skilled and unskilled] to a single standard**" of measurement.[76] For, labor can determine (i.e., explain) the exchange ratios of the products of labor

[70] For discussions of the LTV, cf. Meek 1956, Gordon 1959, Vianello 2008.

[71] Cf. Blaug 1982, 193: "according to the labour theory of value, a given quantity of homogeneous labour always produces an equal quantity of value…" Blaug defines the LTV as: "the proposition that commodities exchange at ratios which — as in [Smith's] beaver-deer example […] — are the reciprocals of the quantity of labour expended in their production, including the labour embodied in the capital goods the labourers make use of" (Blaug 1985, 39; cf. 92f.). George Stigler defines the LTV as the "belie[f] that the relative values of commodities are governed *exclusively* by the relative quantities of labor necessary to produce them" (Stigler 1958, 357). Makoto Itoh characterizes "the basic position of the labour theory of value" as one in which "the social relations of the expenditure of labour are theoretically defined independently of the market relations as a fundamental determinant of prices" (Itoh 1987, 55). The theory is "weakened" if it involves any influence from exchange (Itoh 1987, 51; cf. Böhm-Bawerk 1949, 83) which is "too remote" from the basis of the LTV (Itoh 1987, 55).

[72] Sweezy 1970, 117.

[73] Sweezy 1970, 122.

[74] Desai 2002, 75.

[75] Schumpeter 2008, 24.

[76] Schumpeter 2008, 23.

only if labor itself is a quantity in the same sense in which the relative values of commodities are. (2) The labor with which it is supposed to explain exchange-values *ex ante* must *antedate* those exchange-values, or it must exist in production before the products of labor enter the market. For, an *explanans* can hardly determine its *explanandum* if it does not precede the latter. (3) Finally, "**labor [must be] the only factor of production**",[77] which is to say that the value of any physical capital that is used in the process of production must be reducible to quantities of homogeneous units of the human labor which produces both that capital and final consumer goods.

Here it is helpful to consider the way in which Lefertis Tsoulfidis formulates the LTV's explanatory model of the exchange-values (E) of products (a, b) of labor (L):[78]

$$E_a/E_b = f(L_a/L_b)$$

The ratio of the products that are exchanged (a/b) and hence their relative exchange-values (E_a/E_b) are a function of the ratio between quantities of those labors (L_a/L_b) which are involved in their production. If the quantities of time of labor that go on the in the production of those products are given, then the ratio at which they exchange on the market, or their relative values, are also given.[79] So, if more(less) labor is required for one or other of the productions of two sets of commodities, then their relative values will be greater(lesser). And so, the quantities of the two labors (L_a, L_b) will independently and directly determine the relative exchange-values (E_a, E_b) at which the products (a, b) of the two labors exchange for one another on the market *ex ante* without any reference to money. The direction of determination runs from actual, individual labors in production to the exchange ratios or values of the products of labor on the market as commodities.

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77 Schumpeter 2008, 24.
78 Quoted as "$P_a/P_b = f(L_a/L_b)$" in Tsoulfidis 2009, 59.
79 Cf. Ricardo 1951a, 277, XX.

Marx's value-theory, by contrast, does not accept the LTV's view of the direction of determination of value, I argue. It holds that the ratios and values at which commodities actually exchange at the aggregate-level in the market, which are *essentially* mediated by money, determine which products of labor count as economic values in the first instance, which labor counts as value-producing labor, and it assigns a value to both terms. This means that aggregate quantities of commodities in monetary exchange determine exchange-values and labor-values *ex post* or belatedly, when the products of labor enter the market, *after* production has ceased. So, in the terms that I propose, Marx's value-theory holds that the direction of determination of value runs from the aggregate ratios and values at which the products of labor actually exchange on the market to the labor that occurs in the process of production. This claim, admittedly, runs against the overwhelming consensus of Marx-interpretation among both orthodox Marxists and non-Marxists. Marx presents his view of this issue in his discussion of the so-called "reduction" of "concrete" to "abstract" labor, which Marx calls the "substance" of value, and which commentators only ever really touch on in debates over the so-called "*reduction problem*",[80] which concerns Marx's contentious notion of "abstract labor".[81] Ernest Mandel writes that it "remains one of the most obscure parts of [Marx's] general economic theory", though I will argue that it is only obscure or implausible when one interprets it with assumptions that are at cross purposes to Marx's own. Indeed, "the labour reduction problem cannot be solved along traditional lines", as one commentator puts it, and Marx's theory will admittedly not argue along traditional lines.[82] The

[80] Mandel 1990, 13. Cf. Blaug 1982, Choonara 2018, Phillip Harvey 1985, Itoh 1987, Morris and Lewin 1973/1974, Harvey 2018b, 57-61; Harvey 2018a, 31f.

[81] Cf. Mohun 1991, 2: "the debate over the nature of abstract labor is at the heart of most of the controversies in Marxist economics". Cf. Gleicher 1983; Himmelweit and Mohun 1981; Mohun 1984/1985; Shaikh 1981; Steedman 1981; Roberts 2017.

[82] Blaug 1982, 193. Cf. Blaug 1982, 198: "The labour reduction problem can only be solved at a stratospheric level of abstraction that totally ignores real-world evidence about the determinants of relative wages, the rates of return to educational and training activities, and the patterns of occupational mobility". Blaug misses Marx's point.

way in which Marx reverses the direction of determination of value hangs together with the way in which he adopts a very different, macro-monetary perspective: aggregate-level exchange of the products of labor on the market for money performs the "reduction" in question.[83]

3. Smith and Ricardo's Concepts of Value (OCT and LTV): Micro-Real

In this section I will address the classical concept of value from several angles as it is expressed in the work of Adam Smith[84] and David Ricardo.[85] On the one hand, Smith and Ricardo's views are not ultimately the same; Smith sketches a version of the LTV which he thinks would only describe primitive, pre-capitalist economic conditions, and he ultimately discards it in favor of a so-called cost of production theory of commodities' values, while Ricardo takes up Smith's LTV and applies it to even capitalist conditions. (He makes no historical distinction between pre-capitalist and capitalist modes of production but distinguishes only the manner of distribution.[86]) On the other hand, Smith and Ricardo's concepts converge in virtually every other relevant respect, apart from the determination of exchange-values by labor times, and the LTV belongs to the OCT. So, I take them together, noting the differences between them where they are relevant.

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[83] In claiming that the so-called "real abstraction" or "reduction" of "concrete" to "abstract" labor, the "substance" of value, occurs in the process of monetary exchange, I am in agreement with Sohn-Rethel 1978, 6, 32, *passim*; Mohun 1991 and 1984/1985; Himmelweit and Mohun 1981; Rubin 2008, chapters 13-16; Heinrich 2012, 48-65.

[84] For general accounts of Smith's view, cf. Blaug 1985. chapter 2; Tsoulfidis 2009, chapter 3; Rubin 2017a, part 3, Sowell 2006, 22-78; Heilbronner 1986, chapter 3; Meek 1956, chapter 2.

[85] For general accounts of Ricardo's view, cf. Ricardo 1951b. Cf. Blaug 1985, chapter 4; Tsoulfidis 2009, chapter 4, Rubin 2017a, part 4; Sowell 2006, 22-78; Heilbronner 1986, chapter 3; Stigler 1958, Knight 1935a, Knight 1935b, Edelberg 1933, Cochran 1970, chapter 2; Meek 1956, chapter 3; Hollander 1904 and Hollander 1911; Patten 1893a and 1893b. For an account of the relation of Marx and Ricardo's views, cf. Moseley 2015.

[86] Cf. Ricardo 1951a, 5, introduction.

3.1. Real Analysis

The OCT's concept of value construes it in physical or "real" terms, excluding money from the picture entirely. While it can be hard to believe that economists actually hold the views which follow, they are essential to consider and in fact relatively standard within the economic orthodoxy.

(1) The fact that Smith and Ricardo adopt the method of monetary analysis is evident in their claims that *final consumption* is the ultimate purpose of all economic activity, rather than, say, the accumulation of financial wealth (e.g., liquidity, credit, assets, etc.). Smith claims that individual "consumption is the sole end and purpose of all production…"[87] The products of labor, goods, or use-values are the "real" object of economic activity, while money is merely a "nominal" entity (price),[88] which is a mere means for obtaining the goods that one consumes. From the fact that one cannot *eat* money, that prices can vary while real goods remain the same (e.g., deflation-inflation), he infers that money is negligible and its accumulation is never an end *per se*. He writes:

> …though the wages of the workman are commonly paid to him in money, **his real revenue, like that of all other men, consists, not in money, but in the money's worth**; not in the metal pieces, but in **what can be got for them**.[89]
> **It is not for its own sake that men desire money, but for the sake of what they can purchase with it**.[90]

And Ricardo similarly writes:

> **No man produces, but with a view to consume** or sell, and he never sells, but with an intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production [i.e., consumption].[91]

The OCT also considers the wages paid to workers in the first instance in physical terms for instance as "corn wages" (i.e., real wage), even though employing capitalists pay workers' wages

[87] Smith 1993, 376, IV,viii.
[88] Smith 1993, 39, I.v.
[89] Smith 1993, 183, II.ii.
[90] Smith 1993, 283, IV.i.
[91] Ricardo 1951a, 290, XXI.

in money.[92] The OCT imagines that workers' wages are just shares in the aggregate sum of real products. And the approach which Ricardo pioneered continues to be called the "corn model".[93]

(2) The way in which the OCT understands the exchange of commodities construes the latter as though it were a matter of simple trade or direct barter of goods for goods, which does not require any money at all. In what follows I will therefore refer to its view as a *barter-model*. Indeed, according to the picture which Smith presents at the beginning of his *Wealth of Nations*, people (e.g., butchers and bakers) only exchange the products of labor on the market as commodities because they do not need everything that they produce, while they do not produce everything that they need. Smith writes, "a man… supplies the far greater part of [his wants] by exchanging that surplus part of his own labour, which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for". Smith believes that money is just a convention that was invented to "avoid the inconveniency" of this barter.[94] And Ricardo is even more explicit and univocal here. He writes:

> Gold and silver having been chosen for the general medium of circulation, they are, by the competition of commerce, distributed in such proportions amongst the different countries of the world, as to accommodate themselves to the natural traffic which would take place if no such metals existed, and the trade between countries were purely a trade of **barter**.[95]
> …money [is] a very convenient medium for the purpose of **barter**, but not […] a proper measure by which to estimate the value of things.[96]
> Suppose the use of money to be wholly laid aside, and all trade to be carried on by **barter**…[97]

[92] Ricardo 1951a, 102-3, V; 50, I.vii. Cf. Ricardo 1951a, 50, I.vii: "Wages are to be estimated by their real value, viz. by the quantity of labour and capital [i.e., accumulated labor] employed in producing them, and not by their nominal value in either coats, hats, money, or corn".

[93] Cf. Ricardo 1951a, 35, I. Cf. Blaug 1984, 89. This idealized model of a primitive single-commodity producing economy still persists even among "heterodox" economists (cf. Roemer 1990, Hahnel 2014, chapter 3).

[94] Smith 1993, 31-2, I.iv. Cf. 38, I.v.

[95] Ricardo 1951a, 137, VII.

[96] Ricardo 1951a, 274, XX.

[97] Ricardo 1951a, 309, XXII.

(3) Given that it has already constructed its view of exchange without money at all (i.e., barter-model), when the OCT does get around to discussing money, it claims that money is merely a neutral medium or means of exchange with no positive significance of its own. Here it is important to note, however, that this view moves on the level of theoretical *assumptions* more so than the level of *empirical observation*. It really makes sense only if one has already accepted the barter-model. On this point, Smith makes several truly remarkable pronouncements. He writes:

> **Money**, therefore, **the great wheel of circulation**, the great instrument of commerce, like all other instruments of trade, though it makes a part and a very valuable part of the capital, **makes no part of the revenue of the society to which it belongs**; and though the metal pieces of which it is composed, in the course of their annual circulation, distribute to every man the revenue which properly belongs to him, they make themselves no part of that revenue.[98]
>
> **The sole use of money is to circulate consumable goods.** By means of it, provisions, materials, and finished work, are bought and sold, distributed to their proper consumers.[99]
>
> Goods can serve many other purposes besides purchasing money, but **money can serve no other purpose besides purchasing goods**. Money, therefore, necessarily runs after goods, but goods do not always or necessarily run after money. The man who buys does not always mean to sell again, but frequently to use or to consume; whereas **he who sells always means to buy again**. The one may frequently have done the whole, but the other can never have done more than the one-half of his business.[100]

So, money is not to be counted in individual or national revenue, and the only function of money is to circulate real goods. Smith's final contention money chases goods but goods do not chase money will limit his ability to understand capitalist economies, according to Marx at least. (A seller does not always necessarily buy again immediately, and a buyer might buy to resell at a greater price rather than to consume.) Similarly, Ricardo calls money "the instrument used as a medium of exchange"[101] or the "the general medium of exchange"[102] which has "no operation" or

[98] Smith 1993, 178, II.ii.
[99] Smith 1993, 201, II.iii.
[100] Smith 1993, 283, IV.i.
[101] Ricardo 1951a, 199, XIII.
[102] Ricardo 1951a, 48, I.vii.

real effect in the economy.[103] Like Smith, he claims that "…**money is merely the medium**, or measure, in which wages are expressed".[104] "Productions are always bought by productions, or by services; **money is only the medium by which the exchange is effected**".[105]

In a way which is undeniable in some sense, the OCT holds that money cannot yield any value by itself. Without the labor or goods which money can buy with it, one cannot produce more money with money alone. This seems to be another reason for the OCT's view that it is a negligible entity. For example, Ricardo holds that money is sterile in the sense that it produces no value without the addition of labor. And Smith similarly writes:

> The gold and silver **money which circulates** in any country may very properly be compared to a highway, which, while it circulates and carries to market all the grass and corn of the country, **produces itself not a single pile** of either.[106]

It is obviously true that money *in itself* does not literally "produce" any real products without the mediation of labor. However, for a capitalist who invests in production only for the sake of exchange at a profitable rate, and who cannot personally consume "grass", "corn", or any of the immediate results of production (e.g., pig-iron), they are just as worthless *in themselves* as money.

Additional aspects of the OCT's view of money which are worth considering are the so-called commodity theory and quantity theory of money, which are of a piece with the method of real analysis, and both of which the OCT seems to hold. According to the former aspect, money itself is just another a "commodity" (e.g., gold), which makes it easier to ignore the money-form of value and focus solely on real goods. Ricardo writes that "money, or the standard of money [i.e., gold], is a commodity imported from abroad".[107] Regarding the second aspect, Ricardo's

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[103] Ricardo 1951a, 97, V.
[104] Ricardo 1951a, 162, IX.
[105] Ricardo 1951a, 291-2, XXI.
[106] Smith 1993, 184, II.ii. Cf. Ricardo 1951a, 232, XVI: "In the form of money this capital is productive of no profit; in the form of materials, machinery, and food, for which it might be exchanged, it would be productive of revenue, and would add to the wealth and the resources of the State".
[107] Ricardo 1951a, 213, XV.

statements on paper money bound to a gold-standard indicate that he seems to hold a version of the quantity theory of money, which conceives of money as an illusory veil that is strictly pegged to the circulation of "real" goods.[108] Namely, if the velocity of circulation of money in a given period of economic activity remains constant, then the value of money varies inversely to its quantity, or prices of products vary directly with the quantity of money.[109] And Smith's statements on finance seem to indicate a very similar view.[110]

To clarify the OCT's picture somewhat in terms that Marx will propose, the OCT represents exchange of the products of labor and the role of money as a process of trading a product of labor as a commodity (C) on the market for money (M) only in order to use that money (M) again in order to obtain another desired commodity (C), in a process that can be represented as "C-M-C" or "selling in order to buy". "Consumption, the satisfaction of needs, in short use-value, is therefore its final goal".[111] Because the OCT assumes that consumption is the primary goal, it then infers that money can and must be left out of consideration. Consequently, its view can be represented as the direct trade of one commodity for another: C_a-C_b (i.e., barter-model). Anticipating matters somewhat, this view arguably will create difficulties for understanding the functioning of capital and accumulation in modern economies. Marx will present a fundamentally different model which is not accessible to the OCT, because it has excluded money. Marx's model

[108] Economists represent this as "P=MV/T", "M=PT/V", or "MV=PT". Cf. Fisher 1920, 296: "the really important matter is that students of economics should appreciate the existence of a law of direct proportion between quantity of money and price level…" Cf. Fisher 1920, 184-5: "an increase [or decrease] of money, other things equal, causes a proportional increase [or decrease] in the level of prices". Cf. Blaug 1985, 153-4, 635-6. Cf. Mitchell 1896.

[109] Cf. Ricardo 1951a, 252, XXVII: "A circulation can never be so abundant as to overflow; for by diminishing its value, in the same proportion you will increase its quantity, and by increasing its value, diminish its quantity". Cf. Ricardo 1951a, 361, XXVII: "A currency is in its most perfect state when it consists wholly of paper money, but of paper money of an equal value with the gold which it professes to represent". Cf. Ricardo 1951a, 365, XXVII: "The whole business, which the whole community can carry on, depends on the quantity of its [real] capital, that is, of its raw material, machinery, food, vessels, &c. employed in production. After a well regulated paper money is established, these [real factors] can neither be increased nor diminished by the operations of banking".

[110] Cf. Smith 2000, 382-383, II.ii.iv.

[111] Marx 1990, 247, 250. Cf. Smith 1993, 38, I.v.

essentially includes money and enables him to conceive of the process of exchange in an opposite order that is more suited to capitalist economies and the accumulation of profits (i.e., M-C-M').

(4) Finally, it is essential to note the consequence of OCT's barter-model (i.e., C_a-C_b) which bears most importantly upon its view that the economic POU is impossible in principle. The barter-model is the basis for what has come to be called "Say's Law", which is developed from Smith's view, and which Ricardo explicitly endorses.[112] Say's Law is the claim that a supply of goods on the market always corresponds in principle with a demand for other goods, that harmony reigns, and thus that a disproportion or disequilibrium between production and consumption can only be a passing anomaly in the cases of particular kinds of commodities, not in the case of all commodities (i.e., "general glut", POU). In Keynes's words, it is the thesis that "supply creates its own demand in the sense that the aggregate demand price is equal to the aggregate supply price for all levels of output and employment".[113] Consider how the barter-model gives the impression that the sale and purchase of two different commodities between two individuals directly coincide with one another (C_a-C_b). If this were the case, then the supply and demand for different products would directly coincide in each and every case, markets would be in fundamental equilibrium, and disequilibrium would be exceptional or impossible and certainly not an inherent feature of modern economies. However, one must note, the OCT draws the conclusion that markets are always in equilibrium and the POU (or the "rabble") are impossible from its own representation of individual

[112] Cf. Ricardo 1951a 290ff. XXI.

[113] Keynes 1964, 21-2. Cf. Keynes 1964, 18: "…the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product". Cf. Keynes 1964, 26: "Say's Law, that the aggregate demand price of output as a whole is equal to its aggregate supply price for all volumes if output, is equivalent to the proposition that there is no obstacle to full employment". Cf. Say 1834, 138-9, I.xv: "It is worth while to remark, that a product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value. When the producer has put the finishing hand to his product, he is most anxious to sell it immediately, lest its value should diminish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus, the mere circumstance of the creation of one product immediately opens a vent for other products". Cf. Mitchell, Wray, Watts 2019, 170, 481.

trade, from its own assumption, not from empirical observation. If one takes money seriously, then matters look very differently, as I discuss in more detail below.[114] Namely, a direct barter is a trade of two commodities between two agents (C_a-C_b). Yet the circulation of commodities, involves money (C_a-M_a-C_b), at least two separate exchanges of money, and two commodities (C_a-M_a, M_a-C_b) between three agents (i.e., one who buys: M_a-C_a, one who sells and buys: C_a-M_a-C_b, and one who sells: C_b-M_a). So, the reduction of this complex process to a simple, direct barter, or the attempt to "aggregate up" into a complex process of circulation, is arguably a *fallacy of composition.*

3.2. Relative Value

The basic concept of value which the OCT adopts as its foundation for its more elaborate analyses construes it in relative terms. In the first instance, the OCT is concerned with explaining relative prices or exchange ratios of commodities. For instance, to use Smith's example which I address below, the question "how many deer is a beaver worth?" is a matter of relative values between two items as though they were directly traded for one another (e.g., C_a-C_b), which is consistent with the OCT's view of exchange (i.e., barter-model) and its adoption of the method of real analysis. Absolute value is a secondary consideration to which the OCT would "aggregate up". So, while it *does* address the aggregate product of labor, in the first instance it is concerned with explaining "exchange value" in terms of costs of production (Smith) or quantities of labor (Ricardo).

(1) In chapter four of book one of the *Wealth of Nations*, Smith states that a primary objective of his theory is to establish "the **rules** which men naturally observe in exchanging [goods] either for money or for one another… These rules determine what may be called the

[114] Cf. Gordon 1951, Mill 1844.

relative or exchangeable value of goods".[115] Smith clearly regards "exchangeable value" and "relative" value as synonyms. And slightly later, he provides a straightforward definition of economic value, as he understands it. Value is either use-value or exchange-value, as Marx will put it. He writes:

> The word VALUE, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called 'value in use;' the other, '**value in exchange**.' The things which have the greatest value in use [e.g., "water"] have frequently little or no value in exchange; and, on the contrary, those which have the greatest value in exchange [e.g., "a diamond"] have frequently little or no value in use.[116]

While the meaning of utility is obvious, exchange-value is the proportion or ratio in which some quantity of the real products of labor exchange for some other quantity of other products of labor. This is a *relative* conception of value. Smith makes no explicit mention of value understood in an absolute sense (e.g., the value of the aggregate product or profits understood in monetary terms), though he implicitly uses the notion when speaking of aggregates of products in national economy. And this is consistent with the way in which he understands the aggregate product in *real* terms.

(2) Ricardo similarly equates "the value of a commodity" with "the quantity of any other commodity for which it will exchange" in chapter one of his *Principles*.[117] Were that not clear enough, he states that the initial task of his theory is to discern the "laws which regulate [products'] **relative prices**".[118] And slightly later, he writes that "the inquiry to which I wish to draw the reader's attention, relates to the effect of the variations in the **relative value of commodities, and not in their absolute value**".[119] To be clear, Ricardo does not use "absolute value" in the same

[115] Smith 1993, 34, I.iv. Ricardo points to such statements for his own model. Cf. Ricardo 1951a, 12-13, I.i.
[116] Smith 1993, 34, I.iv. For the purposes of my argument, I will ignore "value in use".
[117] Cf. Ricardo 1951a, 11: 'The value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production, and not on the greater or less compensation which is paid for that labour".
[118] Ricardo 1951a, 12, I.i.
[119] Ricardo 1951a, 21, I.ii.

sense in which I use it in this chapter (i.e., a numerical value irrespective of its relation to other values). However, his explicit view of relative value does exclude my sense. By "absolute value" he means an invariable standard of the value of commodities,[120] an "absolute measure" of commodities' values which he reflected on but never published on.[121] Something akin to gold, yet which were not a commodity with a fluctuating exchange-value, would be what Ricardo means by this term. And *labor*, as he understands it (i.e., LTV), will be as close as Ricardo gets.

(4) Finally, it is important to note that any theory of the wealth of *nations* will require an aggregate-level view of production in terms of absolute value, as I use the term, and a monetary unit of measure of value or unit of account. Just imagine, for example, how one could conceive of GDP otherwise. As Schumpeter remarked above, "nonmonetary [aggregates] are but meaningless heaps of hopelessly disparate things; and if we wish to work with a small number of variables, we can hardly help resorting to monetary" aggregates, because they are "homogeneous" quantities.[122] So, like it or not, any theory of national economy must implicitly or explicitly go beyond real analysis and the relative conception of value. (This will be essential for Marx's "surplus-value".)

3.3. Microeconomic Scale of Description

The OCT does not acknowledge a sharp methodological distinction between the micro- (individual) and macroeconomic (aggregate) scales of description and explanation. On the contrary, it seems intent on equating them. For example, in the *Wealth of Nations*, Smith writes: "What is prudence in the conduct of every private family, can scarcely be folly in that of a great kingdom".[123] And similarly, in his *Principles*, Ricardo writes: "That which is wise in an individual

[120] Cf. Eatwell 2008.
[121] Cf. Ricardo 1951c; Ricardo 1951a, 275, XX. Cf. Woods 1987.
[122] Schumpeter 1994, 278. Leontief 1951 presents an unwieldy aggregate-level view of "real" input-output tables.
[123] Smith 1993, 293, IV.ii.

is wise in a nation".[124] "Is not the real interest of the nation similar [to that of an individual capitalist]?"[125] What is "profitable to individuals", Ricardo thinks, is "therefore also… profitable to the state".[126] In statements such as these it is clear that the OCT reduces the macroeconomic scale of description to the microeconomic one. In the following chapter, where I discuss profit and capital, I will present more striking examples and the problems that this conception causes. For now, it is important to note that one ought to exercise caution in interpreting Smith's notion of an "invisible hand", which would coordinate chaotic individual-level activity with harmonious aggregate-level outcomes.[127] The OCT's view is not one of a robustly "complex system" or "emergent order without any central control",[128] but one on which its microeconomic assumptions (i.e., Say's Law, real analysis) guarantee a macroeconomic equilibrium *a priori*.

3.4. *Ex Ante* Determination of Value

The thesis of the classical labor theory of value, which Smith Sketches in his *Wealth of Nations* and Ricardo completes in his *Principles of Political Economy*, is that the ratio of quantities of labors which produce products independently pre-determine the ratios at which they exchange; quantities of labor determine commodities' exchange values *ex ante.*[129] Its *explanans* is quantities of labor and its *explanandum* is products' exchange values. And, as address shortly, Smith ultimately rejects his sketch because the accumulation of capital ("stock") and rent ("appropriation of land") present difficulties which he, though not Ricardo, takes to be insurmountable for it.

[124] Ricardo 1951a, 248, XXVII.
[125] Ricardo 1951a, 348, XXVI.
[126] Ricardo 1951a, 350, XXVI, fn.
[127] Smith 1993, 191-2, IV.ii.
[128] Cf. Ladyman and Wiesner 2020, 45.
[129] Marx also notes that Benjamin Franklin (Marx 1970, 55-6), Sir James Stuart (Marx and Engels 1988, 348-52) and William Petty (cf. Rubin 2017a, chapter 7) also present an early intimation of the OCT or LTV, which I cannot address here.

(1) Smith's sketch of the LTV presents a model which is meant to describe a primitive situation that precedes capitalist societies and economies and perhaps even civilization in general. He calls it an "early and rude state of society which precedes both the accumulation of stock [e.g., capital] and the appropriation of land [i.e., rents]",[130] in which the original "fund" of all wealth is the labor which people must perform in order to obtain it whether for consumption or for trade.[131] So, like the critics who claim that the LTV works only if "labor is the only factor of production",[132] Smith's sense too is that the theory he sketches will work only if capital and land or rent are not present in the model. In chapter four of book one he cautiously states the basis thesis of the LTV as follows: "the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any **rule** for exchanging them for one another".[133] So, the ratio of quantities of labor should determine the ratios at which the products of those labors exchange for one another. The example Smith gives is "a nation of hunters". If it takes twice as long to obtain one "beaver" as it does to obtain one "deer", then "one beaver should naturally exchange for or be worth two deer". And Smith generalizes from this example to claim that whatever object "naturally" takes twice as long to obtain as some other object will be worth twice as much as the latter, or the value of the latter will be half of that of the former.[134]

Ricardo approvingly quotes and adopts the model Smith sketches,[135] picks up his examples of a hunters' "fish", "game", and "deer",[136] and similarly speaks in terms of the "early stages of society" and the "rule" for determining exchange values.[137] He adopts Smith's model in terms of

[130] Smith 1993, 45, I.vi.
[131] Smith 1993, 8, Introduction. Cf. 120, I.x.
[132] Schumpeter 2008, 24.
[133] Smith 1993, 45, I.vi.
[134] Cf. Smith 1993, 45. I.vi.
[135] Cf. Ricardo 1951a, 12-13, 15, I.i.
[136] Cf. Ricardo 1951a, 27, I.iii; 29, I.iii; 30, I.iv.
[137] Cf. Ricardo 1951a, 12, I.i.

the "laws which regulate [commodities] relative prices" or "exchangeable value".[138] And he claims that "the variations in the relative value of deer and salmon depended solely on the varying quantities of labour necessary to obtain them"[139] or the "*quantity* of labour necessary to their production".[140] In the first line of the first chapter of his *Principles*, he denies that costs of production (e.g., wages) can influence the value of a commodity, and he claims that it is only the *ratio* of quantities of labor that determines values. He writes:

> The **value of a commodity,** or the quantity of any other commodity for which it will exchange, **depends on the relative quantity of labour** which is necessary for its production, and not on the greater or less compensation which is paid for that labour.[141]

And slightly later, he similarly continues:

> If **the quantity of labour realized in commodities**, regulate their exchangeable value, every increase of the quantity of labour must augment the value of that commodity on which it is exercised, as every diminution must lower it. [/] Adam Smith, who so accurately defined the original source of exchangeable value, and who was bound in consistency to maintain, that all things became **more or less valuable in proportion as more or less labour was bestowed on their production**, has himself erected another standard measure of value, and speaks of things being more or less valuable, in proportion as they will exchange for more or less of this standard measure.[142]

(2) It is important here to note an ambiguity or inconsistency in the way in which the OCT conceives of labor and value, which Marx will pick up on. It seems to use the term "labor" in two senses which are not the same, though it passes back and forth between them as though they were interchangeable. It seems to equivocate between the diverse, physical or empirical labors which go on in the process of production, before the products of labor enter the market as commodities, and the abstract quantity of homogeneous human labor in general, which is not found in anywhere in the process of production or indeed in the empirical world at all. The former is what Marx will

[138] Ricardo 1951a, 12, I.i.
[139] Ricardo 1951a, 30, I. Cf. Ricardo 1951a, 27, I.iii; Ricardo 1951a, 29, I.iii.
[140] Ricardo 1951a, 15, I.i.
[141] Ricardo 1951a, 11, I.i.
[142] Ricardo 1951a, 13-14, I.i.

call "concrete useful labour", which produces real use-values,[143] while the latter is what Marx will call "abstract labor", which "forms the value of commodities", or is the "substance" of value.[144] The following statement by Smith encapsulates the matter nicely. Summing up, Smith writes:

> The real price of every thing, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. What every thing is really worth to the man who has acquired it, and who wants to dispose of it to exchange it for something else, is the **toil and trouble** which it can save to himself, and which it can impose upon other people. What is bought with money or with goods is purchased by labour as much as what we acquire by the **toil of our own body**. That money or those **goods** save us this toil. They **contain the value of a certain quantity of labor which we exchange** for what is supposed at the time to contain the value **of an equal quantity**. **Labour was the first price**, the original purchase-money that was **paid for all things**. **It was** not by gold or by silver [i.e., money], but **by labour, that all the wealth of the world was originally purchased**; and its **value**, for those who possess it and who want to exchange it for some new productions, **is precisely equal to the quantity of labour** which it can enable them to purchase or command.[145]

Though Smith in fact presents several theories of value here which are not entirely consistent,[146] this statement presents the way in which the LTV runs the two aforementioned senses of the word "labor" together. Smith claims that an original "quantity" of the "bodily" or physical labor of individuals ("toil and trouble") is bestowed onto products which "contain" it. For this reason, Smith's sketch can be called an "*embodied*" labor theory.[147] And, moreover, they are imbued with that quantity of labor *before* the products of labor enter the market such that it can predetermines their exchange values or determine them *ex ante*.[148]

On the one hand, the OCT clearly wants to claim that it is the concrete labor which goes on within the process of *production* that independently determines the economic values of the

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[143] Marx 1990, 137.
[144] Marx 1990, 137, 131. Cf. Marx 1990, 173, fn. 33. Cf. Meek 1957, 20-2.
[145] Smith 1993, 36-7, I.v.
[146] Smith conflates several kinds of labor theories: an *ex ante* determination theory (LTV), a disutility of labor theory, and a command theory of value of the products of labor (cf. Blaug 1985, 38-9 *passim*; Meek 1956, 63-4f.).
[147] This view, which Smith entertains, and Ricardo adopts, will not ultimately be the view that Smith accepts for his own theory. Cf. Meek 1956, 63-4. Cf. Blaug 1985, chapter 2; Saad-Filho 1997; Hueckel 2000.
[148] Smith 1993 (I.v), 36-7. Cf. Ricardo 1951a, 12-13, I.i.

market. Smith refers to the "trouble" and "toil of our own body" and claims that commodities (as values) "contain" the labor that produced them.[149] Similarly, Ricardo claims that the "length of time which must elapse" before the commodity is brought to market and sold determines its "price".[150] And he claims that "[products'] comparative prices [i.e., exchange ratios, values] would be in proportion to **the actual labour bestowed"**.[151] The labor that goes on in the process of production of the products that will be exchanged on the market is the "**real foundation** of exchangeable value".[152] He claims that "their [i.e., products'] relative values will be **governed** by the relative quantities of **labour bestowed** on their production".[153] And he even repeatedly claims that ratios between quantities of the labor actually bestowed in production are the "**cause**" of the relative exchange ratios and values of products.[154]

On the other hand, however, the OCT also clearly conceives of that labor as though it were of a universal kind or a quantity of homogeneous units, or abstract labor. Such quantities of labor are abstract, though labor that goes on in the production process is a collection of heterogeneous efforts and physical work, just as each individual, concrete product of labor might be slightly different. Ricardo writes: "The **labour** of a million of men in manufactures, **will always produce the same value** [i.e., numerical sum of homogeneous units, quantity], but will not always produce the same riches [i.e., heterogeneous physical goods]".[155] Similarly, Smith writes:

> Equal quantities of labour, at all times and places, may be said to be of equal value to the labourer. […] Labour alone, therefore, **never varying in its own value**, is the ultimate and

[149] Smith 1993, 36-7, I.v.
[150] Ricardo 1951a, 37, I.iv.
[151] Ricardo 1951a, 13-14, I.i
[152] Ricardo 1951a, 13, I.i; 20, I.ii; 25, I.iii. Cf. Ricardo 1951a, 88, IV.
[153] Ricardo 1951a, 47, I.vi.
[154] Ricardo 1951a, 18, I.i; 19, I.i; 30, I.iv; 34, I.iv; 36, I.iv. Whether Ricardo actually conceives of labor as a cause or as a measure of the values of commodities is admittedly a contentious issue in the literature. See e.g., Böhm-Bawerk 1890 and Rubin 2017a, part 4; and Hollander 1904, 460, Tsoulfidis 1998, Schumpeter 1954, 117-8.
[155] Cf. Ricardo 1951a, 273, XX.

> real standard by which the value of all commodities can at all times and places be estimated and compared. It is their real price: money is their nominal price only.[156]

As in the passage quoted above, here Smith clearly thinks of labor as a homogenous substance of quantities with which labor can imbue products as it were, which can be "equal quantities".

Smith also makes another curious statement which again mixes concrete and abstract conceptions of labor in a similar way. He suggests that, when we directly trade (i.e., barter) products of labor, what we are really trading is the *labor* which produced them, albeit indirectly.[157]

> …though labour be the real measure of the exchangeable value of all commodities, it is not that by which their value is commonly estimated [i.e., money].[158]

> Every commodity besides, is more frequently exchanged for, and therefore compared with, other commodities than with labour. It is more natural, therefore, to estimate its exchangeable-value by the quantity of some other commodity than by that of the labour which it can purchase. The greater part of people too understand better what is meant by a quantity of a particular commodity, than by a **quantity of labour**. The one is a plain palpable object; the other **an abstract notion, which**, though it **can be made sufficiently intelligible**, is not altogether so natural and obvious.[159]

It is strange that Smith discards money as the measure of value in favor of labor, because money *prima facie* is the quantitative unit of measurement *par excellence* (i.e., every dollar counts as equivalent, regardless of particular differences), whereas the concrete referent of "labor" seems to be a "meaningless heap[] of hopelessly disparate" labors, as Schumpeter puts it.[160] Smith distinguishes a "particular commodity" as a "plain palpable object" from a "quantity of labour" as "an abstract notion". But the concrete labor that goes on in the process of production, before the

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[156] Smith 1993, 39, I.v.

[157] Cf. Franklin 1729: "Trade in general being nothing else but the Exchange of Labour for Labour, the Value of all Things is, as I have said before, most justly measured by Labour". Cf. Marx at Marx 1970, 56. Cf. Marx 1990, 142, fn. 18: "Franklin is not aware that in measuring the value of everything 'in labour' he makes abstraction from any difference in the kinds of labour exchanged – and thus reduces them all to equal human labour. Yet he does this without knowing it. He speaks first of the 'the one labour', then of 'the other labour', and finally of 'labour', without any further qualification, as the substance of value of everything".

[158] Smith 1993, 37, I.v.

[159] Smith 1993, 38, I.v.

[160] Schumpeter 1994, 278.

products of labor are exchanged on the market, is not "an abstract notion". It is a "plain palpable object" too, it is a set of physical exertions of force. How is the concrete "toil of our own bod[ies]" supposed to become "an abstract notion" or a "quantity" of homogeneous units, such it can mathematically determine exchange-values *ex ante*? The OCT does not go into any degree of detail to answer this question, so it remains open. The only suggestion that Smith gives is that labor becomes abstract in the *division of labor*, or the division of labor *abstracts* or "*reduces*" concrete labor to abstract labor, independently of exchange. For instance, he presents the example of the individual "pin-maker" who works in a massive pin-factory.[161] He writes that "the division of labour… **reduce[es]** every man's business to some one simple operation, and… mak[es] this operation the sole employment of his life…"[162] (This is the view which Hegel adopts from Smith,[163] and which the young Marx still seems to hold under Smith and Ricardo's influence.[164])

In *Capital* Marx will remark that the actual, concrete labor of individuals that produces use-values in the process of production ("actual labour bestowed") *is not* a homogeneous quantity and it is not immediately relevant for understanding value. On this point, he writes: "classical political economy in fact nowhere distinguishes explicitly and with clear awareness between labour as it appears in the value of the product [i.e., abstract labor], and the same labour as it appears in the product's use-value [i.e., concrete labor]".[165] They seem implicitly to have two concepts of labor and speak of concrete labor as though it were an abstract quantity. Smith and Ricardo take abstract labor for granted in their theories, but they never really explicitly explain what it is or how it works. And critics will claim, as noted above, that the LTV can use labor to

[161] Smith 1993, 12, I.i. In Smith's view, exchange gives rise to the division of labor historically (21, 23, I.ii; 26, I.iii), though the division of labor makes labor into an "abstract quantity".
[162] Smith 1993, 429-30, I.i. This is the view that Hegel holds
[163] Hegel 1991a, 232-4 § 198; Hegel 2007, 231 § 525.
[164] Marx 1963, 41.
[165] Marx 1990, 173. Fn. 33.

explain the *ex ante* determination of exchange values *only if* labor (1) "**is all of one kind**",[166] which is to say reduced to abstract labor, and (2) it *antedates* those exchange-values or exists in production before the products of labor enter the market. (These conditions cannot be met.)

(3) Finally, it is important to consider the view which Smith ultimately settles upon when he abandons the LTV which Ricardo further develops. Smith writes that the "original state of things" in which the LTV might hold "could not last beyond the first introduction of the appropriation of land [i.e., rent] and the accumulation of stock [i.e., capital]".[167] He ultimately settles on a so-called cost of production theory,[168] according to which the "real value"[169] or "natural price" of the product of labor[170] is constituted by the components of the product's value (i.e., wages for workers, profits for capitalists, and rents for landlords). He writes:

> As the price or exchangeable value of every **particular commodity**, taken separately, resolves itself into some one or other or all of those three parts; so that of **all the commodities** which compose the whole annual produce of the labour of every country, taken complexly, must resolve itself into the same three parts, and be parcelled out among different inhabitants of the country, either as the wages of their labour, the profits of their stock, or the rent of their land. The whole of what is annually either collected or produced by the labour of every society, or what comes to the same thing, the whole price of it, is in this manner originally distributed among some of its different members. **Wages, profit, and rent, are the three original sources of all revenue as well as of all exchangeable value.** All other revenue is ultimately derived from some one or other of these.[171]

The "natural price" is the average around which market prices are continually "gravitating", while the "market price" of commodities is determined by supply and demand.[172] However, Smith never gives up the view that *labor* produces the *entire* value of the aggregate product of a capitalist society and consequently that the revenues of the three classes in society are deductions from the

[166] Schumpeter 2008, 23-4.
[167] Smith 1993, 64, I.viii.
[168] Smith 1993, 63-4, I.viii. Cf. Blaug 1985, 38-9; Smith 1996, 46, I.vi; Smith 1996, 50, V.vi.
[169] Smith 1993, 46, 48, I.vi.
[170] Smith 1993, 56, 58, I.vii.
[171] Smith 1993, 50, I.vi.
[172] Smith 1993, 53, 54, 56, Iv.ii, Cf. Marx 1991, 279. Cf. Marx 1970, 31, 38. Cf. Marx 1990, 125, fn. 3.

aggregate product, which he nevertheless understands in "real" rather than "monetary" terms.[173] This is the direction in which the OCT goes as Ricardo takes his own path and radicalizes Smith's sketch of the LTV. Unlike Smith, Ricardo will ultimately hold a strict labor theory of *value* and a cost of production theory of *price*, as becomes clear later in his *Principles.* Quantities of labor time determine *ex ante* what he calls the "natural price" or "exchange-value" of products of labor on the market, which is the center of gravity, as it were, around which the "market price" of a given product may fluctuate, where variations in the cost of production alter the latter.[174]

3.5. The Effect of Accumulated Capital and Land Rents (Ricardo)

Ricardo differs from Smith's ultimate view by extending the LTV into those domains which motivated Smith to abstract from them in his sketch of the LTV and ultimately discard the latter as an explanation for modern economies. They are capital ("the accumulation of stocks") and rent ("the appropriation of land"). The condition for success of Ricardo's LTV is that he must present a theory on which "labor is the only factor of production",[175] though economists generally regard land (rent), labor (wages), and capital (profits) as the three "factors of production". That is, he must explain physical capital and rent on the basis of labor alone. In the following chapter, I address the specifics of Ricardo's theory of capital along with Smith's (OCT). Here I simply highlight the way in which the former intends to subsume *everything* under his LTV.

(1) Ricardo's LTV applies not only to the direct products of labor, but also applies to the means with which the products of labor are produced, because those means are also products of labor. He considers the labor that produces the final product of consumption to be "immediate" or

[173] Smith 1993, 46, I.vi; 1996, 50; I.vi. Cf. Ricardo 1951a, 5. Cf. Marx 1990, 709-10; Marx 1991, chapters 48, 52; Marx 1976a, 45.
[174] Cf. Ricardo 1951a, chapters IV and V. Cf. Gordon 1959.
[175] Schumpeter 2008, 24.

direct labor and the labor that produces the means of production to be *indirect labor*.[176] The value of any physical capital (i.e., indirect labor) that is used in the process of production must be reducible to quantities of homogeneous units of the human labor (i.e., time) which produces both that capital and the final consumer goods. So, Ricardo claims that the value of a product on the market will be the "aggregate sum of these various kinds of labor", of all direct and indirect labor that it requires.[177] Capital is just "accumulated labour",[178] for Ricardo, and the total price of the final product is just the "aggregate sum" of the labor which went into every component of its construction, and which independently determines the exchange ratios or values of products *ex ante*. So, if *more efficient* means of production are produced and introduced as capital in the production process (e.g., of stockings), they will decrease the "aggregate sum" of labor time "actually bestowed" on production of those goods. They will "save" labor and lower the relative value of the product.[179]

The notion behind Ricardo's reduction of the "various kinds of labour" to single "aggregate sums" of "accumulated labour" is deeply problematic in a way which has generally been called "the problem of quantity and quality in economics"[180] and specifically the "*reduction problem*" in the case of the LTV.[181] Namely, things of different kinds (e.g., apples and oranges) cannot be

[176] Cf. Ricardo 1951a, 22, I.iii; Ricardo 1951a, 23, I.iii; Ricardo 1951a, 24, I.iii.

[177] Cf. Ricardo 1951a, 25, I.iii: "The aggregate sum of these various kinds of labour, determines the quantity of other things for which these stockings will exchange, while the same consideration of the various quantities of labour which have been bestowed on those other things, will equally govern the portion of them which will be given for the stockings".

[178] Ricardo 1951a, 410, XXXII; 34, I.iv.

[179] Cf. Ricardo 1951a, 25, I: "They [prices] would fall [with better machinery], because a less quantity of labour was necessary to their production, and would therefore exchange for a smaller quantity of those things in which no such abridgment of labour had been made". Cf. Ricardo 1951a, 36, I: "Every improvement in machinery, in tools, in buildings, in raising the raw material, saves labour, and enables us to produce the commodity to which the improvement is applied with more facility, and consequently its value alters". Cf. Ricardo 1951a, 273, XX: "…every thing rises or falls in value, in proportion to the facility or difficulty of producing it, or, in other words, in proportion to the quantity of labour employed on its production". Cf. Ricardo 1951a, 323, XXIII.

[180] Leontieff 1959, 631-632. Cf. Sweezy 1970, 41; Lowe 1981, 808; Heilbronner 1983.

[181] Mandel 1990, 13. Cf. Blaug 1982, Choonara 2018, Phillip Harvey 1985, Itoh 1987, Morris and Lewin 1973/1974, Harvey 2018b, 57-61; Harvey 2018a, 31f.

compared quantitatively or in degree, but rather only things of the same kind (e.g., more or fewer, better or worse apples). And, properly speaking, "various *kinds* of labor" would be *qualitatively different*, not simply different in *relative degree*. Depending, on worker's skills and the simplicity or complexity of work, different labors can produce a different quantity or quality of products in the same amount of time or the same quantity or quality of products in different amounts of time. And differences between labors are qualitative and cannot be simply reduced differences in degree. So, Ricardo's reduction of "various kinds of labour" to simple sums of homogeneous units or quantities and the subsequent aggregation of those quantities of labor into capital or values of final products does not really work. He thinks of labor in the same way as capital. Skilled or complex labor would be an "aggregate sum" of unskilled or simple labor spent in training, as though training were just more "indirect labour", while unskilled labor is *assumed* to consist of primitive, homogeneous units (i.e., time).

Ricardo *presupposes* the common unit of simple labor, which would be "aggregated up" into complex labor and physical capital. But he does not explain how qualitatively different labors can be understood as though they were sums of homogeneous units of simple labor in the first place. And the LTV works *only if* labor (1) "**is all of one kind**" (i.e., homogeneous units, a single standard)[182] and (2) it *antedates* those exchange-values or exists in production before the products of labor enter the market, such that it can determine the value of the latter *ex ante.*[183] The critics of the LTV (and Marx) remark that Ricardo's view is incredibly implausible here. For, there are simply too many "'natural' differences" between the individual labors of even the most ordinary kind for them to be regarded as one homogeneous mass of units that varies only quantitatively.[184]

[182] Schumpeter 2008, 23-4.
[183] Schumpeter 2008, 23.
[184] Schumpeter 2008, 24. Cf. Samuelson 1971, 404: "limitation on the labor theory of value: people are not all alike". Cf. Böhm-Bawerk 1949, 80, 82.

The real labor that is "actually bestowed" in the process of production is more like a "meaningless heap[] of hopelessly disparate things" than a sum or quantity of homogeneous units.[185] So, the "reduction problem" undermines the unit of account or numeraire with which Ricardo would explain value. Ricardo would have to show how different kinds of labor could be reduced to homogeneous units of quantities prior to exchange if they are supposed to determine commodities' values *ex ante*. Thus, contemporary economists hold that the LTV ultimately "fails" to explain exchange ratios.[186]

In what follows, I simply accept this criticism of the LTV. But I hold that the LTV is *Ricardo's* theory. The reduction problem applies to labor-theories which accept the method of real analysis, such as Ricardo's. Any value-theory that accepts the method of monetary analysis, by contrast, will not succumb to the "reduction problem". So, one believes it applies to Marx *only if* one thinks he accepts real analysis or is Ricardian.[187] And I will argue that Marx adopts the method of monetary analysis, and that Marx does not conceive of labor, value, or the "reduction" of the former to the latter in the same way as Ricardo. So, this "reduction problem" does not apply to Marx's value-theory. As I will argue below, Marx clearly holds that the labor which goes on in production, before commodities enter the market, is concrete or heterogeneous labor, which is not a quantity or value and therefore cannot determine commodities' values *ex ante*; and the abstract or homogeneous labor which is such a quantity first appears *within* the process of exchange of products of labor, *after* production is completed. Unlike Ricardo, Marx will claim that the

[185] Schumpeter 1994, 278. Indeed, this is why "we can hardly help resorting to monetary [aggregates]".

[186] Schumpeter 2008, 24, fn. 3: "this method [of reduction] fails in the case of 'natural' differences in quality of work due to differences in intelligence, will power, physical strength, or agility. Then recourse must be had to the difference in value of the hours respectively worked by the naturally inferior and the naturally superior workmen—a value that is not itself explainable on the labor-quantity principle […] which thus fails from the start".

[187] Marxists who agree with the orthodox interpretation that Marx is basically a Ricardian (LTV) include Mandel 1968, 65; Mandel 1971, 49-50; Mandel 1990, 11-15, 32; Itoh 1987, 40, 54; McGlone and Kliman 2004, 136-7; Kliman 2006; 138-9; Sweezy 1970, 41-4; Wolff 1984.

"reduction" of concrete or heterogeneous to abstract or homogeneous labor occurs *within* but not *before* the process of exchange. He claims that abstract labor is a "*result*" of aggregate exchange, not an *antecedent*. So, he will not have to show how concrete labors could be reduced to homogeneous, abstract labor before or independently of exchange, because he is not presenting an *ex ante* explation of exchange-ratios, his view is fundamentally different, as I discuss shortly.[188]

(2) The further problem which Ricardo's introduction of physical capital into the model of the LTV presents is the so-called "transformation problem",[189] from which orthodox anti-Marxists and Marxists alike believe Marx's theory suffers, because they think that Marx's theory basically *is just* Ricardo's theory.[190] Ricardo often seems to treat exchange-ratios or values and prices of products as *equivalent* expressions early on in his *Principles* when he claims that that ratios of quantities of labor independently determine exchange ratios or values of products *ex ante*. However, once physical capital is introduced into the model, the exchange-values of products and their prices deviate from one another. Capitals of different compositions can result in prices that do not correspond to the quantities of labor involved in their production. Where Ricardo does momentarily recognize this discrepancy, the thinks that they are *close enough* to suffice.[191] But critics are right to remark that a theory of exchange-value that fails to give an account of real prices of production (i.e., costs of production plus capitalists' average profits) is a "bad" theory.[192] Marx

[188] As I.I. Rubin puts it: "The assumption that the reduction of qualified to simple labor must take place in advance and precede exchange in order to make possible the act of equalization of the products of labor misses the very basis of Marx's theory of value" (Rubin 2008, 168). Cf. Rubin 2017b, 567: "the concept of abstract labor… is unique to Marx's theory of value and distinguishes it from the classics' theory of value and especially from Ricardo's".

[189] Cf. Sweezy 1970 (chapter VII), Böhm-Bawerk 1949, Samuelson 1974, Foley 1987, Desai 1988, Moseley 2016.

[190] Samuelson 1962, 12. Cf. Mandel 1990, 11; Mandel 1971, chapters 3 and 6; Sweezy 1970, 85; Wolff 1984; Böhm-Bawerk 1949, 77, 83-4; Samuelson 1971; Schumpeter 1954, 85, 114, 130; Schumpeter 1994, 390, 598; Schumpeter 2008, 22-3; Keynes 1982, 43.

[191] Ricardo 1951a, 36, I.iv. Cf. Tsoulfidis 2018.

[192] Cf. Schumpeter 2008 23-4: "For economics as a positive science, however, which has to describe or explain actual processes, it is much more important to ask how the labor theory of value works as a tool of analysis, and the real trouble with it is that it does so very badly".

himself objects to Ricardo's conflation of exchange-value and price[193] and he points out that Ricardo would have to provide an explanation of the "transformation" of values into prices.[194]

Again, in what follows, I simply accept this criticism of the LTV. But I will argue that Marx does not conceive of the determination of value in relation to labor in the same way that Ricardo does. Any theory which adopts the method of monetary analysis and a macroeconomic model, rather than real analysis and a microeconomic model, does not claim that quantities of labor ought to independently determine prices of production *ex ante*, and so it would not succumb to the transformation problem.[195] And again, I will argue that Marx adopts a macroeconomic and monetary theory. So, this problem does not apply to Marx's theory. (Below I return to this point.)

(3) In Ricardo's account, land and rent qualify to a significant degree the determination of the market values of some products (i.e., food) by the quantities of labor that produce them. But they would not ultimately undermine his claim that labor would independently determine commodities' values *ex ante*. He sticks to his LTV. And his rent-theory fares better than his LTV.

The fact that agricultural products depend upon the availability and fertility of land introduces a competitive system of rent into the account production, according to Ricardo, which distorts the prices of agricultural goods and profits, as it were. Ricardo assumes that, unlike other forms of production in modern industry, the finite supply of fertile land uniquely impacts the determination of prices of agricultural products. Agricultural production begins from the most fertile land and moves to the least fertile land. In the course of competitive profit-seeking, capitalists cultivate the most fertile land first, then the less fertile land second, then the least fertile

[193] Marx objects to this (cf. Marx and Engels 1989a, 472; 417, 419, 424, 432).
[194] Cf. Marx and Engels 1989a, 417, 419, 424, 432. Cf. Marx 1991, chapter 8, especially 252.
[195] Cf. Heinrich 2012, 148-9; 234, fn. 40; Moseley 2016.

land last.[196] With the same quantity of high market demand for agricultural products and the application of the same amount of physical labor, the most fertile land will yield the most products, the less fertile land will yield fewer products, and the least fertile land brought into cultivation will yield the least—and ultimately only break even, as it were, yielding no profit at all. These different degrees of agricultural profits are subjected to "differential" rent-seeking by landlords who usurp the surplus profits of capitalists on the most fertile land as a charge for the use of that asset: "rent is the effect of the high price of corn".[197] The landlord who owns the most fertile land charges the most rent, while the owner of the less and least fertile lands can charge less and so on. So, Ricardo claims, "the price of corn is regulated by the quantity of labour necessary to produce it, with that portion of capital **which pays no rent**".[198] The least fertile land would leave no funds to pay to landlords who own that land in the form of rent and thus would not occur at all. Thus, it seems to set the standard for what counts as economically viable production of agricultural goods too, while the excess over and above the lower standard presents a relative *surplus profit*, which landlords usurp from capitalists. Yet Ricardo's general law of value would still hold for the particular limit-case which would be decisive. On the least fertile land, the quantity of labor "actually bestowed" would set the market standard for *all* products and recursively distribute rent and profits.

Though further discussion of this topic is not relevant for my argument, it is important to note that Marx disagrees with Ricardo's rather parochial and arbitrary assumption that the fertility and quantity of land is fixed, finite, and that cultivation can only proceed in a descending scale, as the history of science and colonization shows.[199] He also disagrees that rents are always

[196] Capital investment chases, as it were, the most profitable opportunities, thereby averaging out standards competitively. Cf. Ricardo 1951a 91, IV; 291, XXI, fn.
[197] Ricardo 1951a, 427, XXXII On his theory of rent, cf. Blaug 1985, chapter 3 (8-9); Swyngedouw 2012; Marx also discusses Ricardo's rent theory (Marx and Engels 1989a, 32).
[198] Ricardo 1951a, 111, VI.
[199] Marx and Engels 1989a, 459. Cf. Marx 1991, part 6.

differential, because there are forms of "absolute rent" which must be paid for the use of assets such as land, regardless of profit rates.[200] In short, there are no landlords who charge "no rent".

4. Marx's Concept of Value: Macro-Monetary

In this section I address the four points on which Marx's value-theory differs from the OCT. As mentioned in the introduction, in this chapter I only examine the half of Marx's explanatory model, as it were, which relates directly to the OCT's model above — simple circulation of commodities or C-M-C — and I postpone the other half — the accumulation of value as capital or M-C-M' — until the following chapter on capital. And it is important to note at the outset that Marx's theory contains two distinct notions or senses of the term "abstraction", which are both essential to the reconstruction that I present here. The first sense of "abstraction" plays an important role in the macroeconomic scale of Marx's theory; and it is the conventional sense of the term, according to which a theory looks away from the concrete properties, qualities, details, and differences between individual things, in order focus on a common property that they share.[201] The second plays an important role in Marx's account of the "reduction" of "concrete" to "abstract" labor, which is his reversal of the direction of determination of value that one finds in Ricardo's LTV; and it is an unconventional notion of abstraction, according to which the practical activity of monetary exchange abstracts from the concrete properties or qualities of products of labor and the concrete labor which produces them, giving rise to the "abstract labor" which Marx calls the "substance"

[200] Marx and Engels 1989a, 464, 423, 427-8 *passim*. Cf. Marx 1991, chapter 45.

[201] Cf. Falguera, Martinez-Vidal, Rosen 2021: "According to a longstanding tradition in philosophical psychology, abstraction is a distinctive mental process in which new ideas or conceptions are formed by considering the common features of several objects or ideas and ignoring the irrelevant features that distinguish those objects".

of value. Commentators who acknowledge it call this process a "real abstraction",[202] and, unsurprisingly, considerable confusion and controversy surrounds it in the literature.[203]

4.1. Monetary Analysis

The first respect in which Marx's theory of value is distinguished from the OCT is the difference between their views on the consistency of value. The OCT conceives of value in physical terms (i.e., real analysis), holds that money is a mere "veil", and that the exchange of the products of labor on the market is basically direct barter. Marx, meanwhile, does not reduce value to physical terms, and he holds that money and exchange are essential (i.e., monetary analysis).

4.1.1. Money is a Form of Value

Marx is often said to hold a commodity-theory of money like Ricardo's, but his statements about money indicate otherwise.[204] He criticizes the OCT for conceiving of money as though it were just another commodity among commodities.[205] And the way in which he understands money is fundamentally different from the OCT. He holds what could be called a *functional* theory of money. That is, some item counts as money socially and therefore effectively *is* money *only if* it circulates and distributes the products of labor in exchange throughout the market as commodities

[202] Cf. Colletti 1973 82-91; Sohn-Rethel 1978, chapter 6; Rubin 2008, part II; Heinrich 2006, chapter 4; Himmeweit and Mohun 1981; Mohun 1984/1985; Mohun 1991; Mohun, 1994; Roberts 2017.

[203] Cf. Steedman 1985, 551: "Marx's concept of abstract labour is of little or no use, other than as a metaphor…" Cf. Steedman 1985, 573: "…the metaphor and the concept can be discarded at zero cost to Marx's theory. Marx's search for the 'substance of value' produced only a phrase—abstract labour—which has *no* genuine explanatory content". Cf. Mandel 1990, 13. Cf. Böhm-Bawerk 1949, 83; Blaug 1982; Choonara 2018; Phillip Harvey 1985; Itoh 1987; Morris and Lewin 1973/1974; Harvey 2018b, 57-61; Harvey 2018a, 31f.; Shaikh 1981.

[204] On this debate, see Bellofiore 1985, Reuten 1988, Graziani 1997, Milios 2002, Moseley 2005, Bellofiore 2005, Nelson 2005, Williams 2000. For Marx's important statements on money, cf. CI: 184, 188, 191, 195, 199, 204, 217, 224, 227, 234, 236, 268; Marx 1992, 128-9, 137, 527, 566; CIII: 490, 648, 742-3, 1003; Marx 1970,: Ch. 2; Marx 1993, 146, 238.

[205] Marx and Engels 1989b, 129: "money for them is a commodity…" Marx elsewhere complains of "improperly regarding money as a simple commodity" (Marx 1970, 168).

or values. Money is "socially interwoven" into the process of exchange and circulation, as Marx puts it.[206] In addition to being a means of exchange, money is a measure of value, a store of value, and a means of payment. These other functions are essential for understanding for the accumulation of value as capital (i.e., M-C-M', or M-C…P…C'-M'), which I discuss in the following chapter. Yet it is the essentially social process of exchange and circulation on the market which turns some item into a "form of value" (i.e., commodity-form or money-form). Marx writes:

> [Gold] thus acts as a universal measure of value, and only through performing this function does gold, the specific equivalent commodity, become money.[207]
> …the process of exchange gives to the commodity which it has converted into money not its specific value [i.e., quantitative content] but its specific value-form.[208]

The item that functions as money could, in principle, be anything, so long as it fulfills its basic social function, which is not itself a thing, but rather a position in a web of social relations, which constitute the market and capitalist mode of production. It must simply do the *work* of money.[209]

Unlike the OCT, Marx insists that, in actual markets, people exchange commodities *for money* (C-M) and *money* for commodities (M-C).[210] Yet neither money nor commodities are value *per se*. Money is a "form of value", a "mode of existence of value", or a physical instantiation which value adopts in economic processes of exchange and circulation.[211] He calls money "the value-form of commodities",[212] a "monetary expression of value".[213] In volume I, he writes:

> …both the money and the commodity function only as different modes of existence of value itself, the money as its general mode of existence, the commodity as its particular…

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[206] Marx 1990, 162.
[207] Marx 1990, 188. Cf. Marx 1992, 149.
[208] Marx 1990, 185. Marx distinguishes the "substance of value" from the "form" that value takes in exchange (viz. commodities and money) and the "magnitude" of value (aggregate or "socially necessary labor time"). Cf. Marx 1990, 89, 94, 127-31, 138-9f., 140-1, 151, 159, 185.
[209] Cf. Marx 1991, 1003: "Money is not a thing but a particular form of value, so that it again presupposes value".
[210] Here Marx is much closer to Keynes 1973 and Keynes 1979 than the OCT. Cf. Mitchell, Wray, Watts 2019, 183.
[211] Marx 1992, 137.
[212] Marx 1990, 179.
[213] Marx and Engels 1989a, 394, 427.

> It [i.e., value] is constantly changing from one form into the other [e.g., C-M-C], without becoming lost in the movement…[214]

On the one hand, the existence of money *as* money and commodities *as* commodities depends upon the social relations of exchange; while on the other, the value which money and commodities express has no independent existence, but rather depends upon those forms of expression in which it exists.[215] The value that money and commodities express, as Marx understands it, consists of the social relations of commodity production and exchange in an economy,[216] as I discuss below.

Marx's value-theory involves a more robustly social dimension which one does not find in the OCT or subsequent economics. Value itself is a social relation, which Marx calls the "value-relation".[217] And "money, though a physical object with distinct properties, represents a social relation of production".[218] In chapter one of volume I, for instance, he writes:

> Not an atom of matter enters into the objectivity of commodities as values; in this it is direct opposite of the coarsely sensuous objectivity of commodities as physical objects. […] **their objective character as values is therefore purely social**… it can only appear in the relation between commodity and commodity.[219]
> It is **only by being exchanged** that the products of labour acquire a socially uniform objectivity as values, which is distinct from their sensuously varied objectivity as articles of utility.[220]

The "objectivity" to which Marx is referring, which is distinct from the physical properties (use-value) of the products of labor, is just the objective character of the kind of social relations that

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[214] Marx 1990, 255.
[215] Cf. Harvey 2018a: "values, being immaterial [i.e., a social relation], cannot exist without a [material] means of representation. It is, therefore, the rise of the monetary system, the rise of the money-form itself as a means of tangible expression, that makes value (as socially necessary labor-time) the regulator of exchange relations".
[216] Cf. Rubin 2008, 69: "value (*stoimost*) does not characterize things, but human relations in which things are produced". Cf. Harvey 2018a, 35: "Value is a social relation, and you cannot actually see, touch or feel social relations directly; yet they have an objective presence…" "…value is immaterial, but *objective*. […] To find value in a commodity just by looking at a commodity is like trying to find gravity in a stone" (39).
[217] Marx 1990, 142-3. Cf. Marx and Engels 1942, 246: "… even if there were no chapter on value in my book, the analysis of the real relationships which I give could contain the proof and demonstration of the real value relation".
[218] Marx 1970, 35. Marx 1990, 185: "the money form [is] simply the form of appearance of human relations hidden behind it".
[219] Marx 1990, 138-9.
[220] Marx 1990, 166.

obtain between commodities, money, and agents, in modern economic activity. It is neither an entity that exists independently of money or commodities' physical existence,[221] nor are they inherently value or valuable, which is an illusion that Marx calls "fetishism".[222] "The exchange process is the *real* **relation** that exists between them [i.e., commodities]", Marx writes.[223]

4.1.2. Commodity Exchange is Not Barter

The way in which Marx understands the monetary exchange and circulation of the products of labor on the market as commodities or values (C-M-C) is also fundamentally different from the OCT. Starting from the method of real analysis, the OCT regards exchange as though it were the direct *barter* of goods for goods (C_a-C_b). And Marx rejects that view. In volume I, Marx writes:

> The circulation of commodities [C-M-C] differs from the direct exchange of products [i.e., barter: C_a-C_b] not only in form, but in essence.[224]

And in *Theories of Surplus Value*, he similarly writes:

> …[the] ***commodity***, in which the contradiction between exchange-value and use-value exists, becomes mere product (use-value) and therefore the exchange of commodities **is transformed into mere barter of products** [in the OCT], of simple use-values. […] This is a return not only to the time before capitalist production, but even to the time before there was simple commodity production…[225]

Marx's suggests that the OCT's model rests on *mythology*. He criticizes the OCT in general and Ricardo in particular for focusing exclusively on the quantity or "magnitude" (i.e., content) of labor with which he tries to explain the exchange-values of the products of labor and neglecting

[221] Cf. Meikle 1991; Schumpeter 2008, 23; Robinson 1966, xi. Heinrich 2004 calls this the "substantialist" and "pre-monetary" conception of value (64).
[222] Cf. Marx 1990, 164-5. Cf. Heinrich 2012, 70f., 111, 179f., 231 fn. 17. Cf. Marx 1970, 34: "Although it is thus correct to say that exchange-value is a relation between persons [as Galiani claims], it is however necessary to add that it is a relation hidden by a material veil [*Hülle*—husk]". Cf. Marx 1990, 166-7.
[223] Marx 1970, 41. Cf. V 40: "The real relating of commodities to one another, however, is their process of exchange".
[224] Marx 1990, 207, cf. 209.
[225] Marx and Engels 1989b, 132.

"form" in which products exist as values on the market: either as commodities or money.[226] Ricardo simply takes for granted that the *barter of products* is the same as the *exchange of commodities* because he also takes for granted that that the production and exchange of commodities is the universal and natural form of any kind of economy anywhere at any time.[227] Had he considered that the economy which he tries to explain is a historically specific mode of production and exchange, he may have recognized that the products of labor exist in the form of commodities or that value exists in commodity-form in *capitalist* economies, and the mediation of money-form of value is essential for both.[228]

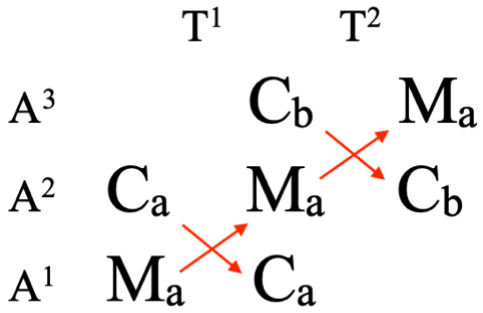
Representing Marx's view will help clarify the fundamental difference between it and the OCT's barter-model. In Marx's view, a single exchange is a transaction between two agents, one of which exchanges money for commodities (M-C) and the other of which exchanges commodities for money (C-M). A single exchange is the coincidence of the sale and purchase of *one* commodity (C) with money (M). Individual exchanges of commodities and money (C-M, M-C) are just the

[226] Cf. Marx 1990, 173-4: "Political economy has indeed analysed value and its magnitude, however incompletely, and has uncovered the content [i.e., labor time] concealed within these forms [i.e., commodities and money]. But it has never once asked the question why this content has assumed that particular form, that is to say, why labor is expressed in value, and why the measurement of labor by its duration is expressed in the magnitude of the value of the product". Cf. Marx and Engels 1989a, 399: "[Ricardo] does not even examine the form of value—the particular form which labour assumes as the substance of value. He only examines the magnitudes of value, the quantities of this abstract, general, and in this form, social labour which engender differences in the *magnitudes of value* of commodities". Cf. Marx and Engels 1989b, 156: Ricardo thinks that the *commodity* form makes no difference to the product, and furthermore, that *commodity circulation* differs only formally from barter, that in this context the exchange-value is only a fleeting form of the exchange of things, and that money is therefore merely a formal means of circulation… this is in fact in line with his presupposition that the bourgeois mode of production is the absolute mode of production, hence it is a mode of production without any definite specific characteristics, its distinctive traits are merely formal". Cf. Marx and Engels 1989a, 389-90; 32, 134-5.

[227] Cf. Marx 1990, 174. Fn. 34. This is the respect in which the OCT is "bourgeois consciousness" or ideology according to Marx (cf. Marx 1990, 93-6, 175, 426, 682, 714, 757-9; Marx 1992, 303, 217, 234; Marx 1991, 598, 117, 300, 956). Cf. Marx and Engels 1978, 4: "It is… [the] social being [of humans] that determines their consciousness".

[228] Marx 1993, 103f. On the distinction of form of value (i.e., commodities or money) and content (i.e., abstract or average human or social labor), cf. Marx 1990, 89, 94, 127-31, 138-9f., 140-1, 151, 159, 185. In chapter 1 of volume I, the measure of the magnitude of value is average time of labor that was which was necessary for the production of the goods that exchange as commodities or values on the market (cf. Marx 1990, 129, 131), though Marx quickly moves to money.

components of the larger social process of "circulation" of commodities and money (C-M-C) which unifies them in the course of circulation of money.[229] And the process of circulation must involve at least *three* agents, two of which possess two different commodities (C_a, C_b) and one of which possesses money (M_a).[230] This is why exchange and circulation cannot be reduced to direct-barter. His social model of exchange and circulation can be represented by figure 2.1:[231]



(Figure 2.1. Simple Circulation)

One agent (A^1) starts with money (M_a), another (A^2) with a commodity (C_a), and yet another (A^3) with another commodity (C_b). They exchange their possessions at two separate points in time (T^1, T^2). First (T^1), the first agent (A^1) exchanges the value it possessed in the form of money (M_a) with the second agent (A^2) for the value that the latter possessed in the form of a commodity (C_a). Then (T^2), the second agent (A^2) exchanges the value it acquired from the first (A^1) in the form of money (M_a) with the third (A^3) for the value which the latter possessed in the form of another commodity (C_b). Note how the representation of the money-form of value (M_a) is the essence of this model, as it were. It performs a dual function. On the one hand, it separates the purchase and sale of the first commodity (C_a) from the purchase and sale of the second commodity (C_b), which take place in two separate events (T^1, T^2). On the other hand, it unites the two individual exchanges of the

[229] Cf. Marx 1990, 162, 198-220.
[230] Cf. Marx 1990, 206; Marx 1970, 99, 139.
[231] I construct this model on the basis of Marx's descriptions at Marx 1990, 206, Marx 1970, 99, 139, and points in volume II.

two commodities into a larger social process that goes on "behind the backs" of the individual agents, though it only occurs through their transactions.[232] So, the equivalence of the two commodities as values (C_a=C_b) is performed over the course of two different exchanges between three agents. And so, it does not consist in a *direct*, simultaneous equation or simple trade of one with one the other (i.e., barter: C_a-C_b). The money-form of value (M_a) *indirectly* equates the items with one another as commodities and thus as values at different points in time (T^1, T^2) by mediating the entire process.[233] As Marx puts it in volume II: "These forms [of value] are therefore fluid forms, and their simultaneity [as equivalent values] is mediated by their succession" in the process of circulation.[234] Before the process of circulation takes place, the "articles A and B… are not as yet commodities, but become so only through exchange".[235] "A man who produces an article for his own immediate use, to consume it himself, creates a *product*, but not a *commodity*".[236] The products of labor become commodities or values belatedly when they are exchanged with the money-form of value and equated at different points in time (T^1, T^2).

The very different standpoint of the OCT, by contrast, selectively represents the process of exchange and circulation as though two individual agents directly trade or barter two individual products of labor for one another (C_a-C_b). It represents the process of circulation from a microeconomic scale of description, the standpoint of the individual agent (A^2) who exchanges a commodity (C_a) for money (M_a) and that money (M_a) for another commodity (C_b). From the standpoint of this representative agent (A^2), it seems like money (M_a) can be abstracted away and

[232] Marx 1990, 135.
[233] In an apparently furious comment on Ricardo, Marx writes: "Money is not only 'THE MEDIUM BYWHICH THE EXCHANGE IS EFFECTED' ([p.] 341), but at the same time THE MEDIUM BY WHICH THE EXCHANGE OF PRODUCE WITH PRODUCE BECOMES DISSOLVED INTO TWO ACTS, INDEPENDENT OF EACH OTHER, AND DISTANT FROM EACH OTHER, IN TIME AND SPACE" (Marx and Engels 1989b, 134-5).
[234] Marx 1992, 185.
[235] Marx 1990, 181.
[236] Marx 1976a, 30.

the process of circulation (C_a-M_a-C_b) can be abbreviated as "C_a-C_b". This reduces circulation, which consists of two exchanges, to a single trade (C_a-C_b). It abstracts from the other agents who are involved (A^1, A^3) as well as from the fact that commodities are only equated during a process of circulation that is divided into two events (T^1, T^2). And this seems like a fallacy of composition.

As I will address in the next chapter, the barter-model of the OCT (C_a-C_b) will make it impossible to understand the accumulation of value as capital (M-C-M'), according to Marx. But more importantly for now, the OCT's interpretation of the exchange of commodities as direct barter is the basis on which it concludes that markets are always in harmonious equilibrium and thus that the economic POU is impossible in principle. For, the barter model (C_a-C_b) gives the impression that supply and demand or production and consumption immediately coincide in a single exchange between two agents (i.e., Say's Law), which is the basic model that the OCT "aggregates up" into its macroeconomic picture.[237] So, on this picture there is no way in which disequilibrium could be anything more than a passing, contingent exception.

From Marx's perspective the OCT's claim that markets are always in equilibrium is clearly not drawn from empirical observation of the economy, which an accurate representation or model ought to capture, but rather from the barter-model which the OCT simply assumes. So, it is either just a bare assertion (*petitio principii*) or a *non sequitur*. If one does not adopt a micro-real perspective from the start, then it is obvious that the entire process of circulation (C_a-M_a-C_b) cannot be abbreviated as "C_a-C_b" without grossly distorting it. While the circulation of commodities (C_a-M_a-C_b) consists of single exchanges (C_a-M_a, M_a-C_b), it is not a simple aggregate of individual trades and cannot be reduced to a single trade (C_a-C_b) without succumbing to a fallacy of composition. In volume I, Marx addresses this point which relates to Say's Law:

[237] Cf. Ricardo 1951a 290ff. XXI.

> Nothing could be more foolish than the dogma [i.e., Say's Law] that because every sale [i.e., C-M] is a purchase [i.e., M-C], and every purchase [i.e., M-C] a sale [i.e., C-M] the circulation of commodities necessarily implies an equilibrium between sales and purchases. If this means that the number of actual sales accomplished is equal to the number of purchases, it is a flat tautology [e.g., GDP]. But its real intention is to show that every seller brings his own buyer with him. […] No one can sell unless someone else purchases. But no one directly needs to purchase because he has just sold. Circulation bursts through all the temporal, spatial and personal barriers imposed by the direct exchange of products [i.e., barter: C^a-C^b], and it does this by splitting the direct identity present in this case between the exchange of one's own product and the acquisition of someone else's into these two antithetical segments of purchase and sale.[238]

And in *Theories of Surplus Value*, Marx makes the following statement on Say's Law:

> **TRADE is not BARTER**, and… the seller of a commodity is not necessarily AT THE SAME TIME THE BUYER OF ANOTHER. **This whole subterfuge** then **rests on abstracting from *money*** and from the fact that we are not concerned with the exchange of products but with the circulation of commodities, and essential part of which is the separation of purchase and sale.[239]

A barter is a direct trade of two commodities between two agents. But the agent (A^2) who exchanges a commodity (C_a) for money (M_a) and money (M_a) for another commodity (C_b) is transacting with *two* other, different agents (A^1, A^3) in two different exchanges (T^1, T^2), *not a single agent in one exchange* (C_a-C_b). So, the sale and purchase of commodities do not necessarily coincide. The second sale of the second commodity (C_b) is not guaranteed by the first sale of the first commodity (C_a). There is no objective reason why the first agent, upon selling the commodity (C_a) for money (M_a), must also spend that money back into the economy immediately. And so, supply and demand are not necessarily in equilibrium.[240] Marx therefore rejects Say's so-called law and identifies the possibility of "crisis" at the very ground level of circulation.

[238] Marx 1990, 208-9. Cf. Marx and Engels 1989b, 124ff., 132-3. Cf. Shoul 1957, Foley 1985, Cottrell 1997.
[239] Marx and Engels 1989a, 161.
[240] Cf. Gordon 1951, Mill 1844.

4.1.3. Money is Essential for Commodity Exchange

Many interpreters presume that money is not essential for Marx because they also presume that he is basically a Ricardian (i.e., real analysis),[241] and popular selections of Marx's writings edit out those passages where he clearly expresses money is essential.[242] Those who interpret Marx as a Ricardian understand his measure or "unit of account" (*numeraire*) of value to be disembodied labor time[243] or "labor values",[244] rather than monetary value. Heinrich calls this the "substantialist" and "pre-monetary" conception of value.[245] And as I have just tried to show, matters could not be more different. Marx calls capitalism a "money economy"[246] and money the "necessary form of appearance" of value,[247] which I take to mean that x (e.g., some corn) is a value only if it eventually appears in the form of money or is exchanged for an equivalent monetary sum or value. In the thousands of pages that follow chapter one of volume I, Marx always refers to values in *monetary terms*, and he never writes that a capitalist or worker buy means of production or consumption with "labor values", but rather money (M) such as pounds (£). The *numeraire*, "unit of account", or *measure* of value is essentially *monetary*.[248]

It is worth considering Marx's statements on the OCT here, because they show that he could not possibly accept its view of money. He claims that it is "one of the chief failings of classical political economy" that it specifically ignored "the form of value which in fact turns value

[241] Joan Robinson recognizes the robustly monetary dimension of Marx's value-theory, but also thinks that Marx is ultimately committed to real analysis, because she thinks that his value-theory is basically Ricardo's LTV: "Part of the time he [i.e., Marx] is accepting Say's Law and part rejecting it" (Robinson 1966, 86).
[242] E.g., Robert C. Tucker's widely read and assigned *Marx-Engels Reader* presents a very distorted picture.
[243] Sweezy 1970, 117, 122, 271-2.
[244] Desai 2002, 75.
[245] Heinrich 2012, 64.
[246] Marx 1992, 298, 195. Cf. Keynes 2015 (174-5) and Keynes 1979 (81, 89); Mitchell, Wray, Watts 2019, 183.
[247] Marx 1990, 188: "Money as a measure of value is the necessary form of appearance of value which is immanent in commodities, namely, labor-time".
[248] Cf. Heinrich 2012, chapter 3, and Moseley 2016, chapters 1, 3, and 4

into exchange value".[249] He calls Ricardo's view "inadequate",[250] "erroneous",[251] and "false",[252] though it is basically just Smith's view as well. And, in *Theories of Surplus Value*, he writes:

> [Ricardo] overlooks the fact that the commodity has to be converted into money.[253]
> **[For Ricardo,] money is merely a means circulation**, and exchange-value itself merely a fleeting aspect of the exchange of product against product—**which is wrong**.[254]
> Since [Ricardo's] transformation of the commodity into a mere use value (product) obliterates the essence of exchange value, it is just as easy to deny, or rather it is necessary to deny, that ***money* is an essential aspect of the commodity** and that in the process of metamorphosis [i.e., circulation] it is *independent* of the original form of the commodity.[255]
> Ricardo's *false assumption* [is] that money, in so far as it serves as a medium of circulation, exchanges as a commodity for commodities. Commodities are assessed in money before it circulates them.[256]

A product of labor counts as a commodity and therefore an economic value, for Marx, *only if* it is exchanged for an equivalent value in the form of money.[257] He claims, "…the first condition of capitalist production… [is] that the product must be a commodity and therefore express itself as money…",[258] and he calls the "conversion of the product into money" the "*conditio sine qua* [*non*]" of "*commodity production*".[259] At the aggregate-level too, Marx holds that monetary exchange is an essential condition for the functioning of capital, as I discuss in the following chapter.[260] And the consequence of the OCT's exclusion of money from the economic model of value, is that it does not present an explanation of capitalism at all: "capitalist production itself—denied".[261]

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[249] Cf. Marx 1990, 174. Fn. 34. Cf. Marx 1970, 66: "Price is the converted form in which the exchange-value of commodities appears *within* the circulation process".
[250] Marx and Engels 1989a, 399.
[251] Marx and Engels 1989a, 389-90.
[252] Marx and Engels 1989b, 134-5.
[253] Marx and Engels 1989b, 101.
[254] Marx and Engels 1989b, 130.
[255] Marx and Engels 1989b, 132.
[256] Marx and Engels 1989a, 425.
[257] Marx and Engels 1989b, 188.
[258] Marx and Engels 1989b, 132. Cf. Marx and Engels 1942, 108: "money does not merely appear as a means of circulation but as the realization of price".
[259] Marx and Engels 1989b, 139.
[260] Marx 1992, 281, 527, 570-1.
[261] Marx and Engels 1989b, 132.

4.2. Relative Value and Absolute Value

Marx accepts not only a relative concept of value (i.e., exchange value), as the OCT does, but also an absolute concept, which is a quantity denominated in a monetary unit of account (*numeraire*). The values of individual commodities can be understood as exchange ratios or relative values, or they can be understood as the "form of appearance" or expression of the aggregate or absolute value of the lot of commodities to which they belong. For example, a single commodity of some lot of 1,000 commodities with a value of $1,000 expresses one one-thousandth of that value.

At the beginning of volume I, Marx appears to accept Smith's two classical senses in which a commodity is a value (i.e., use-value and exchange-value). But he does not ultimately accept this view.[262] Regarding exchange-value, he writes:

> Exchange-value appears first of all as the quantitative relation, the proportion, in which use-values of one kind exchange for use-values of another. […] exchange-value appears to be something accidental and purely relative, and consequently an intrinsic [*innerlicher, immanenter*] value, i.e. an exchange-value that is inseparably connected with the commodity, inherent in it, seems a contradiction in terms. Let us consider the matter more closely.[263]

Then Marx shifts the focus of attention, from the relative values of the commodities related in exchange, to the relation between commodities which stand to one another as values. In the first instance, the lowest common denominator of two commodities which stand in relations of value to one another is not human labor, but rather simply value as such, or value understood absolutely. That relation comes to the fore *only if* abstraction is made from all the sensible properties that the commodities possess as concrete, physical, material bodies.[264] He writes:

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[262] The only relevant roles that use-values play in Marx's theory is that they are the physical or material basis in which value is instantiated, so called "bearers" (*Träger*) of value and means of social reproduction (cf. Marx 1993, 83-100).

[263] Marx 1990, 126.

[264] Cf. Marx 1990, 148. Cf. Marx 1990, 167: "to express the sugar-loaf as a [quantity of] weight, we put it into a relation of weight with the iron. In this relation, the iron counts as a body representing nothing but [a quantity of] weight".

> **The common factor** in the exchange relation, or in the exchange-value of the commodity, **is** therefore its **value**. […] exchange-value [is] the necessary form of expression, or form of appearance, of value.[265]

For instance, if two Smithian deer and one Smithian beaver appear on the market in an exchange ratio of 2:1, then the deer express one half of the aggregate or absolute value in question (i.e., each deer expresses one quarter) and the beaver expresses the other half. The "substance" of their value is the "numerical value-relation" between them;[266] "their value… is something purely social".[267]

Later in chapter one, Marx explicitly *corrects* the language of use-value and exchange-value in classical political economy and makes room for his own conception of value. He writes:

> …the value of a commodity is independently expressed through its presentation [*Darstellung*] as 'exchange-value'. **When, at the beginning of this chapter, we said in the customary manner that a commodity is both a use-value and an exchange-value, this was, strictly speaking, wrong.** A commodity is a use-value or object of utility, and a 'value'. It appears as the twofold thing that it is [i.e., a use-value and an exchange-value] as soon as its value possesses its own particular form of manifestation [as a value in some other commodity], which is distinct from [its own] natural form. This form of manifestation is exchange-value, and the commodity never has this form when looked at in isolation, but only when it is in a value-relation or an exchange relation with a second commodity of a different kind.[268]

The physical bodies (i.e., use-values) of each commodity is the form of expression or "appearance" of the *value* of the other.[269] In this sense, commodities are relative expressions of value or exchange-values. But ultimately, each commodity's value is the partial expression of an absolute value, which is the aggregate value of the lot to which it belongs, as I discuss further below.[270]

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[265] Marx 1990, 128.
[266] Marx 1993, 792. Cf. Marx 1990, 137, 131.
[267] Marx 1990, 149. Cf. Marx 1990, 177.
[268] Marx 1990, 152.
[269] Cf. Marx 1990, 143, Marx 1976b 22, *passim*.
[270] Cf. Marx and Engels 1989a, 382.

4.3. Macroeconomic Scale of Description

The third respect in which Marx's value-theory is fundamentally different from the OCT is the difference between the micro- and macroeconomic scales of description which their respective theories adopt. The OCT's model is based upon the representation of individuals and excludes money (i.e., real analysis) to explain real exchange ratios on the independent basis of labor. A model that adopts a fundamentally aggregate-level or macroeconomic scale of description, by contrast, is one that represents the absolute or aggregate value of the total sum of products that are produced and exchanged in period of activity (e.g., GDP: total income = total expenditure). Volumes I and II adopt macroeconomic scales of description (i.e., production, circulation), while volume III addresses microeconomic themes (i.e., distribution, competition, etc.).

4.3.1. Marx's Model

The subject matter of volume I is the entire capitalist process of production of commodities and the realization of their values in exchange on the market.[271] That is a macroeconomic theory, if ever there was one. In the first instance, its goal is to explain how capitalist economies produce *value* by way of producing and exchanging commodities. The value that Marx sets out to explain is not primarily the relative exchange-value of individual products or lots of products, but rather aggregate or absolute value of the total product of labor, which macroeconomists today would call GDP, of which individual commodities' values represent mere portions. Ultimately, Marx is interested in explaining the aggregate growth between *two* periods of economic activity, or production of "surplus-value", though I will only be able to address this in the following chapter.[272]

[271] Cf. Marx 1990, 90, 92, 710.

[272] Marx 1990, 975: "Capitalist production [is] the production of surplus-value". Cf. Marx 1991, 477: "The product of capital is profit".

The macroeconomic character of *Capital* involves the conventional sense which Marx uses the term "abstraction" (i.e., a theoretical or methodological procedure), which I mentioned above. He adopts an "abstract point of view" on "the immediate process of production".[273] That is, Marx's model or framework represents the capitalist process of production and realization of value at an aggregate-level or scale of description by using the "power of abstraction" to look away from every microeconomic feature of the economy as it would be perceived from an individual-level or scale description. It focuses upon the aggregate sum that is produced in a given period of economic activity, the "total annual commodity product",[274] or the "total value annually produced",[275] in order to observe that value in a "pure state",[276] as it were, before considering more concrete details at a later "stage of analysis",[277] such as the various avenues by which that value is distributed among the various individual firms, sectors, and classes of the economy as forms of revenue.[278]

Marx's so-called reproduction schema in Chapter 20 of volume II of *Capital* presents his explanatory model or framework in a way that clearly illustrates his macroeconomic perspective and anticipates modern macroeconomics in the post-Keynesian tradition.[279] His account of "simple reproduction" presents a model of social reproduction of a constant aggregate value.[280] And this model will be essential for understanding the way in which the dynamics of the accumulation of value as capital can result in overproduction or underconsumption (i.e., the POU, Hegel's "rabble"). As I will argue in the following chapters, Marx's schema of "reproduction on an

[273] Marx 1990, 710. Cf. Marx 1991, 116-7.
[274] Marx 1992, 473. Cf. Robinson 1966, chapter VI.
[275] Marx 1991, 960.
[276] Marx 1990, 90.
[277] Marx 1990, 135, fn. 15.
[278] Volumes I and II concern the macroeconomic production and circulation of aggregate value, volume III concerns the microeconomic distribution of value to individuals and classes e.g., through competition (cf. Moseley 2016).
[279] Cf. Robinson 1966, chapter 6; Kalecki 1971, chapter 7; Dimand 2008; Mitchell, Wray, Watts 2019, 178, 213-14.
[280] Marx discusses "simple reproduction" in chapter 23 of volume I of *Capital* and the accumulation of capital in chapter 24 of volume I, in addition to his discussion in chapter 21 of volume II.

expanded scale" will explain how the proportion ("organic composition") between value invested in means of production (i.e., constant capital) and value invested in wages (i.e., variable capital) tends to change in a way which results in increased production, decreased effective demand, and involuntary unemployment (i.e., POU).[281] But first it is essential to consider *simple* reproduction.

Marx's model divides the entire capitalist economy into two sectors or "departments" (I and II) of commodity production, the first of which (I) produces and sells the means of production, and the second of which (II) produces and sells the means of individual consumption. The respect in which this is a fundamentally aggregate-level or macroeconomic model is expressed in the fact that the total amount of value which the capitalists of both departments spend in a given period of economic activity on investment and consumption equals or is identical to the total amount of value received as income by both departments. That is, aggregate-level inputs = aggregate-level outputs (e.g., GDP).[282] Using Marx's own example, his model may be presented by Table 2.1:

	A. Means of Production	B. Wages	C. Revenue	**Output:**
Department I:	$4,000	$1,000	$1,000	$6,000[a]
Department II:	$2,000	$500	$500	$3,000[b]
Input:	$6,000[a]	$1,500[b]	$1,500[b]	$9,000

(Table 2.1. Simple Reproduction)

First, consider the total spending of the capitalists of each department. Regarding department I (row I), these capitalists spend or invest $4,000 in the means of production which they buy and $1,000 in labor which they pay in wages, and they spend their $1,000 revenue on individual consumption—to a total sum of $6,000. Regarding department II (row II), these capitalists spend or invest $2,000 in means of production and $500 in wages, and they spend their $500 revenue on individual consumption—to a total sum of $3,000.

[281] Cf. Marx 1992, 565; Marx 1990, chapter 25; Marx 1991, chapter 15.
[282] At the aggregate-level, income = consumption + investment (Y = C + I). Cf. Kalecki 1968.

Second, consider the total value both department's capitalists invest or spend on the products of both departments, which will equal the total income of both departments. Regarding the means of production (column A.), which is the product of department I, both departments buy $6,000 worth of means of production (i.e., $4,000 + $2,000). So, the total expenditure of both departments on means of production (i.e., $6,000) equals the total (gross) income of the capitalists of department I (i.e., $6,000).[283] Regarding means of individual consumption (columns B. and C.), which is the product of department II, both departments buy $1,500 worth of labor-power (i.e., $1,000 + $500) and spend their revenue of $1,500 on their own means of individual consumption (i.e., $1,000 + $500). So, the total expenditure of both departments on wages, which buy the means individual consumption of workers (i.e., $1,000 + $500), and on capitalists' own means of individual consumption (i.e., $1,000 + $500), equals the total (gross) income of the capitalists of department II (i.e., $3,000).[284]

Third, consider the aggregate-level or absolute value of both departments. Their total spending equals their total income. Both departments taken together spend $9,000 (i.e., 6,000 + $3,000). Both departments taken together receive a gross income of $9,000 (i.e., 6,000 + $3,000). So, the aggregate *outputs* and aggregate *inputs* of the two departments are *identical* values. It is hard to imagine how this macroeconomic model could be more different from that of the OCT.

4.3.2. Value and Prices

Marx's precise concept value is difficult identify in the early pages of volume I. But his statements elsewhere present it and the distinction between it and the OCT's concept of value clearly. One

[283] From which their costs on means of production (i.e., $4,000) and wages (i.e., $1,000) are deducted or covered, leaving their net revenue (i.e., $1,000), which they spend on the means of their own individual consumption.
[284] From which their costs on means of production (i.e., $2,000) and wages (i.e., $500) are deducted or covered, leaving their net revenue (i.e., $500), which they spend on the means of their own individual consumption.

must distinguish *value* (absolute), and *prices* and *exchange-values* (relative), which Marx sometimes simply refers to as "values", and which I address in the following sub-section. And one must understand these concepts in relation to the fundamental distinction between microeconomic and macroeconomic scales of description. Value and price do not constitute two different but systems which must be squared with one another. There is only one real system, which is the capitalist economy that empirically exists.[285] Concepts of *value* (or surplus-value) refer to the economy from a macroeconomic scale of description and explanation, while concepts of *price* (or profit) refer to the economy from a microeconomic scale of description. As Heinrich puts it:

> The transition from ***value*** and *surplus value to production* ***price*** *and average profit* is not a historical or even a temporal sequence, but rather **a transition between different *levels of description*** [i.e., macro and micro].[286]

If this distinction of scales of description is not respected, however, then there will be nonsensical results (e.g., "fallacies of composition") and spurious problems of interpretation.

The "price" of a commodity is a microeconomic concept. It describes the amount of money for which an individual commodity of some kind exchanges on the market at some point.[287] Individual commodities of a certain kind (e.g., rolls of toilet paper) within a given branch of production (i.e., the toilet paper industry) exchange for money in individual cases at a wide variety of different prices for a wide variety of reasons. Some may exchange for more(less) money than others of the same kind at various times and places. And Marx's theory is not price-theory.[288]

"Value" is a fundamentally macroeconomic concept. It describes the numerical quantity, denominated in money, for which the total amount of products of labor exchange as commodities

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[285] For discussions of interpretations which understand Marx in this way, see Kliman 2006 and Moseley 2017.
[286] Heinrich 2012, 148-9. His own objections (Heinrich 2006, 193) to the contrary, I take his claim to mean micro- and macroeconomic scales of description, simplifying to a degree which he might not happily accept.
[287] Cf. Marx 1970, 66: "Price is the converted form in which the exchange-value of commodities appears *within* the circulation process".
[288] Cf. Roemer 1990. For standard views to the contrary, cf. Böhm-Bawerk 1949, 83; Schumpeter 2008, 24-5.

on the market in a period of economic activity (e.g., GDP). So, value is just the sum of all prices at which all products of labor exchange as commodities on the market for money. The particular prices at which individual commodities exchange are irrelevant for a macroeconomic scale of description, and the specific range of individual prices at which they exchange does not affect their total sum—*whatever* they may be. (For example, 1 and 6, 2 and 5, 3 and 4, or an infinite number of other intermediate addends all sum to 7.) No matter what prices the individual commodities of a certain kind (e.g., rolls of toilet paper) exchange at, there is an aggregate sum of those prices for which they all indeed exchange. And that that sum is what Marx designates as "value". Similarly, at the level of the *entire* economy, including all branches of production and all kinds of commodities, value is just the aggregate sum of prices of *all* the products of labor realized on the market when they are exchanged as commodities for money.

In volume III of *Capital*, on "values or prices of production", Marx writes, "the two coincide when we take the totality of commodities".[289] He states that his analysis concerns "the total social capital, where price of production equals value".[290] By calling "the total social capital" the place "where" prices equal value, he indicates that he adopts a macroeconomic scale of description. The "total social capital" is the aggregate value that is invested and functions as capital and returns to capitalists within the process of production and exchange. By "prices of production", which Marx also sometimes calls "cost prices", Marx means the prices at which commodities exchange, which include or cover the costs that are spent on the production of commodities (i.e., means of production and wages) as well as an extra increment which constitutes capitalists' returns (i.e., average profit), as Marx's reproduction schema above illustrates. So, Marx's statement means

[289] Marx 1991, 398.
[290] Marx 1991, 265. In Marx's terms, prices of production or costs prices = costs of production + average profit.

he views production and exchange from the perspective or scale of description on which "price… *equals* value". Slightly later, he writes:

> The sum of the profits for all the different spheres of production must accordingly be equal to the sum of surplus-values, and **the sum of prices of production for the total social product must be equal to the sum of its values**.[291]

And in *Theories of Surplus Value*, he similarly writes:

> The **sum total of these *cost prices* of all the commodities taken together will *be equal to their*** [aggregate] ***value***.[292]

Postponing the topic of surplus-value and profit until the next chapter on capital, what is important here is Marx's claim that the *sum of prices "will" or "must be equal" to aggregate value*. This is an *analytical* claim, not an empirical claim.[293] The reason why value "will" or "must be" equal to prices is that the aggregate sum of realized prices of products *defines* the value of the product, as Marx uses this concept. The purpose of Marx's analytical claim is methodological. Though it is useless for microeconomic purposes at an individual-level scale of description (e.g., price-theory), it provides a view of the product of the entire capitalist economy in purely quantitative terms (e.g., GDP). This will have massive consequences for the ability of his theory to explain the origin of aggregate profit (i.e., surplus-value), the accumulation of value as capital, and the dynamics of social pathology (i.e., the POU and the "rabble"),[294] as I discuss in the next chapters. So, the fears of commentators who suspect that "value" is a metaphysical boogeyman lurking behind the movement of prices are due to the way in which they misunderstand the macroeconomic sense of Marx's concepts.[295] There is no disembodied specter of value that independently or causally determines anything *ex ante*.

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[291] Marx 1991, 273.
[292] Marx and Engels 1989a, 415-16.
[293] Cf. Veblen 1906; Sowell 1967, Sowell 1972, Sowell 2006; Robinson 1966, chapter III.
[294] Cf. Robinson 1966, 16: "The fact of exploitation [of labor] makes profit possible…"
[295] Cf. Heinrich 2004 on the "substantialist interpretation" (57); Robinson 1966; Meikle 1991; Schumpeter 2008.

4.3.3. Exchange-Values of Commodities

Though it is not entirely obvious at the beginning of volume I, "exchange-value" is also an aggregate-level or macroeconomic concept, for Marx, unlike the way in which the OCT or LTV uses this term. The exchange-value of some type of commodity or the "values" of commodities, as Marx sometimes puts it, within a given branch of production and exchange, is just the *average price* at which all the individual commodities of that kind exchange. The exchange-value of a commodity of some kind is determined by dividing the absolute value of all the products of that entire branch of industry — which is just the aggregate sum of all the various prices at which all those commodities of that kind really exchange in some period of economic activity — by the number of individual commodities of that kind that are produced and exchanged within that period, which express portions of that aggregate value. For instance, take the aggregate sum of all the prices at which all the toilet rolls of Charmin Ultra exchanged in 2019. Divide it by the number of individual rolls that Charmin Ultra produced and exchanged in 2019. This is the exchange-value.

Talk of "prices" is talk of empirically real entities, while talk of the "exchange-values" of commodities is talk of ideal averages, which only have their sense in an aggregate-level or macroeconomic context. Indeed, it makes no sense to speak of the average of an individual, empirical entity, or to speak of an average as though it were that kind of thing. So, an exchange-value is not the kind of thing that can either determine or be determined by price, though many critics and some defenders seem to expect this of Marx. The expectation that the one could or ought to directly "determine" the other is simply a confusion that stems from confusing different scales of description with one another and what is ideal with what is empirically real. For example, the average American family in 2019 had 1.93 children. Clearly, however, what really or empirically existed were families (approximately 79.6 million) and *whole* children (approximately

73.1 million), the distribution of which did not affect the aggregate sum or the average. This is also the reason why Marx's analysis of value (absolute) is not constructed and cannot be understood by "aggregating up" individual exchange-values (relative), as though they were primitive analytical building-blocks of aggregates—which averages are not.

In volume I, Marx states that he *assumes* that "prices = values",[296] while he also states that "prices actually differ from values" in the real world.[297] This would be a baffling combination of inconsistent views, if it were not expressing that he distinguishes between the macroeconomic scale of description (i.e., value) and the microeconomic scale of description (i.e., price). In *Value, Price, and Profit*, Marx writes, "speaking broadly, and embracing somewhat longer perspectives, all commodities sell at their respective values".[298] And in *Theories of Surplus Value*, Marx writes:

> **The value** [i.e., exchange-value] ([average]price) **of the individual commodity thus=the *total value* of the product** [i.e., the aggregate product or all the products] **divided by the total number of products**, which are measured according to the standard of measurement—such as tons, quarters, yards, etc.—appropriate to them as use-values.[299]

So, Marx derives the value of some type of commodity, or the exchange-values of the commodities of that type, from an aggregate-level calculation. It is *not* the actual price at which it really exchanges. It is the average price at which the commodities of that kind exchange. The prices of individual commodities will deviate from the exchange-value (i.e., average price), either above or below it. But their deviations do not affect the average or the aggregate sum. Marx writes:

> …although the cost price [i.e., price of production] of the respective commodities [on the market] is either above or below their value [i.e., exchange-value, average price], both commodities *taken together* are *sold at their value*…[300]

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[296] Marx 1990, 329 fn. 9: "The calculations given in the text [i.e., volume I] are intended merely as illustrations. We have in fact assumed that prices = values. We shall, however, see in volume 3 that even in the case of average prices the assumption cannot be made in this very simple manner".
[297] Marx 1990, 269, fn. 24. This is the subject matter of much of volume III of *Capital*.
[298] Marx 1976a, 36. Translation modified. Cf. Marx and Engels 1962, 129: "…allgemeiner gesprochen und mit Einschluß etwas längerer Perioden, alle Gattungen von Waren [werden] zu ihren respektiven Werten verkauft…"
[299] Marx and Engels 1989a, 382.
[300] Marx and Engels 1989a, 410.

> The aggregate volume of the commodities in which it [i.e., an investment of value, capital] is materialised would have *the same value,* but the *individual commodity* would have a different value.[301]

If, for example, labor produces more(less) commodities of one kind than previously, and those commodities exchange for the *same* aggregate value as previously, then each individual commodity will have a lesser(greater) exchange-value, because the aggregate value (=aggregate prices realized) will be divided by a greater(lesser) number of commodities.[302] The reason for this change in the exchange-value of the commodities changes is not any direct causal influence from the concrete labor that goes on in production, but rather simply the fact that the *same* aggregate value has been divided by a larger(smaller) number of individual commodities. Unlike the OCT, Marx does not regard values as primitive constituents which can be simply "aggregated up", because they are only intelligible at all in the context of aggregate scales of description.[303]

These considerations can eliminate spurious problems and criticisms. Recall, for example, how Ricardo's theory of exchange-value fails to explain real prices of production when capital is introduced into the model of the LTV. Traditionally, Marx's value-theory has been interpreted as a version of Ricardo's theory,[304] and so it is said to suffer from the "transformation problem" that Ricardo's theory has.[305] As Michael Heinrich puts it:

> If the value of a commodity is determined independent of exchange [i.e., real analysis] (which was also the dominant conception in traditional Marxism) then there is in fact a 'transformation problem'.[306]

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[301] Marx and Engels 1989a, 438.

[302] Cf. Marx and Engels 1989b, 167: "Each individual commodity may become cheaper but the value of the increased total mass of commodities [will] rise".

[303] Cf. Marx 1991, 993, 1003.

[304] On the anti-Marxist side, Böhm-Bawerk 1949 (chapters 2 and 3) first formulated the matter in this way. Cf. Schumpeter 2008, 22-8. On the Marxist side, cf. Mandel 1968, 65; Mandel 1990, 11-15, 32; Mandel 1971, 49-50; Sweezy 1970, 33-4, 41-5, 85, 122, 271-2; Wolff 1984. Robinson 1966 is somewhere between these two camps.

[305] Cf. CIII, 252: "The theory of value thus appears to be incompatible with the actual movement, incompatible with the actual phenomena of production [i.e., prices of production and average profit rate in competition], and it might seem that we must abandon all hope of understanding these phenomena". "Appears" signals reality is otherwise.

[306] Heinrich 2012, 234, fn. 40.

The irony here is lost on orthodox critics and Marxists. (Recall, Marx himself claims that *Ricardo's theory* requires a "transformation"[307] because *he* does not correctly distinguish exchange-value and price.)[308] Orthodox critics demand that Marx should present a solution to Ricardo's transformation problem, and orthodox Marxists try to provide one. Neither seem to understand that the issue is spurious, because they do not recognize that Ricardo's LTV and Marx's value-theory are two different kinds of theory with fundamentally different assumptions, objectives, and objects. The need for a transformation procedure between values and prices of production arises for a theory that adopts the method of real analysis (i.e., barter-model) and a microeconomic scale of description. Value and price must be two systems that sync in Ricardo's theory because he assumes their separation in his claim that labor-values independently determine exchange-values *ex ante*. From a macroeconomic and monetary perspective, however, there are not two different systems, but rather two different perspectives on the same system: "value" is just a description of the market seen from a macroeconomic scale (i.e., total prices realized in exchange), and "price" is just a description of the market seen from a microeconomic scale (i.e., distribution at actual prices). So, Ricardo's problem cannot have a meaningful solution or even make sense or arise in the context of a theory which *assumes* that "value" is essentially a monetary phenomenon from the start. As Heinrich puts it, "…within the framework of a *monetary* theory of value, there can be no point to any sort of procedure for calculating production prices from values".[309] The real problem here is not theoretical. It is hermeneutical. And *assuming* that Marx is a Ricardian and interpreting his value-theory with the lens of assumptions (e.g., micro-real theory) that are clearly antithetical to his own is the cause of the problem.

[307] Cf. Marx and Engels 1989a, 417, 419, 424, 432. Cf. Marx 1991, chapter 8.
[308] Cf. Marx and Engels 1989a, 472.
[309] Heinrich 2012, 148-9. Cf. Moseley 2016.

4.3.4. Labor is Only Relevant from a Macroeconomic Scale of Description

Like value and exchange-value, labor is relevant for Marx's value-theory *only if* it is understood from the vantage point of a macroeconomic scale of description, which requires the method of monetary analysis. The sense in which labor constitutes the "substance" of value, "determines" (*bestimmt*), or "forms" (*bildet*) value, according to Marx, is the sense in which it is seen as "average" labor,[310] which Marx also calls "abstract" or "social" labor, and which only makes sense from a macroeconomic standpoint, as I discuss in more detail in the following section. This notion of labor must be distinguished from LTV's view of the labor that is "actually bestowed" in the process of production of goods (Ricardo) or "contained" in products of labor (Smith), *before* they enter the market. Concrete labor only produces particular objects of utility, not commodities or values.[311] And products of labor are commodities or values only if they exchange for the money-form of value. In volume I, Marx writes:

> The real value of a commodity, however, is not its individual, but its social value; that is to say, its value is not measured by the labour time that the article costs the producer in each individual case, but by the labour-time socially required for its production.[312]

In volume III, Marx also similarly writes:

> **the law of value [] makes itself felt**, not **in relation to** the individual commodities or articles, but rather to **the total products** at a given time of particular spheres of social production autonomized by the division of labour… **No producer considered in isolation produces a value or commodity**, neither the industrialist nor the agriculturalist. His product becomes a value and a commodity only in a specific social context.[313]

And in *Theories of Surplus Value*, he writes:

> The value of the commodity—which is the product of a particular sphere of production—is determined by **the labour which is required in order to produce the *whole amount,* the *total sum* of the commodities appertaining to this sphere of production and not by the particular labour time** that each individual CAPITALIST or EMPLOYER within this

[310] Marx 1990, 129.
[311] Marx 1990, 137.
[312] Marx 1990, 434.
[313] Marx 1991, 774, 777.

> sphere of production requires. […] The quantity of labour by which, for example, [the value of] a yard of COTTON is determined is therefore **not the quantity of labour it contains, the quantity the MANUFACTURER HAS EXPENDED UPON IT, but the average quantity with which all the COTTON-MANUFACTURERS PRODUCE ONE YARD OF COTTON for the market**.[314]

The total labor that produces the aggregate product, which exchanges for the aggregate sum of money that Marx calls "value", is the labor which is relevant for his economic explanation. The perspective from which one considers *aggregate labor*, or abstract or average labor, adopts a macroeconomic scale of description, while the perspective from which one considers the concrete individual labors of the production process adopts a microeconomic scale of description.

Here it is necessary to compare the model of the OCT or LTV with Marx's. The LTV's model — $E_a/E_b = f(L_a/L_b)$ — focuses upon two sets of labors of individuals (L_a/L_b) that are employed in two different *firms* or *sectors* in relation to the ratio at which their products (a, b) exchange on the market (E_a/E_b). To use Ricardo's example, it represents a firm that produces "salmon" and one that produces "game". It adopts a fundamentally microeconomic scale of description because and represents the labors of individual firms *before* the products of labor exchange. Marx, by contrast, represents the total labor that produces the total product which exchanges, divided into two departments (i.e., means of production and consumption), and the relation between those two departments, which exhaust the entire economy. Marx writes:

> **In so far as [commodities] are exchange-values, their relativity consists** by no means solely of the ratio in which they exchange for one another, but **of the ratio of all of them to this social labour which is their substance**.[315]
> …the value of each individual commodity in a particular sphere of production is determined by **the *total mass of social labour time*** required by the *total mass of the commodities of this particular sphere of social production* and **not by the individual values of the separate commodities or the labour time the individual commodity has cost its *particular* producer and seller**.[316]

[314] Marx and Engels 1989a, 428.
[315] Marx and Engels 1989a, 399.
[316] Marx and Engels 1989a, 430; cf. 31, 481.

Aggregate, average, abstract, or social labor can seem perplexing when it is considered from a microeconomic scale of description or in isolation from monetary exchange. Seen from a microeconomic scale of description, only individual, concrete labors exist. Obviously, abstract labor can only be understood at a macroeconomic scale of description which essentially involves monetary exchange, as I will now address. And this has very negative consequences for the LTV.

4.4. *Ex Post* Determination of Value

The fundamental distinction between the OCT and Marx's respective views of the determination of value is the fourth respect in which they are different. It is the way in which Marx's value theory differs above all from the LTV. For the LTV, the direction of determination of value starts with given quantities of labor in production and runs toward exchange. That is, labor in production independently determines value in exchange *ex ante*. Yet Marx *reverses* the direction of determination of value which is found in the LTV. The determination of value starts with the monetary exchange of the aggregate product and runs toward labor in production. The monetary value at which the aggregate product of labor exchanges on the market as commodities "realizes" the product as value, establishes *ex post* that the labor which produced them counts as a quantity of "average", "abstract", "social", or "socially necessary" labor, and assigns values to them both.[317] For example, in Marx's model of simple reproduction presented above, the aggregate quantities and ratio of average or abstract labors in the two departments (I & II) of a capitalist economy are a function of the aggregate monetary values and ratio of the products of both departments on the market (i.e., $L^{I}/L^{II} = f(\$6{,}000/\$3{,}000)$). They are not independent causes of commodity's values.

[317] Cf. Marx and Engels 1989b, 39: "The value of labour=[the value of its] its product". Cf. Marx and Engels 1988, 378: "The value of labour is therefore equal to the value of the product of labour".

Here it is helpful to disambiguate "determine". In English, it can mean either (1) a real, causal process or relation between two things or (2) an abstract, ideal, logical, or mathematical operation, which specifies or assigns a meaning or value (content) to some variable (form). The former is a chronological series of events (i.e., cause and effect), while the latter is not. In German, the word for cause (1) is "verursachen" (verb) or "Ursache" (noun), while the word for (2) specifying or assigning a value to some variable is "bestimmen". Marx uses the term "bestimmen", or "bilden" (to form), not "verursachen", when speaks he speaks of the value "content" (*Gehalt*) of a form of value such as the "quantitative determinacy" (*Quantitative Bestimmtheit*) of a commodity.[318] My claim is that a product of labor is a commodity and a value, for Marx, *only if* it exchanges for money, and so monetary exchange determines *whether* labor produces value and assigns a value belatedly or *ex post* to the product and to labor, while concrete labor does not determine value *ex ante*. This is not a causal claim. As Marx puts it, the exchange of commodities and money lends the product its *value-form* but does not cause the quantitative content of forms of value.[319] Once products *have* been exchanged and the labor that produced them *counts* as abstract, value-producing labor, Marx will claim that abstract labor, which presupposes exchange, determines (*bestimmt*) or forms (*bildet*) commodities' values, which is also not a causal claim.

4.4.1. Value Starts with the Exchange of Commodities

Marx claims that value is only actual or "realized" upon the *exchange* of the products of labor *as commodities or values*.[320] Exchange decides whether a use-value will have "social validity"[321] or

[318] Marx 1990, 144. Cf. Marx 1990, 147.
[319] Cf. Marx 1990, 184-5.
[320] Marx 1990, 270.
[321] Marx 1990, 159, Marx 1990, 183.

"count"[322] as a commodity or value, and whether the "concrete" labor that produces it will count as value-producing labor. So, value does not exist independently in production, before the products of labor enter the market (cf. LTV), because value is just a *form* of exchange. There can therefore be no question of concrete labors independently determining commodities' values *ex ante* (LTV), for Marx. This is also a truism for a macro-monetary theory, which always already approaches value in terms of aggregates of commodities which are exchanged for money.

In volume I of *Capital*, Marx writes that "value is realized only in exchange, i.e., in a social process".[323] "If products are produced as commodities, they must be sold after they have been produced, and they can only satisfy the producer's needs after they have been sold".[324] In his *Contribution to the Critique of Political Economy*, he writes that "the commodity as an exchange-value is always considered solely from the standpoint of the **result".**[325] "It [i.e., value] realizes itself only in the process of exchange".[326] And I take this to mean that a product of labor is a commodity and therefore a value *only if* it actually exchanges,[327] not independently of exchange. The labor that produces products also produces commodities or values *only if* those products actually exchange for value in the form of money on the market. If they are not exchanged, then they are not actually commodities or values, and that labor therefore did not produce value.

The technical aspect of production and the utility of labor and the products of labor are necessary conditions that must be satisfied to produce a commodity that can contribute to aggregate value and physical reproduction of society. Commodities must be use-values (for their

[322] Marx 1990, 441, 129. Cf. Heinrich 2012, 50.
[323] Marx 1990, 177.
[324] Marx 1990, 272. Cf. Marx 1992, 156; Marx and Engels 1989b, 114, 156.
[325] Marx 1970, 37.
[326] Marx 1970, 43.
[327] But the fact that something is exchanged does not mean it has a value: "a thing can, formally speaking, have a price without having a value" (Marx 1990, 197). Land, for instance, is exchanged for money and thus has a price. But the exchange of land and money does not involve the production of commodities that contributes to aggregate value.

non-owners) and values (for their owners). But these necessary conditions are neither sufficient nor have any directly causal or determining relation to the economic value of commodities (cf. OCT or LTV), because the production of *goods* that people want and need is not the same as the production of commodities or values, which are exchanged for other values (i.e., money):[328] " only the action of exchange can prove whether that labour is [actually] useful for others,[329] Marx writes.

4.4.2. Exchange Retroactively Determines Value

Throughout *Capital* Marx claims that aggregate-level exchange can have a "retroactive [*nachträglich*] effect"[330] on the determination of the value of commodities. This clearly contradicts the LTV's claim that the labor "actually bestowed" (Ricardo) or "contained" in commodities before they enter the market (Smith) independently determines their values *ex ante*. Only "average", "abstract", or "socially necessary labour time", not the actual duration of concrete labor that goes on in production, forms the value of the product of labor as commodities on the market.[331] And, as I will argue shortly, Marx thinks that it is the monetary exchange of commodities which "reduces" the concrete labor of production to the abstract labor which he calls the substance of value. So, "socially necessary labor" is not just a statistical or technical measurement of concrete labor independently of market exchange.[332] Because virtually *everything which exists* in a capitalist economy is mediated by the monetary exchange of commodities, the measurement of social

[328] Cf. Marx 1990, 179, 182. Cf. Marx and Engels 1989b, 156, 114.
[329] Marx 1990, 180. Cf. Marx 1990, 131, 300; Marx 1970, 42. Cf. Marx 1990, 165: "Objects of utility become commodities only because they are the products of the labour of private individuals who work independently of each other. […] …the producers do not come into social contact until they exchange the products of their labour…"
[330] Marx 1992, 368.
[331] Marx 1990, 129.
[332] Cf. Schumpeter 2008, 23: "the existing standard of efficiency of production (the 'socially necessary quantity of labor')".

necessity is internal to the economy as a whole, and what counts as "socially necessary" is therefore expressed by the going rates of exchange (i.e., purchase and sale) of what is produced.[333]

For instance, Marx explicitly states that the longer time which a "more unskillful and lazy worker" takes to produce a product does not add additional value to it.[334] "The value of commodity is determined not by the quantity of labour actually objectified in it", Marx writes, "but by the quantity of living labour necessary to produce it" at present.[335] The criterion or standard for counting as value is not to be found in the isolated labor or production process, but is just whatever it would take produce and sell it in current economic circumstances. Elsewhere he continues:

> **If the amount of** [necessary] **labour-time alters**… **this reacts back** [*findet eine Rückwirkung statt*] **on all the old commodities of the same type, because they are only individuals of the same species**, and their value at any given time is measured by the labour that is socially necessary to produce them, i.e., by the labour necessary under the social conditions existing at the time.[336]

For example, if labor is employed to produce commodities some of which do not ultimately sell, or if the standard of efficiency changes rapidly, then "the value, even if the commodity already produced, falls by half".[337] What has occurred is *waste*. In volume I, Marx writes:

> **The effect is the same as if each individual weaver had expended more labour-time on his particular product than was socially necessary.** […] The division of labour converts the product of labour into a commodity [by necessitating exchange], and thereby makes necessary its conversion into money. At the same time, it makes it a **matter of chance** whether this transubstantiation succeeds or not.[338]

Conversely, if less labor is employed (i.e., paid) than other producers require in the same sector, due to differences in relative efficiency of machinery, for instance, then the ultimate result is a

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[333] Cohen 1981. This is not "supply and demand", which concerns prices (cf. Marx 1990, 667-8, 793; Marx 1991, 282, 287, 291, 478).
[334] Marx 1990, 129. Cf. Marx 1990, 440-1; Marx 1976a, 33.
[335] Marx 1990, 677.
[336] Marx 1990, 318. Cf. Marx 1991, 238: "The value of any commodity… is determined… by the *socially* necessary labour-time required for its reproduction". Cf. Marx 1991, 522.
[337] Marx 1990, 677.
[338] Marx 1990, 202, 203. Cf. Marx 1990, 442; Marx 1991, 288.

gain. Or an increase in the *price* (i.e., not value) of the components (raw materials) of some commodity might raise the price of the final products. It is might be surprising to some when Marx goes on to claim: "As the retrospective expression of more labour-time [*durch Rückwirkung Ausdruck von mehr Arbeitzeit wird*], this cotton adds a higher value to the product which it goes into as a component than it possessed originally and the capitalist paid for it".[339] This claim that changes in price can belatedly cause changes in value without the addition of labor is a striking counterexample to the LTV. So, Marx clearly does not hold that the direction of determination runs from concrete labor in actual production to value in exchange (*ex ante*). Aggregate market exchange and social conditions significantly qualify what counts as value (*ex post*).

4.4.3. Aggregate Exchange "Reduces" Concrete to "Abstract" Labor ("Substance of Value")

The aspect of Marx's value-theory which contradicts the OCT or LTV most definitively is his view that the "substance" of value — average, social, or abstract human labor in general — does not exist independently of the monetary exchange of the aggregate product of labor as commodities on the market. It does not exist in the production process or antedate exchange. On the contrary, it is a "result" of exchange.[340] So, clearly, it could not determine aggregate value or relative exchange-values *ex ante* in any meaningful sense. And Marx's view on this point makes use of the second, unconventional sense in which he uses the term "abstraction", which I mentioned above. He claims that the concrete labor that goes on in production is abstracted from or "reduced" to average or abstract labor in general in the process of monetary exchange of the products of that labor as commodities. The said abstraction is not meant to be a theoretical or mental process, but a practical and social one in which the value-relation of the products of labor on the market

[339] Marx 1991, 207.
[340] Marx 1970, 45.

abstracts from their concrete properties, which sympathetic and heterodox interpreters call "real abstraction".[341] On this point, Alfred Sohn-Rethel writes:

> The essence of commodity abstraction… is that it is not thought-induced; it does not originate in men's minds but in their actions. And yet this does not give 'abstraction' a merely metaphorical meaning. It is abstraction in its precise, literal sense. The economic concept of value resulting from it is characterised by a complete absence of quality, a differentiation purely by quantity and by applicability to every kind of commodity and service which can occur on the market.[342]

Orthodox or unsympathetic interpreters who presume that Marx holds Ricardo's LTV ignore this aspect of Marx's theory and take him to mean by the "reduction" of labor to value Ricardo's problematic view of the calculation of the "aggregate sum" of labor that goes into a product of labor (i.e., indirect labor, capital, skilling-time, etc.), as discussed above.[343] Some of them have even noticed that Marx thinks it is exchange which abstracts or reduces concrete labor to abstract labor, the substance of value, or that *exchange determines what counts as socially necessary labor time*. Yet they mistake this feature of Marx's theory for a problem, because they mistake Marx's theory for Ricardo's LTV. For instance, Marx's first critic, Eugen von Böhm-Bawerk, claims that "Marx is arguing in a complete circle".[344] Clearly, Marx's theory works *only if* it is not Ricardo's.

It is necessary to consider what Marx calls the "dual character of the labor embodied in commodities" and the distinction he draws between what he calls "concrete" and "abstract" labor.[345] Marx complains that classical political economy (OCT) "fails" to recognize this feature

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[341] Cf. Colletti 1973 82-91; Sohn-Rethel 1978, chapter 6; Rubin 2008, part II; Heinrich 2006, chapter 4; Mohun & Himmeweit 1981; Mohun, 1994. Marx also speaks of this process as a "historical abstraction" (*Correspondence* 106; cf. Marx 1993, 104-5).

[342] Sohn-Rethel 1978, 20. Cf. Sohn-Rethel 1978, 18: "For this entire tradition [of philosophy] it is an established fact that abstraction is the inherent activity and the exclusive privilege of thought; to speak of abstraction in any other sense is regarded as irresponsible, unless of course one uses the word merely metaphorically".

[343] Cf. Schumpeter 2008, 23; Mandel 1968, 65; Mandel 1971, 49-50; Mandel 1990, 11-15, 32; Itoh 1987, 40, 54; McGlone and Kliman 2004, 136-7, 138-9; Sweezy 1970, 41-4. Steedman 1981.

[344] Böhm-Bawerk 1949, 83. Cf. Nozick 1974, 260: "There is no longer any labor theory of value; the central notion of socially necessary labor time is *itself defined* in terms of the process and exchange ratios of a competitive market!!"

[345] Marx 1990, 131-7.

which he believes it implicitly takes for granted,[346] and he claims it is the "crucial" feature for understanding value.[347] Recall the ambiguity in Smith and Ricardo's views of the labor which, they suppose, would determine commodities' values *ex ante*. On the one hand, they refer to the concrete labor that goes on in production, while on the other hand they conceive of labor as though it were an abstract quantity. Here I take Marx to introduce microeconomic and macroeconomic scales of description. "Concrete" is just the microeconomic or individual scale of description of the labor that goes on in the production process, while "abstract" is a just the aggregate scale or macroeconomic description, which essentially includes monetary exchange (i.e., quantities).

Concrete labor consists of the empirically real, physical labors that are "actually bestowed" (Ricardo) or "contained" (Smith) in individual products in the process of production before those products enter the market. It "produces [*produziert*] use-values", according to Marx, or physical objects.[348] It does not necessarily produce commodities or value, because the products of labor are commodities or values *only if* they exchange for value in the form of money. And it is qualitatively heterogeneous — contains "individual differences"[349] or "natural diversity"[350] — in the sense that each laborer and each laborers' work is slightly different. Some laborers are more(less) skilled than others, and consequently produce more(less) work than others in the same time, or work of a higher(lower) quality in the same time than that of which a less(more) skilled worker is capable. Concrete labor is subject to what Leontief calls "the problem of quantity and quality in economics".[351] So, it cannot truly be regarded as a mathematical quantity, because it is more like

[346] Marx 1990, 174.
[347] Marx 1990, 132. Cf. Marx and Engels 1942, 226 & 232.
[348] Marx 1990, 137. On "abstract labor", cf. Rubin, 1978; Gleicher 1983; Mohun 1984/85; Saad-Filho 1997; Roberts 2017.
[349] Marx 1990, 440, 696.
[350] Marx 1990, 654.
[351] Leontieff 1959, 631-632. Namely, one can measure things quantitatively (viz. more or less) only if they are all of one qualitative kind (e.g., apples), but not of different kinds (e.g., comparing apples and oranges). Cf. Sweezy 1970, 41; Lowe 1981, 808; Heilbronner 1983.

a "meaningless heap[] of hopelessly disparate" labors, in Schumpeter's words, than a sum of homogenous units.[352] And so, it cannot be a quantitative value that determines another value.

Abstract labor is average, "human labour in general", "equal human labour", or "social" labor. It is not the concrete labor that goes on in the process of production before the products of labor enter the market. It is qualitatively homogeneous and differs only quantitatively in degree. And it "forms [*bildet*] the value of commodities" which appears in exchange with money.[353] This statement, as well as Marx's statement that abstract labor is the "substance" of value, can be very misleading, because it sounds like he means that it is some *thing* (*res*) which is distinct from value and *causes* value to exist. But Marx defines the "substance" of value as a purely "numerical value-relation".[354] And so, simplifying matters somewhat, abstract labor *is just* value, or they are synonyms, which is why the former cannot *cause* the latter. As Marx puts it: "The value of labor is therefore equal to the value of product".[355] "The value of labour=its product".[356]

Marx is well aware of the "problem of quantity and quality" which applies to concrete labor and products. Yet, in his view, we need not wrack our brains searching for a method to quantify the heterogeneous products or heterogeneous labors, because monetary exchange automatically quantifies the diverse products of labor and even labor itself (i.e., method of monetary analysis).[357] There is no need for gathering a statistical average of "standard efficiency" of technical processes

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[352] Schumpeter 1994, 278.

[353] Marx 1990, 137. Marx also makes the following, potentially misleading comment that "all labour is an expenditure of human labour-power, in the physiological sense, and it is in this quality of being equal, or abstract, human labour that it forms the value of commodities" (Marx 1990, 137). Labor in the "physiological sense" might sound like "concrete" labor, which cannot be measured quantitatively. Yet labor regarded physiologically (i.e., scientifically) is not the labor of some particular individual. It is labor regarded in a general or abstract sense that concerns humans in general.

[354] Marx 1993, 792. Cf. Marx 1990, 137, 131.

[355] Marx and Engels 1988, 378. Cf, Marx and Engels 1988, 408. This is why aggregate profits are only possible by exploiting labor.

[356] Marx and Engels 1989b, 39.

[357] Marx's search for an internal or immanent criterion is a positive aspect of his Hegelianism (cf. Hegel 1977, 56, Hegel 1969, 580-1).

of production, which experts might try to calculate independently of the process of exchange.[358] We must simply observe markets. Regarding the LTV, Marx makes the following critical remark:

> As use-values, commodities differ above all in quality, while as exchange-values they can only differ in quantity, and therefore do not contain an atom of use-value [i.e., quality].[359] It is overlooked that the magnitudes of different things only become comparable in quantitative terms when they have been **reduced** to the same [kind of] unit.[360]

When the products of labor are held in monetary relations of exchange (i.e., equivalence), abstraction is made from all their concrete properties and differences from one another: "All [their] sensuous characteristics are extinguished".[361] And regarding labor, Marx similarly writes:

> While, therefore, with reference to use-value, the labour contained in a commodity counts only qualitatively [i.e., concrete labor], with reference to value it counts only quantitatively, once it has been **reduced** to human labour pure and simple [i.e., abstract labor]. [362]

As I will now argue, monetary exchange, for Marx, will directly "reduce" heterogeneous products to the common denominator of homogeneous quantities or values and indirectly "reduce" the concrete labor that produced commodities to quantities of abstract labor or the substance of value in the process or practice of exchange itself. (Recall here Schumpter's claim that "if we wish to work with a small number of variables, we can hardly help resorting to monetary ones" because "monetary aggregates are homogeneous, whereas most nonmonetary ones are but meaningless heaps of hopelessly disparate things…")

In chapter 1 of volume I, Marx makes the following statement which is absolutely essential for my interpretation. He distinguishes between "abstraction" in the conventional sense of the term, in which "our analysis reduces" things to homogeneous units or quantities, and his own peculiar

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[358] So-called Sraffian or neo-Ricardian Marxism takes this approach (cf. Steedman 1985). Cf. Marx 1991, 257, 301. Cf. Schumpeter 2008, 23: "the existing standard of efficiency of production (the 'socially necessary quantity of labor)".
[359] Marx 1990, 128.
[360] Marx 1990, 140-1.
[361] Marx 1990, 128.
[362] Marx 1990, 136. Cf. Marx 1990, 127-9, 140-1, 168, 173, 269, 418, 701. Cf. Marx 1991, 257, 301.

sense of the term, in which the "act of equating" things "actually" reduces them "in fact".[363] He states that the latter sense of abstraction occurs in a "social process" of which the participants are not conscious.[364] And he states that the process in question is exchange. He writes:

> It is **only by being exchanged that the products of labour acquire a socially uniform objectivity as values**, which is distinct from their sensuously varied objectivity as articles of utility. […] From this moment on, the labour of the individual producers acquires a twofold social character. **Equality** in the full sense between different kinds of labour **can be arrived at only if we abstract from their real inequality, if we reduce them to the characteristic they have in common**, that of being the expenditure of human labour-power, of human labour in the abstract.

Then Marx inserts the following essential clause in the French edition of *Capital* and his handwritten marginalia to the first German edition at this point. He writes:

> **And it is only exchange that performs this reduction to the abstraction of equal human labor, and which factually equates the products of different labors**.[365]

And finally, in the English and German published additions, Marx continues:

> …the social character of the equality of the various kinds of labour is reflected in the form of the common character, as values, possessed by these materially different things, the products of labour. [/] Men do not therefore bring the products of their labour into relation with each other as values because they see these objects merely as the material integuments of homogeneous human labour. The reverse is true: **by equating their different products to each other in exchange as values, they equate their different kinds of labour as human labour.** They do this without being aware of it.[366]

To reiterate and reformulate Marx's tangled prose more simply: people "see these objects merely as the material integuments of homogeneous human labour" because they "bring the products of their labour into relation with each other as values"; "equating their different products to each other in exchange as values… equate[s] their different kinds of labour as human labour". So, abstract

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[363] Cf. Marx 1990, 141-2.
[364] Cf. Marx 1990, 135.
[365] My translation: "…, et c'est l'échange seul qui opère cette réduction en mettant en présence les uns des autres sur un pied d'égalité les produits des travaux les plus divers" (Marx 1965, 607). "Die Reduktion der verschiednen konkreten Privatarbeiten auf dieses Abstraktum gleicher menschlicher Arbeit vollzieht sich nur durch den Austausch, welcher Producte verschiedener Privatarbeiten thatsächlich gleichsetzt" (Marx 1987, 41) Cf. Heinrich 2012, 50; Heinrich 2021, 153-7.
[366] Marx 1990, 166-7.

labor is labor which has been quantified (i.e., assigned a measure) by the monetary exchange of its products on the market as commodities. Products do not exchange at equivalent values on the market because they already possess equivalent values or because their production requires equivalent quantities of labor. On the contrary, different products count as equivalent values, and the different concrete labors that produced them count as quantities of homogeneous human labor in general, *because* their products exchange as values or quantities. As Michael Heinrich puts it: "Abstract labor is a *relation of social validation* (*Geltungsverhältnis*) that is constituted in exchange".[367] So, the abstraction of human labor does not occur in the social division of labor, before exchange takes place, as Smith imagines. Rather, it happens in the process of exchanging the products of labor as commodities or values for other values in the form of money.

Similarly, in his *Contribution to the Critique of Political Economy*, Marx also states the process of capitalist production and exchange performs the abstraction in question. He writes that different labors must be "reduced" to a uniform measure and states that this "reduction" "**is an abstraction that is made every day in the social process of production**. […] This abstraction, human labour in general, exists in the form of average labour…"[368] Slightly later, he specifies that the abstraction in question occurs in exchange. The "universal social labour" that commodities express *as values* does not "enter into their production" or the market.[369] It is not a "ready-made" input that would determine exchange-values *ex ante*. Rather, "the labour-time of individuals becomes materialized universal labour-time only as the **result of the exchange process**".[370] And

[367] Heinrich 2012, 50. Cf. Heinrich 2021, 153: "Only *retroactively*, through the *exchange* of labor products, are the individual private acts of labor actually socialized" (Cf. ibid. 153-4, 366-9, 375-81).
[368] Marx 1970, 30. Cf. Marx 1993, 104-5.
[369] Cf. Schumpeter 2008, 26.
[370] Marx 1970, 45.

much later, he finally claims that "**labour becomes social** [i.e., abstract human labour in general] **only as a result of the universal alienation** [i.e., exchange] of individual kinds of labour".[371]

To present Marx's view of the reduction of concrete to abstract labor clearly, it should be broken down into two steps and reconstructed in relation to his view of monetary exchange. The first (1) pertains to the products of labor and the second (2) to concrete labors which produce them.

(1) When the products of labor (use-values, goods) exchange on the market as commodities or values, they are directly placed into quantitative relations of equivalence with money which "reduce" them to homogeneous units of value. Their quantitative equivalence as values abstracts from all the concrete qualities and differences of individual products. In this relation they only count as homogeneous quantities or values of various magnitudes. For example, if X amount of linen cloth exchanges for Z amount of dollars, and Y amount of tailored clothing also exchange for Z amount of dollars, then the cloth and the clothing are posited as *equal* or both count as *equivalent values* in the relevant economic sense of the term, due to the social relation of value which they express in relation to money. Without being aware of it, economic agents perform a practical abstraction from the qualities and differences between the individual products when they exchange them.[372] On the essential role of the money-form of value here, in volume II, he writes:

> Portions of value are not qualitatively distinguished from each other as such, save in so far as they appear as the values of different articles, concrete things, thus in various different useful forms, as values of different bodies of commodities – a distinction that does not arise from their existence as mere portions of value. **In money, every difference between commodities is obliterated, because money is precisely the equivalent form common to all of them.** […] **There is absolute homogeneity, a complete absence of conceptual** [*begrifflich*] **distinction, between the… constituent parts of the sum of £110**.[373]

[371] Marx 1970, 84-5.
[372] Sohn-Rethel 1978 calls this the "postulate of equivalence" (50).
[373] Marx 1992, 128-9. Cf. Marx 1991, 490, 648, 742-3. Marx 1993, 776: "… value, which appeared as an abstraction [in the course of our presentation], is possible as an abstraction, as soon as money as posited".

The *fungibility* of the money-form of value plays an essential role in rendering the products of labor as the *fungible* kinds of things which commodities are as values. In relation to money, products of labor count as interchangeable commodities, quantities, or mere expressions of value.

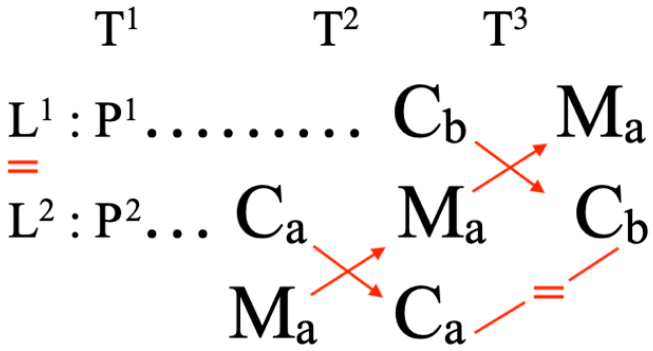
(2) When the products of labor are directly placed into quantitative relations of exchange as commodities or homogenous values (M-C, C-M), exchange also indirectly abstracts from all the differences between all the individual concrete labors that produce all the products, rendering them fungible as well.[374] That is, commodity exchange indirectly renders the concrete labors that produce them as homogeneous quantities or abstract labor. For example, the social value-relation in exchange abstracts from concrete properties and differences between "tailoring" and "weaving" when their products are exchanged for money as commodities or values.[375] If ten hours of the unskilled labor in a textile factory and an hour of skilled labor in a tailor shop both give rise to products that exchange on the market as commodities for an equivalent value (e.g., $100), those two concrete labors are equivalent, abstract labors as well. The proportion at which those products exchange belatedly assigns a value (quantity) to those labors. The fact of exchange makes them commensurable in a quantitative sense. Yet the products need not even exchange for the same value. They must simply be placed into monetary exchange-relations for their labors to be quantified or rendered commensurable. In volume I, Marx writes that the money-form of value is the "form of appearance of value, that is a material embodiment of abstract and therefore equal labour".[376] And in his *Contribution to the Critique of Political Economy*, he writes:

> In this series of equations of [various quantities of] iron, wheat, coffee, potash [Brazil timber, and Y other commodities], [these commodities] appear to one another as materialisation of uniform labour, that is labour materialised in [various quantities of] **gold,**

[374] Marx 1990, 141-2.
[375] Marx 1990, 142. Cf. CI, 308.
[376] Marx 1990, 185. Cf. Marx and Engels 1989a, 389-90.

> **in which all distinctive features of the concrete labour represented in the different use values are entirely obliterated**.[377]
> …the particular labour contained in the commodity can only through alienation [i.e., exchange] be represented as its opposite, impersonal, abstract, general—and only in this form **social-labour, i.e., money**.[378]

Marx's model of the reduction of concrete to abstract labor in the process of monetary exchange of commodities or values on the market may be represented as follows:



(Figure 2.2. Reduction of Concrete to Abstract Labor)

First (T^1), two labors (L^1, L^2) produce the two products that will subsequently exchange on the market as commodities (C_a, C_b) in two different processes of production (P^1, P^2). Then (T^2), the one (L^2) product is exchanged as a commodity (C_a) for value in the form of money (M_a). And then (T^3), that same money-form of value (M_a) is exchanged for the other commodity (C_b), which is a product of the other labor (L^1). In this process, the two products of the two labors exchange for value in the form of money (M_a). They are not directly equated with one another in a single exchange as the OCT imagines (i.e., barter-model), but rather belatedly equated with one another or count as equivalent values in relation to money (C_a=C_b). And the circulation of money also equates, at a further degree of mediation, the two labors (L^1=L^2) of the two agents that produced them at a previous point in time (T^1). Production was completed (T^1) before the exchanges

[377] Marx 1970, 65.
[378] Marx 1970, 69.

occurred (T^2, T^3). And the labors were not already equivalent quantities or abstract labor in the processes of production (P^1, P^2). So, the equation of the two labors as abstract labor is essentially belated and depends upon the equation of their products which occurs in relation to money in two different, subsequent actions. In sum, exchange establishes that both products are commodities and that both labors that produced them count as abstract, social labor, or the substance of value, and assigns values to them both.

On the view which I have just reconstructed and presented, value in the form of money in exchange is the essential mediation which equates different products as values and concrete labors as abstract labor, the substance of value. So, on my interpretation, it is not *labor as such* which is the "self-mediating" or "self-grounding" substance of capitalist society.[379] Labor itself does not literally mediate society. Laborers do not exchange *labor for labor*—or the products of other laborer's labor—a view which would remain far too close to the LTV.[380] Abstract labor is not an activity of workers. And actual concrete labors, seen from the individual-scale of description, do not literally become abstract or homogeneous.[381] *Labor-power* is exchanged for *money*, which is exchanged for other commodities (C-M-C). The monetary exchange of the products of labor as commodities or values, seen at a macroeconomic scale of description, indirectly renders concrete labor as abstract labor, the substance of value, which is just a social relation of exchange.[382]

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[379] Cf. Postone 1993, 150-2: "The *function* of labor as a socially mediating activity is what [Marx] terms 'abstract labor'. […] *it is the social function of labor which makes it general*. […] As a socially mediating activity, labor is abstracted from the specificity of its product, hence, from the specificity of its own concrete form. In Marx's analysis, the category of abstract labor expresses this real social process of abstraction; it is not simply based on a conceptual process of abstraction. As a process that constitutes a social mediation, labor is labor in general. […] 'labor in general' serves in a socially general way as a mediating activity"

[380] Cf. Franklin 1729: "Trade in general being nothing else but the Exchange of Labour for Labour, the Value of all Things is, as I have said before, most justly measured by Labour". Cf. Marx 1970, 56.

[381] Here I agree with Chibber 2013, 129-30: "Labor never becomes something other than concrete labor. […] It does not have to cease being concrete labor, in order that it might take the form of abstract labor".

[382] Heilbronner 1983 calls it a "deep structure" (254).

The problem with the LTV from Marx's perspective is that there is no possible description of labor on which it could independently determine exchange values *ex ante*.[383] Recall that the LTV works *only if* labor (1) "**is all of one kind**" (i.e., homogeneous units)[384] and (2) it *antedates* those exchange-values or exists in production before the products of labor enter the market. The LTV faces a dilemma here because these conditions cannot both be satisfied. (1) Abstract human labor in general can be understood as a kind of homogeneous quantity ("one kind") which could determine values. But it does not antedate exchange or exist in production before the monetary exchange of the products of labor as commodities. It is a *result* of exchange. So, once one can speak of abstract labor, exchange has *already* taken place, and hence it cannot determine values in exchange *ex ante*. (2) Concrete labor is the kind of labor which does antedate exchange or exists in production before the products of labor enter the market. But it is a "meaningless heap of hopelessly disparate" labors, in Schumpeter's words. Concrete labor is qualitatively heterogeneous, not a homogeneous quantity. So, it is not the kind of thing which could determine values at all.

Marx calls the LTV a "tautological" or circular explanation of value, and therefore no real explanation at all. Its attempt to explain value on the independent basis of abstract human labor is illegitimate, for Marx, because "value" and "abstract labor" are just two descriptions of the same thing.[385] The LTV simply *assumes* that the order of production and the order of exchange are two separate orders in order to claim that former independently determines the latter *ex ante*.[386] It "presupposes" a "purely quantitative" form of labor which has already been reduced to "abstract

[383] Cf. Harvey 2018b, 37: "labor is not and never can be a fixed and invariable standard of value".
[384] Schumpeter 2008, 23-4.
[385] Cf. Marx 1970, 35. Cf. Marx and Engels 1989a, 99. Here Marx echoes Hegel's criticism of explanations that proceed on the basis of "tautological" reasons (*Gründe*). Cf. Hegel 1969, 458-61; Hegel 1991b, 188-92 §§ 121; cf. Hegel 1977, 95, § 155.
[386] Cf. Marx and Engels 1989a, 99: "Ricardo and most of the economists… consider labour without exchange, although their system, like the whole bourgeois system, rests on exchange-value".

human labour", which is a mysterious sounding notion that it ought to also explain.[387] But labor is only quantified or abstracted when its products are exchanged on the market. And so, the LTV use an effect of market exchange (i.e., abstract labor) to explain exchange-values. And it does so because it systematically ignores the role of money in general and specifically the role of money in reducing concrete to abstract labor in exchange,[388] even though value can only be expressed in *money*.[389]

While Marx's language can seem baffling or extravagant, his unconventional view of the reduction of labor ultimately more plausible than the LTV. He is basically claiming that the substance of value or abstract labor is not a metaphysical entity that antedates and independently determines exchange.[390] It is a standard or measure that is established within the market mechanism of capitalist economies at an aggregate scale of description. And this is hardly as unconventional as it initially sounds. At the microeconomic scale of description, it is not an entity that exists at all. It is just a social relation of monetary exchange of the products of labor seen from macroeconomic scale of description.[391] Labor only acquires a "dual character" (concrete and abstract) from the "moment" in which it assumes the form of a commodity (labor-power) which produces other commodities, which are exchanged on the market for *money*, which is capitalism.[392]

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[387] Marx 1990, 173. Fn. 33. Cf. Marx 1990, 174. Fn. 34.

[388] Cf. Marx and Engels 1989b, 132: "It is quite consistent [of Ricardo] that money is then regarded merely as the medium in the exchange of products, and not as an essential and necessary form of existence of the commodity which must manifest itself as exchange-value, as general social labour". Cf. Marx and Engels 1989b, 134-5: "…individual labor must present itself as *abstract general social labour only through its alienation* [i.e., exchange]". Cf. Marx and Engels 1989a, 389-90: "… [Ricardo] does not grasp the connection of *this labour* with *money* or [the fact] that it must assume the form of *money*".

[389] Marx and Engels 1988, 400.

[390] Meikle 1991 defends this view which Schumpeter 2008 (23) and Robinson 1966 (vii, 39) rightly find problematic.

[391] Here I agree with Alfred Sohn-Rethel and disagree with Moishe Postone's assessment of Sohn-Rethel (Postone 1993, 177-9) and the similar criticism by Jappe 2013. Abstract labor is a fetish of specifically the capitalist mode of production (cf. Sohn-Rethel 2018, 434).

[392] The "capitalist epoch", according to Marx, is defined by the fact of the universality of commodity production and exchange, in which even labor-power itself is a commodity (Marx 1990, 274; cf. Marx 1992, 119). The necessity of the exchange of the products of labor as commodities is due to social division of labor in capitalism (Marx 1990, 165), pace Smith.

5. Conclusion

In this chapter I have argued that the OCT and Marx's theories of value are fundamentally different. This distinction will set up the further distinctions which I draw between them in the following chapters regarding their concepts of capital and their views of the economic POU or Hegel's "rabble". While the former adopts what I call a micro-real perspective of value, the latter adopts what I call a macro-monetary perspective. And one major problem with the OCT's conception, from Marx's perspective at least, is that the barter-model which it takes for granted in its theory already doctors its conclusion, as it were, that the POU will be impossible in principle. The OCT holds this view because it is also committed to the view that exchange is just direct barter of goods for goods. Hence it thinks that supply and demand, production and consumption, automatically coincide, and therefore that markets are automatically in harmonious equilibrium (i.e., Say's Law). Marx will reject this view because he rejects the erroneous assumption on which it rests (i.e., the barter-model). A further problem, I have argued, is that the LTV's conception of value, which would also guarantee the smooth functioning of the economy, simply does not work, according to Marx. In the course of that argument, moreover, I have additionally tried to show that Marx does not actually hold Ricardo's LTV. This difference between Marx's theory and the OCT or LTV will also clarify their different views of capital, which also bear on the different views of the POU and help to explain their different responses to the topic of Hegel's "rabble" later. In the following chapter I address the different ways in which the OCT and Marx's theory conceive of the accumulation of value as capital (M-C-M') on the basis of what I have said here, before turning directly to the problem with which the dissertation began (i.e., POU).

Chapter Four: The Concept of Capital

1. Introduction

The purpose of this chapter is to show that the orthodox, classical theory (OCT) and Marx's theory of capital are two different kinds of theories, to shed light on the controversy around the economic problem of overproduction and underconsumption (POU),[1] to which I return in the next chapter. The OCT and Marx's theory are what I call "micro-real" and "macro-monetary" theories, respectively, to distinguish them in characterized fashion.[2] The differences between the kinds of theories which the OCT and Marx's theory are—their different assumptions or fundamental concepts—explain why the former can neither recognize nor explain the POU while the latter can.

To recall my general argument in this dissertation, Hegel's conclusion that the economic POU produces an involuntarily unemployed and impoverished "rabble" adopts premises ("fundamental concepts") from the OCT, from which his conclusion does not follow. Indeed, the OCT's assumptions do not allow for the possibility of the POU and thus rule out his conclusion *a priori* (i.e., Say's Law). In the previous chapter, I addressed one of the alternative premises which would be necessary for Hegel's conclusion to follow (i.e., Marx's concept of value). In this chapter, I address the other one, which is Marx's unique concept of capital. In the following chapter I will apply these concepts to the economic POU to argue that Marx can recognize and explain the phenomenon which Hegel only vaguely intuits and to which the OCT is completely blind.

In the previous chapter, I addressed value in the process of circulation of commodities of equivalent value, which Marx represents as C-M-C, and which the OCT pictures as direct-barter

[1] In what follows, I will refer simply to the OCT, because Ricardo's strict LTV belongs to the OCT, and the differences between Smith or Say's and Ricardo's views are less important regarding the discussion of capital in general than they were regarding value. Wherever it is relevant, I will try to flag the differences between them.

[2] I borrow the latter expression from Moseley 2016 and similarly coin the former for the sake of clear distinction.

(i.e., C_a-C_b, Say's Law). In this chapter, I address the other side of that same process which occurs in capitalist economies. From Marx's perspective, it is the formation of surplus-value and accumulation of capital, which he represents in value-theoretic or monetary terms as M-C-M' or M-C…P…C'-M',[3] and which OCT pictures as the accumulation of real, physical goods or wealth (i.e., C-C'). The difference between these two conceptions of accumulation of capital determines whether they construe capitalist economies as fundamentally harmonious or not. From the OCT's perspective, modern economies are always fundamentally in equilibrium, and disequilibria, such as the economic POU, would either just be passing, exogeneous anomalies or they would be impossible. From Marx's perspective, capitalist economies are not always fundamentally in equilibrium, and disequilibria, such as the economic POU are neither exogenous anomalies nor impossible, but rather predictable consequences and "a matter of course".[4]

Specifically, I will emphasize the difference between the OCT and Marx's concepts of the kind of capital which employs labor to produce wealth and value which capitalists accumulate—the concepts of *circulating capital* and *variable capital*, respectively. The OCT imagines the former in real terms, as though individual capitalists bartered groceries (i.e., "corn") for labor directly with workers for their immediate consumption. Yet according to Marx, capitalists pay monetary wages (i.e., variable capital) to workers, who then recycle that money into the economy, where it can further circulate and multiply transactions. The micro-real perspective of the OCT does not allow it to recognize and explain the POU, while Marx's macro-monetary perspective allows him to do so. For the OCT, decreasing investment into labor would be an immediate decrease of the standard of living for the worker. For Marx, decreasing investment into workers'

[3] In this sense one can say that Marx changes the "object" of inquiry of political economy, but not in the sense in which Althusser 1970 makes this claim. Marx does not leave political economy in other to theorize "history" instead. He is talking about *capital*. Cf. Sohn-Rethel 1978, xii, 20.

[4] Peirce 1955, 151. Cf. Harman 1965.

wages has far-reaching ripple-effects on sales, effective demand, profitability, investment, and employment elsewhere, because less money is thereby circulated into the economy which realizes fewer exchanges or less value. This can trigger a downturn in the industrial cycle. The POU or the "rabble" (i.e., involuntary unemployment, modern poverty) would just be effects of such changes in the composition of capital investments as capitalists accumulate it, as I argue in the next chapter.

2. Two Kinds of Theories: Micro-Real or Macro-Monetary

To present the difference between their views of profits, capital, and accumulation as clearly as possible, I distinguish the possible positions that the OCT and Marx's theory adopt in terms of contemporary economic categories, as I did in the previous chapter. In what follows I characterize the OCT (i.e., Smith and Ricardo) as a "micro-real" theory (A) and Marx's theory as a "macro-monetary" theory (B). The kinds of theories which they are adopt opposite kinds of foundations:[5]

1. Regarding the consistency of capital itself, one could conceive of it either (A) in exclusively physical terms (e.g., method of real analysis), or (B) in value-theoretic terms (e.g., method of monetary analysis).

2. Regarding the temporal character of capital, one could conceive of it either (A) exclusively as a static "stock" of real physical resources, or (B) in a way which includes dynamic "flows" of financial funds (i.e., money or credit-debt) and commodities.

3. Regarding the kind of labor — "productive labor" — which contributes to the production and accumulation of profit as capital, one could conceive of its contribution either (A) exclusively physical terms (e.g., real analysis), or (B) in value-theoretic terms (e.g., monetary analysis).

[5] Certainly, there are other respects in which the OCT and Marx's theory might differ, but I restrict my account here for the purposes of the argument of this chapter and dissertation.

4. Regarding the different scales of description which one can adopt to explain the accumulation of profits as capital, one could either (A) adopt a microeconomic scale of description and conceive of capital as the saved and reinvested revenues or profits of individual entrepreneurs or firms, or (B) one could adopt a macroeconomic scale of description and conceive of capital as the aggregate profits that result from aggregate growth of production, which depends upon increasing aggregate reinvestment and exploitation of labor.

2.1. Real Analysis or Monetary Analysis of Capital

The first point on which the OCT and Marx's theory of capital differ is the way in which they conceive of the consistency of capital. The consensus among orthodox economists is that capital is a real "stock" of physical goods which are specifically used to produce more real goods and "earn a revenue",[6] as Irving Fisher puts it. Similarly, Simon Patten claims that "the idea of capital is involved" wherever labor uses real goods to produce more real goods.[7] And the contemporary mainstream economist, Gregory Mankiw uses the term "capital" to "refer to the **stock of equipment and structures** used for production [of goods and services]. That is, the economy's capital represents the accumulation of goods produced in the past that are being used in the present to produce new goods and services".[8] These views adopt the method of real analysis.

From the orthodox perspective (i.e., real analysis), capital does not involve *money* at all. In Schumpeter's words, the idea that money/credit performs an "essential function" is "heresy".[9] Money is a "neutral veil" that masks the movement of real goods. When capital is accumulated

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6 Fisher 1896, 518-520.

7 Patten 1889, 194-5.

8 Mankiw 2021, 370: "For our apple firm, the capital stock includes the ladders used to climb the trees, the trucks used to transport the apples, the buildings used to store the apples, and even the trees themselves". Cf. Mankiw 2021, 795: "physical capital[:] the stock of equipment and structures that are used to produce goods and services".

9 Schumpeter 2017, 95. Schumpeter's theory of capital does essentially involve money and he cites Marx as a major influence for his view of capitalism (Schumpeter 1951, 159).

("income formation"), one simply accumulates more and more of the real goods ("physical means of subsistence") or implements which are used to produce goods ("real factors of production").[10] It is not the accumulation of monetary value (i.e., M-M'), but rather of real goods (i.e., C-C'). Capitalists' profits would consist of real goods, and workers' incomes would be a "real wage", or commodity-bundle, as though capitalists and workers directly traded goods and labor (i.e., barter). Even financial lending is construed in "real" terms as though financiers lend real capital goods to industrial capitalists for future real consumer goods, which financiers purportedly consume later, when industrialists repay their debts to those creditors. Lending financial credit and repayment of debts is supposed merely to redistribute a fixed quantity of consumption of physical products in various ways among different agents.[11] This is how the method of real analysis would have it that markets (i.e., production and consumption, supply and demand) are always in equilibrium (e.g., Say's Law).[12] Money is supposed to be "neutral" in the "long-run".[13]

The alternative to the orthodox view is the method of monetary analysis. It provides a very different concept of capital. And money is "essential" from this perspective.[14] Modern, capitalist economies involve not only *real* goods but also *monetary* sums such as profits, which will be reinvested (i.e., saved) for further accumulation of profit as capital, or wages. A capitalist economy is an "economic process" or "system of streams of expenditures" and incomes, rather than a barter-economy of real goods.[15] The real economy of production already includes money, and real factors

[10] Schumpeter 1994, 277. For example, the most influential post-war economist of growth in America, Robert Solow, "modeled capital as a single homogeneous productive stock, or thing, called 'K.' K excluded money capital, and thus liquidity [i.e., money], by definition" (Levy 2021, 533. Cf. Solow 1956).

[11] This view is of a piece with the quantity theory of money (cf. Fisher 1920, 296, 184-5; Blaug 1985, 153-4, 635-6). Its major 20th century exponent, Irving Fisher, also recognized that debts denominated in a monetary unit of account can have significant effects (e.g., deflation) on economies in relation to declining growth (Fisher, 1933). However, he still conceives of the real economy itself in exclusively "real" terms (Bernanke 2000, 24; Hudson 2015, 168).

[12] Cf. Say 1834, 138-9, I.xv; Baumol 1977, Baumol 1999; Cf. Keynes 1964, 18, 21-2, 26.

[13] Mankiw 2021, 620.

[14] Schumpeter 1994, 278.

[15] Schumpeter 1994, 280.

impact monetary movements.[16] So, the accumulation of capital cannot be understood only as the accumulation of *real* goods (i.e., C-C'), but must also be understood as the accumulation of *monetary* values (i.e., M-M') such as financial assets. Indeed, the only way to coherently conceive of qualitatively heterogenous lots of goods and their accumulation in a unified coherent way amenable to mathematical models is to take recourse to monetary values (i.e., quantities).[17]

John M. Keynes similarly claims that "we actually live" in a "monetary economy",[18] by which he means that money is not merely a means of exchange of goods (i.e., real barter), but rather is an "essential" feature of modern economies.[19] In his lectures from the 1930s, Keynes writes: "The [capitalist] firm is dealing throughout in terms of sums of money. It has no object in the world except to end up with more money [M'] than it started with [M]. That is the essential characteristic of an entrepreneur [i.e., capitalist] economy".[20] As the former CEO of GM, Alfred P. Sloan, is said to have put it: "The point is that General Motors is not in business to make cars, but to make money". Accordingly, Keynes suggests that the classical concept of capital must be revised in this light: it is not just a real physical tool for production or "self-subsistent entity", but rather something which is essentially bound up with the circulation of money and effective demand.[21] Capitalists only invest the amount of money in production (e.g., employment) as capital which they expect to result in profitable returns.[22] Thus money flows from capitalist employers to

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16 Schumpeter 1994, 279.
17 Schumpeter 1994, 278. Cf. Sherman 2001. Cf. Cohen and Harcourt 2005.
18 Keynes 2015, 174-5.
19 Keynes 1964, vii.
20 Keynes 1979, 89. A monetary economy is "an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot be predicted, either in the long period or the short, without a knowledge of the behaviour of money between the first state and the last"
21 Cf. Keynes 1964, 106: "capital is not a self-subsistent entity existing apart from consumption. On the contrary, every weakening of the propensity to consume regarded as a permanent habit must weaken the demand for capital as well as the demand for consumption". Cf. Schumpeter 2017, chapters 3 and 4.
22 Cf. Keynes 1964, 25: "entrepreneurs will endeavor to fix the amount of employment at the level which they expect to maximize the excess of the proceeds over the factor cost". On effective demand, cf. Keynes 1964, 23-5, 31. On the relation between marginal efficiency of capital and interest rate, cf. Keynes 1964, 54-5, 260-1, 280-91, 380-1.

workers and to other capitalists, providing them with funds to buy commodities (i.e., effective demand), and hence from consumers back to capitalists (i.e., profits). Capitalists' aggregate investment therefore determines aggregate employment, utilization of capital capacity, effective demand, and profitability.[23]

As I will argue in this chapter, the OCT adopts the method of real analysis for its model of capital and therefore abstracts from every monetary aspect of the accumulation of value as capital. Marx's model of the accumulation of surplus-value as capital, on the other hand, adopts the method of monetary analysis. Capitalism is a "money economy".[24] "It is the foundation of the capitalist mode of production that money confronts commodities as an autonomous form of value".[25] In his lectures from the early 1930s, Keynes credits Marx with recognizing that money is essential for capitalism and that capitalist firms specifically seek monetary profits (M-C-M').[26] Post-Keynesian macroeconomists similarly recognize that Marx was the first economist to understand the importance of effective demand in a specifically monetary sense,[27] and they accordingly adopt his framework for understanding capital (M-C…P…C'-M') from a macro-monetary perspective.[28]

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[23] Cf. Kalecki 1971, 78-9. Kalecki 1968 formulates the post-Keynesian view with Marx's reproduction schemas. Cf. Mitchell, Wray, Watts 2019, 409-13, 479-485.

[24] Marx 1992, 298, 195. Here I am in agreement with Heinrich 2012 and Moseley 2016.

[25] Marx 1991, 648.

[26] Cf. Keynes 1979, 81. "Karl Marx… pointed out that [capitalist] production in the actual world is not, as economists seem to often suppose, a case of C-M-C', i.e. of exchanging [a] commodity (or effort) for money in order to obtain another commodity (or effort). That may be the standpoint of the private consumer. But it is not the attitude of business, which is a case of M-C-M', i.e. of parting with money for [a] commodity (or effort) in order to obtain more money. […] The excess of M' over M is the source of Marx's *surplus value* [ΔM]". Keynes ultimately rejects Marx, whose views he seems to have gleaned from McCracken 1933, because he thinks Marx is a Ricardian (i.e., OCT; cf. Keynes 1982, 43; Robinson 1966, 42, 82). Cf. Veblen 1901, 208; Veblen 1978, 20, 50.

[27] Cf. Mitchell, Wray, Watts 2019, 213: "[Marx was] the first to understand the notion of effective demand. He made the distinction between a notional demand for a good (a desire) and an effective demand (one that is backed with ability to pay)". Cf. Mitchell, Wray, Watts 2019, 423. Cf. Robinson 1966, 43f.

[28] Mitchell, Wray, Watts 2019, 422, 438, 484. Cf. Mitchel, Wray, Watts 2019, 52: "GDP is the most commonly used measure and it does have one big advantage: it focuses largely on the monetary value of output. As we have discussed, the profit motive drives capitalistic production. It can be characterised as M-C-M'; that is, it begins with money (M) to produce commodities for sale (C) for more money (M'). For that reason, GDP is an appropriate measure for the capitalist sphere of production because it focuses on production for sale in exchange for money". Cf. Sherman 2001, 89.

2.2. Static or Dynamic Model of Capital: Stocks or Flows

The second point on which the OCT and Marx's theory of capital differ is the way in which they conceive of the temporal character of capital. For the orthodox view, recall, how Mankiw and Fisher call capital a "stock" of physical goods. Orthodoxy holds that stocks and flows are exclusive concepts. "Stock" designates a quantity of real goods ("wealth") at a single point in time, and hence it is a static concept, while "flow" designates a rate of movement of goods or change of real stocks over a period, and hence it is a dynamic concept. On this view, capital is a stock of real goods, so capital is not a flow. And expenditure and income (e.g., revenue or profit) are "flows", so they are not capital.[29] Because the classical view *equates* capital with stock and income or expenditure with flows, its concept of capital excludes any processes such as production, consumption, exchange, or circulation (i.e., flows). Capital goods or physical means of production can be bought and sold and thus count as a flow, but in that moment they do not count as capital.

The alternative to the orthodox view of capital as a static stock is the macro-monetary view of the post-Keynesians. It uses the concepts of "stocks" and "flows".[30] However, it *decouples* them from the concepts of "capital" and "expenditure", "income" or "revenue". There are real and financial assets, which can function variously as a capital, funds for individual consumption, or flows of income or expenditure. Capital can be a "real stock" of productive assets, *or* it can be a "monetary flow" (e.g., finance capital), just as individual consumption funds or assets can be real or monetary. For example, post-Keynesians call "capital stock" the "productive plant and equipment or other capacity, which defines the potential output of an economy. Thus, when a firm builds a new factory or purchases a new piece of machinery, it is considered to be investing".[31]

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[29] Fisher 1896, 514, 516, 527; cf. Fisher 1896, 522: "capital and income are the two great antithetical ideas".
[30] Cf. Mitchell, Wray, Watts 2019, 459: "To put it simply, a stock is a point in time, while a flow occurs over time".
[31] Mitchell, Wray, Watts 2019, 222

But they also speak of "capital flows",[32] which are amounts of monetary or financial assets which are spent or received and accumulated over the course of a given period of economic activity.[33] Hyman Minsky characterizes the "capitalist economy" in terms of a series of "interlocking balance sheets" (i.e., credits and debts) which is the "basic structural characteristic of a capitalist economy", tracking the flows of commodities, money, profits, and capital, to and from stocks.[34] This is the so-called "sectoral balances approach",[35] which tracks stocks and flows of capital, funds and goods within and between all the sectors of an economy in a way which is "consistent" at the macroeconomic level. "Stock-flow consistency means that every flow must come from somewhere and go somewhere, with flows accumulating to stocks".[36] For, one person's spending is another person's income.[37] Expenditure and income net to an aggregate sum (e.g., GDP), and the aggregate financial assets and liabilities net to zero, because one person's credit is another's debt.[38]

As I will argue in this chapter, the OCT adopts the classical conception of capital as a static stock of real physical production goods (i.e., means of production and real wages), while Marx adopts the more capacious conception of capital on which it is at once a physical fund of means of production and consumption and also a temporal process that contains stocks at various points but also flows of money and commodities, thereby anticipating his post-Keynesian successors.[39]

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[32] Mitchell, Wray, Watts 2019, 329-31, 366. Mankiw 2021 (20) also speaks of flows but excludes money from the model. His discussion of capital flows is considered in real terms (cf. Mankiw 2021, 642).

[33] For example, the massive amount of financial credit that flowed into the United States from south Asia's debts, which allowed the Clinton-era to run public *and* private sector surpluses, eventually plunging Asia into a deflationary recession (cf. Mitchell, Wray, Watts 2019, 513; cf. Harvey 1007, 96-7, 105, 262-3).

[34] Minsky 1995, 202. Cf. Minsky 1980, 509.

[35] Mitchell, Wray, Watts 2019, 94. Cf. Ritter 1963.

[36] Mitchell, Wray, Watts 2019, 552.

[37] Keynes 2015, 366. Cf. Dimand 2008.

[38] Cf. Ritter 1963, 228-9.

[39] Cf. Marx 1992, 396, 400, 408, 411, 413, 415; Marx 1991, chapters 24, 27 and 30. Cf. Kalecki 1968.

2.3. Productive and Unproductive Labor

The third point on which the OCT and Marx's theory of capital differ is the way in which they conceive of the labor involved in the process of production of commodities and accumulation of capital. Classical authors call labor which directly contributes to profit-formation "productive labor" and labor which does not do so, but rather is a mere overhead cost (*faux frais*) of production, "unproductive labor". Similarly, they distinguish "productive" sectors of the economy (viz. industry) from "unproductive" sectors of the economy (e.g., finance and real estate).

There are few analogs for this distinction in orthodox theory after the early part of the 20th century, because of the rise of the neoclassical view.[40] John Bates Clark redefined productivity in terms of *income*, rather than real production (i.e., OCT) or the formation of aggregate profit in monetary terms of value (i.e., Keynes, Marx). He erased any notion of an "unearned increment", so-called passive income of absentee owners or rentiers (e.g., rent, interest), by redefining land as capital, rent as profit, and all income as "earned".[41] From his standpoint, all labor is productive, no labor is unproductive, and everyone earns and produces whatever they get. This is the standpoint from which it is possible for Lloyd Blankfein to say that the employees of Goldman Sachs "are among the most productive in the world".[42] The only remaining trace of the classical view of productive and unproductive sectors of a capitalist economy that remains is the post-Keynesian claim that the upper limit of speculative or financial claims on wealth (e.g., interest, fees, rent), which the latter cannot exceed without crippling capitalist economies, is the real production of aggregate value by industrial labor, on which aggregate growth and profits depend.[43]

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[40] Cf. Hudson 2006 and Hudson 2015, Basu and Foley 2013, Christophers 2011 and Christophers 2019, Assa 2017.

[41] Cf. Clark 1888, 111, 124, 154-5. Cf. Hudson 2015, 82-6. Simon Patten was the first critic of Clark's view. Cf. Patten 1891, 356, 363, 369; Patten 1908, 90. Veblen 1808 and Veblen 1997 also criticized Clark's view.

[42] Farrel 2009.

[43] Cf. Keynes 1964, 159: "Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done".

As I will argue in this chapter, the OCT adopts micro-real perspective of the productive and unproductive labor. By this I mean that it defines productive labor as that which contributes to profit-formation for an individual capitalist or firm understood in physical terms of goods. Marx, by contrast, adopts a macro-monetary perspective of productive and unproductive labor. By this I mean that he defines productive labor as that which contributes to aggregate profit-formation (i.e., surplus-value) for an entire economy in value-theoretic terms. Both regard productive labor as the driving factor of economic growth, profit-formation, and accumulation of capital; both regard the incomes of unproductive labor and revenues of unproductive sectors of the economy (e.g., finance and real estate) as *transfers* or *redistributions* of aggregate real wealth (OCT) or value (Keynes, Marx), which is produced by productive labor (i.e., industry). Yet their differences persist.

2.4. Micro- or Macroeconomic Scales of Description of Capital: Profit-Formation and Accumulation

The fourth point on which the OCT and Marx's theory of capital differ is the scale from which they describe the formation and accumulation of profit as capital. The distinction between micro- and macroeconomic scales of description is the difference between explanatory models which take representations of *individuals* as the primitive units of their analysis before "aggregating up" into a macro-level picture of aggregates and models which take *aggregate effects* of individual interactions as the foundation of their analysis (e.g., GDP: aggregate spending = aggregate income). It is necessary to distinguish strictly between individual (microeconomic) and aggregate (macroeconomic) scales of description here, lest one succumb to a "fallacy of composition".[44]

[44] On this distinction, cf. Keynes 1964, 85. Cf. Mitchell, Wray, Watts 2019, 409, 411, 490, 560.

The contemporary, mainstream (i.e., neoclassical) view is the most microeconomic model of profit. For example, Mankiw defines profit as an individual entrepreneur or firm's net gain, which is gross returns minus expenses. It is what is left over when costs are subtracted from revenue.[45] In the spirit of Clark, mentioned above, this definition is meant to hold generally and to apply to any individual in any sector of the economy irrespective of the specific place or function within the economic system by which one obtains one's income. Industry, commerce, financial lending or speculation, and real estate leasing or speculation are all the same from this individual scale of description. What is essential to note here is that, on this microeconomic kind of model, individuals must receive revenue or profits *before* they can spend it on their investments (saving) to accumulate further profit as capital. Capital can be accumulated *only if* individuals' net revenue or profits exceed costs and are *saved* to purchase more "inputs" (i.e., costs) and conduct business on an expanding scale. So, microeconomic views then "aggregate up" this view and hold that aggregate accumulation of profit as capital depends upon individual revenues and accumulation.

The older, classical approach adopts a scale of description which is slightly more macroeconomic. It also defines profit as the total net gain or total gross returns minus expenses or costs.[46] However, Patten's view of landlords' rents, for example, demonstrates the limits of the individual or microeconomic definition by expanding it to a more aggregate-level scale of description. The simple, individual-level definition of profit is inadequate if it is meant to cover both industrial capitalists *and* landlords, because *everyone* cannot profit by lending or leasing land. One person can lease *only if* someone else pays rent, and if everyone is a landlord, then there will

[45] Cf. Mankiw 2021, 244: "What is a firm's profit? The amount that the firm receives for the sale of its output (cookies) is called total revenue. The amount that the firm pays to buy inputs (flour, sugar, workers, ovens, and so forth) is called total cost. As the business owner, Chloe gets to keep any revenue above her costs. That is, a firm's profit equals its total revenue minus its total cost: [/] Profit = Total revenue – Total cost". It is also customary nowadays to speak of hypothetical gains and losses as "opportunity costs".

[46] Cf. Patten 1908, 91: "the line of cost is the line of bankruptcy".

be no tenants or workers and hence no fund of wealth with which to pay rent to landlords. Industrial capitalist activity produces the aggregate fund of wealth ("surplus value") from which all incomes are distributed, while landlords' rents are mere portions or unproductive *transfers* of it. They produce nothing yet are legally entitled to a portion of other people's revenue (i.e., rent is a cost).[47]

Fisher makes a similar observation about financial institutions such as banks and their peculiar form of revenue (i.e., interest on credit-debt). He similarly demonstrates the limits of the microeconomic definition of profit by accepting yet expanding it. *Everyone* cannot make a financial profit (i.e., interest) by lending credit, because interest is possible for some *only if* others incur a debt and pay it back with interest. And there would be no one left to incur a debt and pay it back with interest, as well as no fund with which to do so, if everyone were lending and no one were laboring or producing.[48] Again, industrial capitalist activity produces the aggregate "stock" or fund of wealth from which individual incomes or revenues and profits are deductions, transfers, or redistributions of wealth. Like rent, financial interest too is a deduction or transfer of wealth (i.e., overhead cost) from the productive industrial sector to the unproductive financial sector, whether this means capitalists paying interest directly for their own credits-debts or paying for the interest that workers must pay for credits-debts by paying higher wages (i.e., debt deflation). Interest might compound infinitely on paper, but the maximum amount that can be really paid to creditors is the aggregate stock or fund of wealth which is produced by labor with capital.

The distinction between distribution and production of wealth helps to illustrate the meaning of the distinction between microeconomic and macroeconomic scales of description of

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[47] Cf. Patten 1808, 84: "The difference between total values and total costs is the social surplus for which each group of producers contends"; Patten 1891, 357: "By thinking in a more general way we get at the idea of surplus value".

[48] Cf. Fisher 1896, 522: "Though an individual may employ his stock profitably by lending it, society as a whole cannot. Interest is simply paid from one member of society to another and therefore does not enrich society as a whole. Social enrichment comes only from productive employment of stock". Cf. Fisher 1896, 523: "[A capitalist] cannot perpetually pay interest out of accumulations, but must win profits out of which interest is paid".

profits. On the one hand, individuals' expenditure or income, such as profit, is a question of *distribution* of extant wealth. Markets merely *distribute* or *redistribute* the aggregate stock or fund to individuals.[49] And distribution does not add to the aggregate sum that can be distributed in in various ways. For example, one individual might profit, though at a loss to another individual. On the other hand, the aggregate income and expenditure of the entire economy are always *equal* at any given point or within any given period (e.g., GDP). So, aggregate growth or aggregate profit-formation (i.e., surplus-value) is a question of *production* measured over the course of a period which adds to the total extant wealth which markets can be distribute among individuals in various ways.[50] Aggregate wealth and profit can be distributed in various ways in the market *only if* more is really produced by labor in industry. This is the only way in which one agent can obtain a real profit without entailing a real loss to another. For example, the value of the total amount of goods and services bought and sold in the United States of America in 2019 equaled approximately $21.43 trillion; the value of the total amount of goods and services equaled approximately $20.49 trillion in 2018. So, the difference between these two sums (i.e., net aggregate value added) equals approximately $940,000 billion. And so, the aggregate profit (i.e., surplus-value) or net aggregate value added is the difference, which required the production of new goods and services (i.e., labor).[51] Thus I distinguish between "individual profits" (i.e., distribution) and absolute or "aggregate profits" (i.e., surplus-value, production) in what follows.

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[49] Cf. Mitchell, Wray, Watts 2019, 5: "Neoclassical definition of economics: the study of the allocation of scarce resources among unlimited wants". Cf. Robbins 1945, 16.

[50] Cf. Mitchell, Wray, Watts 2019, 7: "Heterodox definition of economics: the study of social creation and social distribution of society's resources". Cf. Keynes 2015, 385-6.

[51] It is important to note that the way in which GDP or the "national income and product accounts" (NIPA) is calculated is highly contentious and potentially inaccurate. Today, rent and interest are counted and included in a way which neither classical economists nor Marx nor Keynes accept, due either to the ascendancy of neoclassical economics or the capture of state institutions by *rentier* interests or both (c.f., Hudson 2006 and Hudson 2015, Christophers 2011, Assa 2017, Assa and Kvangraven 2021, Mitchell, Wray, and Watts, 2019, chapter 4).

The revolutionary aspect of the classical concept of profit was its "complete revision of certain fundamental concepts and the postulation of a new basic social pattern", the insight that interest and rent are derivative forms of income "paid out of gross revenue".[52] Financiers' interest or landlords' rent are an unproductive deduction, transfer, or redistribution from other people's income which depends upon the aggregate fund of real products and production, which they stifle, and which presents the upper limit to such financial claims. The ultimate limitation of the classical view, however, is the way in which it is nevertheless still too microeconomic. Though it expands the microeconomic definition of profit to explain the industrial source of aggregate wealth, which can be distributed in various ways (e.g., wages, profits, interest, rent). It is still focused on individual capitalists. And just as everyone cannot be a lender or landlord without a debtor or renter with disposable income, not everyone can be a capitalist and profit without someone who works and consumes. It is committed to the idea that individual industrial capitalists must receive revenue or profit *before* they can spend it on investment (saving) to form and accumulate their fund of capital. Individual capitalists could accumulate capital *only if* they save their net revenue or profits individually and purchase more "inputs" (i.e., costs). So, aggregate productivity and aggregate profit formation would depend on the individual revenues of industrial capitalists, which pose a limit to aggregate accumulation of capital. And so, individual revenues would determine or constrain the aggregate accumulation which is possible. The direction of determination of capital accumulation would run from the microeconomic scale of description to the macroeconomic one.

The alternative to the orthodox view is the definition of profit which one finds in post-Keynesian theory. Keynes recognizes the microeconomic definition of individual profit — the net excess that remains over gross returns minus expenditures of individuals between periods of

[52] Cf. Meek 1954, 144, cf. 140. Cf. Meek 1956 25-6. On classical profit-theory, see Desai 2008. Cf. Eatwell 1987; Panico 1987; Shaikh 1987. Cf. Smith 1993, 46, 48, 50, I.vi; 56, I.vii. Cf. Ricardo 1951a, 5.

economic activity — as legitimate within the bounds of its scale of description.[53] He also thinks that the aggregate fund of an entire economy which can be distributed in various ways requires real production and aggregate investment. And the aggregate profit which can be distributed in various ways requires that more be produced and exchanged at a greater monetary value at a later point in time than its costs of production at an earlier point. Everyone cannot be wealthier at the end of the day if no one works or contributes to increased production of goods, because one persons' monetary spending is always another persons' monetary income, which is to say that aggregate expenditure and income are always equivalent in any given instance or period.[54] At the end of the day, *everyone* can be wealthier in "real" terms (though admittedly not in *monetary* terms) *only if* some people produce or "make" the goods that are distributed in various ways in market exchange.[55] So, the employment of labor is absolutely necessary for the production of aggregate wealth and aggregate profit (i.e., surplus-value).[56] This is also why society is harmed if individuals hoard or do not spend their money (i.e., liquidity) on the products of labor, which will therefore not circulate or multiply exchanges of wealth and therefore income or profits, for instance due to high debt burdens amid increasing production (e.g., deflation).[57] So, similar to the classical

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[53] Cf. Keynes 1964, 23.

[54] Keynes 2015, 366. Cf. Mitchell, Wray, Watts 2019, 218: "The total value of goods and services produced in any period [i.e., GDP] is equal to the total spending and the total income generated… in that same period".

[55] Cf. Keynes 2015, 385-6: "…when an individual spends, he affects not only himself but others [as well]. Spending is a two-sided transaction. If I spend my income on buying something which you can make for me, I have not increased my own income, but I have increased yours. If you respond by buying something which I can make for you, then my income is also increased. Thus, when we are thinking of the nation as a whole, we must take account of the results as a whole. The rest of the community is enriched by an individual's expenditure – for his expenditure is simply an addition to everyone else's income. If everybody spends more freely, [then] everybody is richer and nobody is poorer. Each man benefits from the expenditure of his neighbor, and incomes are increased by just the amount required to provide the wherewithal for the additional expenditure. There is only one limit to the extent to which a nation's income can be increased in this manner, and that is the limit set by the physical capacity to produce [new goods for exchange]".

[56] Cf. Keynes 1964, 213-4: "It is much preferable to speak of capital as having a yield over the course of its life in excess of its original cost, than as being *productive*. […] I sympathize, therefore, with the pre-classical [i.e., pre-neoclassical or properly classical] doctrine that everything is *produced* by *labour*. […] It is preferable to regard labour… as the sole factor of production".

[57] Cf. Keynes 1964, 84, 210. Cf. Keynes 1979, 103.

view, the post-Keynesian view argues that the aggregate profit produced in industry presents the upper limit to individual profits, interest, or rent. If the unproductive individual profits of financiers exceed the fund of aggregate profit — for example, financial claims on wealth exceeding the aggregate disposable income of society — then someone must lose, or the economy falters (e.g., the 2008 global financial crisis).[58]

The way in which the post-Keynesian framework goes beyond the even the classical one, however, is the way in which it does not try to force the macroeconomic description of investment and accumulation of capital into a microeconomic scale of description of profit. The classical view holds that, because individual capitalists must receive revenue and reinvest profit *before* they can accumulate profit as capital, all capitalists must similarly receive revenue and reinvest profit *before* they can accumulate profit as capital; it holds that individual capitalists' revenues or reinvestments constrain or determine the total or aggregate-level accumulation of all capital. But this extension of the microeconomic scale of description to a macroeconomic one is a *fallacy of composition*. Revenue cannot constrain investment expenditure at the aggregate-level because income *equals* spending at the aggregate level (e.g., GDP).[59] So, the post-Keynesian view reverses the classical view of the direction of determination or "causation" of accumulation of profits as capital.[60] The direction of determination runs from the macroeconomic scale of description to the microeconomic one. Aggregate investment determines or constrains individual revenue. All capitalists must spend productively or reinvest their profits at the aggregate-level *before* any individual capitalists can receive revenue at the individual level. Only increased aggregate investment, increased production and increased employment of labor, contributes to the increased aggregate fund of products of

[58] Cf. Keynes 1964, 159. Cf. Magdoff and Foster 2009; Foster and McChesney 2012.
[59] Cf. Keynes 1964, 63: "Income = value of output = consumption + investment".
[60] Mitchell, Wray, Watts 2019, 552.

labor which are sold to consumers, thereby constituting aggregate profit, of which individual profits are portions, which can be distributed in various ways (e.g., to creditors or landlords).

The *prices* at which individuals sell their products are the microeconomic basis of individual profits, which are a matter of distribution, not aggregate profit, which is a matter of production. Prices simply *distribute* the aggregate product and portions of aggregate profit to individuals in various ways, but do not create anything.[61] Individual capitalists might imagine that they derive relative profits by changing prices (e.g., 'buying low and selling high'), but *everyone* cannot profit by simply marking up prices (e.g., inflation). Someone can take a loan from a bank to buy a cheap house in Detroit and wait for credit-fueled asset prices to inflate before selling it and paying back the loan while nonetheless "profiting" relatively (i.e., "capital gains"). Or someone can invest funds in the construction and sale of a new facility in Kansas, employing labor to produce real wealth that will be exchanged for money and distributed to households (i.e., wages) and other firms (i.e., profits). The first example does not add to aggregate production, growth, or profit. It *merely* redistributes extant real and monetary values in various ways to the speculator, while in the second, *labor* in production changes the absolute mass of assets that are distributed according to prices.[62]

In what follows, I argue that the OCT adopts a microeconomic concept of industrial capitalists' profits. It holds that the incomes or revenues which they receive and save, reinvest, or spend productively constrain or determine the aggregate profit formed and the accumulation of capital which is possible at the aggregate level. Marx's theory adopts a macroeconomic concept of profit and accumulation of capital. Aggregate-level expenditure of the entire capitalist class on investment and consumption determines the incomes or revenues and profits of individual

[61] Cf. Mitchell, Wray, Watts 2019, 482; 409-13, 479-485, 552.
[62] Cf. Mitchell, Wray, Watts 2019, 222-3.

capitalists or firms which they can save or accumulate. The aggregate growth of production and exchange forms the aggregate profit which he calls the absolute "mass of surplus-value".[63] Post-Keynesians develop their view of the "the origin of profit from a macroeconomic perspective" with reference to his model (M-C…P…C'-M'),[64] which will be essential for explaining the POU.

3. Smith and Ricardo's Concept of Capital (OCT): Micro-Real

In this section I argue that the two central representatives of the OCT, Adam Smith[65] and David Ricardo,[66] hold views of capital which fall under my characterization of a "micro-real" theory, though there are certainly other differences between their views. A principal feature of the OCT is the way in which it equates the micro- and macroeconomic scales of description or reduces the latter to the former in a way which focuses to a disproportionate degree on individuals' relations to real goods. Smith writes: "What is prudence in the conduct of every private family, can scarcely be folly in that of a great kingdom".[67] And Ricardo similarly writes: "That which is wise in an individual is wise in a nation";[68] "…freedom of commerce, which undoubtedly promotes the interest of the whole, promotes also that of each particular country…"[69] It is hard to imagine better examples of *fallacies of composition* (i.e., "aggregating up").

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63 Cf. Marx 1990, chapter 11; Marx and Engels 1989b, 63*:* "*ABSOLUTE PROFITS* (=*SURPLUS VALUE*)"; Mitchell, Wray, Watts 2019, 52, 218, 423, 436, 482; Harvey 2021.

64 Mitchell, Wray, Watts 2019, 409. Cf. Mitchell, Wray, Watts 2019, 422: "Marx defines capitalist production as the process of M-C-P-C'-M' (where P is the production process that transforms commodity inputs (C) to final commodities (C') for sale to realise more money (M') which includes profits). Note here that C is used to indicate commodity inputs and C' is used to denote final commodities. The capitalist producer does not have a choice to *not* sell. Capitalists must sell in order to recoup the M with which they started. They do not produce commodities for their own use, but rather produce them only to sell at profit".

65 Cf. Rubin 2017a, part 3; Blaug 1985, chapter 2; Aspromourgos 2009, 4.3.1-2 and 2013; Tsoulfidis 2009, chapter 3.

66 Cf. Rubin 2017a, part 4; Blaug 1985, chapter 4; Davis 1993; Tsoulfidis 2009, chapter 4. For an account of Ricardo in relation to Marx, cf. Moseley 2015.

67 Smith 1996, 293, IV.ii.

68 Ricardo 1951a, 248, XXVII.

69 Ricardo 1951a, 338, XXV.

3.1. Real Analysis: Physical Stock

According to the OCT, the total fund of physical resources at an economic agent's disposal is a "stock" of real goods. And the OCT divides it analytically into two portions. The first is a general or *mere* stock of physical goods, which is the fund used for individual consumption, for securing the subsistence of the economic agent throughout a period of activity. For instance, someone invests their stock into a house which he or she will inhabit.[70] The second is a "capital stock", which is not consumed individually, but rather "saved", "invested", spent or consumed productively, and all the representatives of the OCT make "the classical assumption that all savings are at all times automatically invested".[71] Unlike a *mere* stock of goods, a "capital stock" is employed to yield a future "revenue", which might is not used for individual consumption, but rather reinvested or saved to produce further profits and accumulate "capital stock".[72] What is essential to constantly bear in mind, however, is the way in which the OCT conceives of capital as simply consisting of real, physical implements of production of other real, physical things, excluding money and specifically flows of it. To borrow Keynes's formulation, the OCT conceives of capital as a "self-subsistent entity".[73]

Here it is helpful to consider Smith's distinction between labor in primitive economic conditions, where the LTV would hold, and civilized or bourgeois conditions, where a cost of production theory would hold, according to Smith. In both settings, "labor" is the primary resource or "fund" with which people obtain the goods or "wealth" that they need,[74] yet it is used differently

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[70] Cf. Smith 1993, 164-5, II.i.

[71] Bleaney 1976, 209; cf. Bleaney 16, 22-3.

[72] Smith 1993, 164, II.i. Cf. Smith 1993, 169, II.i: "In all countries where there is tolerable security", Smith writes, "every man will employ whatever stock he can command in procuring either present enjoyment [i.e., revenue] or future profit".

[73] Keynes 1964, 106.

[74] Smith 1993, 8, Introduction. Cf. Smith 1993, 222, II.v: "annual produce, the fund from which all taxes must ultimately be paid". Cf. Smith 1993, 120, I.x.

in each. In primitive conditions, the entire product belonged to the laborer,[75] but not in bourgeois conditions.[76] Humans move beyond subsistence economies by using their primary "fund" of labor to accumulate a secondary "fund" of resources, which Smith calls "stock". Within his general concept of "stock", Smith distinguishes the sum of goods an agent uses for personal consumption or reproduction[77] and the sum of goods he or she uses for further production of goods which are intended for exchange on the market for the sake of a future revenue or profit. It is only at this point that one can speak of capital in the proper sense, according to Smith.[78] The accumulation of general stock and the employment of others (i.e., workers) with capital stock for the sake of obtaining revenue or profit are the necessary conditions for developing the modern economy's productive forces,[79] according to Smith.

Between Smith and Ricardo appeared the theory of Jean Baptiste Say, who similarly characterizes capital in real terms as a physical thing. He defines "*productive capital*" as "tools and implements of the several arts", "products necessary for the subsistence of the industrious agent", and the "raw materials, which are to be converted into finished products by the means of his industry".[80] And Ricardo's value-theory (i.e., LTV) continues in this path, though he ultimately differs from Smith's value-theory (i.e., cost of production theory). He applies Smith's view of labor to Smith's view of capital, irrespective the difference between primitive and modern

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[75] Cf. Smith 1993, 63, I.viii: "The produce of labour constitutes the natural recompence or wages of labour. [/] In that original state of things, which precedes both the appropriation of land [i.e., rent] and the accumulation of stock [i.e., capital], the whole produce of labour belongs to the labourer. He has neither landlord nor master to share with him".Cf. Smith 1993, 45, I.vi.

[76] Cf. Smith 1993, 64, I.viii: "But this original state of things, in which the labourer enjoyed the whole produce of his own labour, could not last beyond the first introduction of the appropriation of land [i.e., rent] and the accumulation of stock [i.e., capital]. It was at an end, therefore, long before the most considerable improvements were made in the productive powers of labour…" Cf. Blaug 1985, 38-9; Smith 1993, 46, I.vi; 50, V.vi.

[77] Cf. Smith 1993, 159, II, introduction.

[78] Smith 1993, 160, II, introduction. Cf. Smith 1993, 162, II.i.

[79] Cf. Smith 1993, 160-1, II.

[80] Say 1834, 71 (III).

conditions, claiming that the "weapon" which a "hunter" uses to catch his game (e.g., beaver or deer) is the "hunter's capital".[81] In his *Principles of Political Economy*, he writes:

> The **capital** of a country consists of its commodities.[82]
> **Capital** is that part of the wealth of a country which is employed in production, and consists of food, clothing, tools, raw materials, machinery, &c. necessary to give effect to labour.[83]
> **Capital** is that part of the wealth of a country which is employed with a view to future production, and may be increased in the same manner as wealth.[84]
> The whole business, which the whole community can carry on, depends on the quantity of its capital, that is, of its **raw material, machinery, food, vessels**, &c. employed in production.[85]

All members of the OCT regard capital as a subset of the general stock of real products of labor which capitalists employ (laborers to use) to produce more products and ultimately revenue or profits. Ricardo (LTV) adds the specification that "capital" is "accumulated labour".[86] Two capitals of the same value might be embodied in very different quantities of physical wealth, but both are just physical *things*.[87]

The OCT's view of finance, interest and lending is especially interesting in this connection. It views finance as essentially unproductive because it holds that the sum-total of real products of labor is the ceiling of possible financial claims on wealth, which labor produces, and it holds that money simply distributes that real wealth. Yet it also discards the fact that capitalists seek profits in money (M'). So, the OCT considers even finance as though creditors lend capital stock in kind and creditors repay interest and principal repaid in real, non-monetary terms. This is consistent with the method of real analysis.[88] Yet the consequence is that *financial capital*, would not exist.

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[81] Ricardo 1951a, 23, I.iii: "the hunter's capital, the weapon, by the aid of which their destruction was effected".
[82] Ricardo 1951a, 270, XIX.
[83] Ricardo 1951a, 95, V.
[84] Ricardo 1951a, 279, XX.
[85] Ricardo 1951a, 356, XXVII.
[86] Ricardo 1951a, 410, XXXII; 34, I.iv.
[87] Cf. Ricardo 1951a, chapter XX. Cf. 95, V.
[88] Cf. Smith 1993, 178, II.ii; Smith 1993, 183, II.ii. Cf. Smith 2000, 382, II.ii.iv: "Almost all loans at interest are made in money, either of paper, or of gold or silver. But what the borrower really wants, and what the lender really supplies him with, is not the money, but the money's worth, or the [real] goods which it can purchase. … [either]

3.2. Static Model: Fixed and Circulating Capital Stock

As I have just discussed, the OCT distinguishes between a mere ("general") stock of products used for immediate consumption and capital stock used for further real production and obtaining profit. The OCT also makes a further analytical subdivision within the category of capital stock. It distinguishes the species of "fixed" capital and "circulating" capital.[89] Fixed capital consists of real physical means of production and implements, while circulating capital consists of the raw materials and the real wages paid to workers (e.g., groceries) who use those means of production and materials to produce the aggregate sum of all kinds of real goods. The concept of circulating capital is of central importance for OCT's account of profit and accumulation of capital, and, as I argue later, its fundamentally microeconomic understanding of circulating capital in terms of real analysis will limit its ability to clearly represent the macroeconomic production of aggregate profit (i.e., surplus-value) and recognize and explain economic turbulence such as the POU. As any micro-real theorist would hold, Smith claims that these distinctions hold in "the same" way at *any* level of description, reducing the macro to the micro-scale of description: "The general stock of any country or **society is the same with that of all its inhabitants** or members, and therefore naturally divides itself into the same three portions [viz. immediate consumption, circulating capital, and fixed capital], each of which has a distinct function or office".[90]

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a stock for immediate consumption… [or] a capital for employing industry… By means of the loan, the lender, as it were, assigns to the borrower his right to a certain portion of the annual produce of the land and labour of the country, to be employed as the borrower pleases. Cf. Smith 2000, 383, II.ii.iv: "Any increase in the quantity of silver, while that of the commodities circulated by means of it remained the same, could have no other effect than to diminish the value of that metal. The nominal value of all sorts of goods would be greater, but their real value would be precisely the same as before. […] The capital of the country would be the same, though a greater number pieces might be requisite for conveying any equal portion of it from one hand to another". Smith accepts the quantity theory of money on which it is "neutral". Cf. Ricardo 1951a, 252, XXVII; 361, XXVII; 365, XXVII.

[89] Smith 1993, 162-9, II.i.; 164-7, II.i; 199, II.iii.

[90] Smith 1993, 164, II.i.

The OCT distinguishes the fixed and circulating species of capital stock in terms of the relative frequency or rate at which the physical goods of which they consist are replaced with a profit within a period or cycle of economic activity. Ricardo characterizes this distinction in terms of relative degrees of physical "durability".[91] Fixed capital is replaced more slowly, while circulating capital is replaced more rapidly or frequently. The period required for a capital stock to be replaced with a profit constitutes the so-called turnover time or rate of turnover of that capital.

Fixed capital is archetypically the capital stock of an industrial capitalist (e.g., "farmer" or "manufactory"). Unlike circulating capital, it is constantly employed (i.e., "without changing hands")[92] in the process of production of products which are periodically sold to merchants or commercial capitalists and eventually to final consumers. It includes investment in relatively permanent physical means of production and infrastructure. And the longer period of its turnover time might span several turnover times of other circulating capitals (e.g., plant machinery in relation to raw materials or finished consumer products in storefronts).[93]

Circulating capital is archetypically the capital stock of a merchant or commercial capitalist, though it is meant to cover the capital spent by all capitalists on labor and raw materials. The characteristic by which it qualifies as "circulating" is the fact that it is constantly being bought

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[91] Cf. Ricardo 1951a, 52, I: "In every society the capital which is employed in production, is necessarily of limited durability. The food and clothing consumed by the labourer, the buildings in which he works, the implements with which his labour is assisted, are all of a perishable nature. There is however a vast difference in the time for which these different capitals will endure: a steam-engine will last longer than a ship, a ship than the clothing of the labourer, and the clothing of the labourer longer than the food which he consumes". Cf. Ricardo 1951a, 31, I.iv: "According as capital is rapidly perishable, and requires to be frequently reproduced, or is of slow consumption, it is classed under the heads of circulating, or of fixed capital.* A brewer, whose buildings and machinery are valuable and durable, is said to employ a large portion of fixed capital: on the contrary, a shoemaker, whose capital is chiefly employed in the payment of wages, which are expended on food and clothing, commodities more perishable than building and machinery, is said to employ a large proportion of his capital as circulating capital". Cf. Ricardo 1951a, 38, I.v: "in proportion as fixed capital is less durable, it approaches to the nature of circulating capital. It will be consumed and its value reproduced in a shorter time, in order to preserve the capital of the manufacturer".

[92] Blaug 1985, 53. It must be noted that Smith is not always consistent about whether manufacture is productive.

[93] Cf. Smith 1993, 163-4, II.i.

and resold (i.e., "changing hands"),[94] coming in one form and going in another, or being replaced at a relatively rapid rate, while yielding an individual profit.[95] And as Smith writes:

> When we compute the quantity of industry which the circulating capital of any society can employ, we must always have regard to those parts of it only, which consist in provisions, materials, and finished work: **the other, which consists in money, and which serves only to circulate those three, must always be deducted.**[96]

The term "circulating capital" can be misleading because it sounds like a dynamic concept. Yet it is still a real stock, according to the OCT. So, it excludes flows of goods, but above all flows of money. As Blaug writes: "in Adam Smith, circulating capital is still conceived in **real terms**".[97]

Smith nearly identifies fixed capital with means of production and circulating capital with means of consumption and commercial capital. Yet many economic enterprises will consist of a combination of circulating and fixed capital to varying degrees. The "proportion" between fixed and circulating capitals will vary by firm and determine its productivity and profitability, according to the OCT. (Marx will adopt and modify this view.) Merchants' or commercial capital consists exclusively of circulating capital (i.e., goods bought and resold for a profit), while industrial capital involves a far greater portion of fixed capital (e.g., machinery).

It is crucial to note the relative way in which Smith draws his central distinction and a tension within that distinction. First, Smith distinguishes circulating and fixed capital stocks according to their *relative* rates of turnover or turnover times. The rate of turnover of circulating capital is higher, or its turnover time is less, relative to fixed capital; and the rate of turnover of fixed capital is less, or its turnover time is greater relative to circulating capital. Circulating capital is constantly being replaced almost entirely, while fixed capital must be gradually replaced

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[94] Blaug 1985, 53.
[95] Cf. Smith 1993, 162-3, II.i.
[96] Smith 1993, 182, II.ii.
[97] Blaug 1985, 53.

throughout the process of production (i.e., depreciation) until the means of production themselves are completely retired (e.g., obsolescence or destruction). Even within the category of circulating capital, the rate of replacement or turnover time of goods (e.g., timber and fruit) vary greatly. Second, Smith also claims that fixed capital *depends* upon circulating capital.[98] Fixed capital consists of products initially bought and sold in the form of circulating capital on the market as are the parts which are obtained for its gradual replacement and repair, the necessary materials, and the real wages of workers who set it to work. So, the categories of real capital bleed into one another because they are distinguished relatively by degree and interdependent. This ambiguity is arguably due to the micro-real character of the OCT, which is also why it breaks down when expanded to the macroeconomic scale (i.e., fallacy of composition), as I discuss directly. It indicates that the conceptual distinction between kinds of capital must be radically redrawn in qualitative rather than quantitative terms of degree, as I discuss later in relation to Marx.

Ricardo recognizes the problem with Smith's concepts of fixed and circulating capital, though he nevertheless perpetuates them, as I discuss momentarily. His remarks highlight the intrinsic limitations of Smith's conception which appear when it is extended to a slightly more macroeconomic scale of description. In short, one capitalist's circulating capital is another capitalist's fixed capital, and *vice versa*.[99] Wheat is fixed capital for a farmer and circulating capital for a baker. So, Ricardo understandably calls Smith's relative distinction of degree: "A division [which is] not essential, and in which the line of demarcation cannot be accurately drawn".[100]

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[98] Smith 1993, 167-8, II.i: "Every fixed capital [e.g., machines, materials] is both originally derived from, and requires to be continually supported by a circulating capital. […] [/] No fixed capital can yield any revenue but by means of a circulating capital. The most useful machines and instruments of trade will produce nothing without the circulating capital which affords the materials they are employed upon, and the maintenance of the workmen who employ them. Land, however improved, will yield no revenue without a circulating capital, which maintains the labourers who cultivate and collect its produce".

[99] Cf. Ricardo 1951a, 31, I.iv.

[100] Ricardo 1951a, 31, I.iv, fn. Cf. Ricardo 1951a, 150, VIII: "We have already shewn how the capital of a country is either fixed or circulating, according as it is of a more or of a less durable nature. It is difficult to define strictly,

Rather than providing a better distinction, however, he tries to sidestep the problem by reducing fixed and circulating capital to greater or lesser quantities of "accumulated labor".

Ricardo holds fast to the LTV that Smith sketches and rejects and presents an economic theory that integrates into his labor-theory of capital those very elements that Smith found so daunting (i.e., accumulation of capital and land or rent). He formulates Smith's distinction between fixed and circulating capital in terms of degrees "durability" or the amount of *time* for which a real capital stock lasts within the economic process of production and exchange. This emphasis on *time* is of a piece with his LTV, which he fuses with Smith's conception of fixed and circulating capital. For Ricardo, the quantity of labor time "actually bestowed" in the process of production of some piece of capital independently determines its economic value *ex ante*;[101] fixed and circulating capital are merely "accumulated labor".[102] And the quantities of labor time accumulated in the fixed and circulating capital employed in the production of final products are just component parts of the "aggregate sum" of final values.[103] Circulating capital is less durable or is used up and replaced in a shorter period of economic activity, while fixed capital is more durable or is used up and replaced in a longer period of economic activity. So, Ricardo squares the LTV with the concepts of fixed and circulating capital by claiming that the entire value (i.e., accumulated labor time) of the less durable, circulating capital is "transferred" to the final product more quickly, over a shorter period of time, while the entire value of the more durable, fixed capital is "transferred" to the final product more slowly, over a longer period of time. Or, in the same amount of time, a

where the distinction between circulating and fixed capital begins; for there are almost infinite degrees in the durability of capital. The food of a country is consumed and reproduced at least once in every year; the clothing of the labourer is probably not consumed and reproduced in less than two years; whilst his house and furniture are calculated to endure for a period of ten or twenty years".

[101] Cf. Ricardo 1951a, 37, I.iv; Ricardo 1951a, 37, I.iv.

[102] Ricardo 1951a, 410, XXXII.

[103] Cf. Ricardo 1951a, 23, I.iii.

larger portion of circulating capital is "transferred" to the product, while a smaller portion of value of fixed capital is "transferred" to the product.[104] This attempt at a solution is of dubious utility.

As I have already suggested in the previous chapter, the way in which Ricardo tries to sidestep the problem with Smith's concepts of fixed and circulating capital comes at a hefty price: i.e., the transformation problem. In a primitive economy, which contains no capital, values would be determined solely by ratios of quantities of labor. But, Ricardo admits, the "introduction" of fixed and circulating capital, understood as "accumulated labor", into the model of the LTV introduces problems for the theory's ability to provide its explanations of prices. Two equal capitals consisting of different compositions of fixed and circulating capital will yield products whose relative prices or exchange ratios do not exactly correspond to the ratios of quantities of labor bestowed upon them. Different capitals consisting of different compositions of fixed and circulating capital do not ultimately sync with Ricardo's explanation of relative prices (i.e., LTV). There is a discrepancy between labor values and market values. At times he speaks of a "minor variation",[105] at times he writes that this "introduces a considerable modification to the rule",[106] while at other times he claims that the difference is "comparatively slight".[107] In Blaug's words,

[104] Cf. Tsoulfidis 1998, 74; Meek 1956, 103-5

[105] Cf. Ricardo 1951a, 42, I.v: "…after the introduction of these expensive and durable instruments [i.e., capital], the commodities produced by the employment of equal capitals will be of very unequal value; and although they will still be liable to rise or fall relatively to each other, as more or less labour becomes necessary to their production, they will be subject to another, though a minor variation, also, from the rise or fall of wages and profits. Since goods which sell for 5000*l.* may be the produce of a capital equal in amount to that from which are produced other goods which sell for 10,000*l.,* the profits on their manufacture will be the same; but those profits would be unequal, if the prices of the goods did not vary with a rise or fall in the rate of profits".

[106] Cf. Ricardo 1951a, 37-8, I.iv: "It appears then that the division of capital into different proportions of fixed and circulating capital, employed in different trades, introduces a considerable modification to the rule, which is of universal application when labour is almost exclusively employed in production; namely, that commodities never vary in value, unless a greater or less quantity of labour be bestowed on their production, it being shown in this section that without any variation in the quantity of labour, the rise of its value merely will occasion a fall in the exchangeable value of those goods, in the production of which fixed capital is employed; the larger the amount of fixed capital, the greater will be the fall".

[107] Ricardo 1951a, 36, I.iv. Cf. Tsoulfidis 2018, 14.

he basically "shrugged his shoulders".[108] Marx clearly recognizes the problem and claims that a "transformation" procedure would be necessary.[109] For the purposes of my argument, suffice it to say there is a problem with the LTV, which is not Marx's problem, because he does not hold Ricardo's LTV, as I have argued. So, ultimately, the problem with Smith's concepts remains.

Finally, I should briefly address the further problem, mentioned above, which I will return to in relation to Marx below and in the next chapter. The way in which the OCT understands circulating capital will be part of the reason why it cannot recognize or explain the economic POU, to which I will return in the following chapter. The OCT understands both raw materials *and* real wage payments for labor under the same category of circulating capital. Yet labor is the only factor of production which produces the entire product and hence the aggregate profit or value. The OCT will not be able to isolate this essential factor and understand the origin of aggregate profit (i.e., surplus-value) precisely, because it understands labor with the same category with which it also understands costs of production which *do not do any producing* (i.e., raw materials). Moreover, because it understands the payments of circulating capital to labor in physical terms (i.e., real wages), it cannot properly understand the circulation of *money-capital* from capitalists to workers (i.e., nominal wages) and from workers back to capitalists (i.e., profits), which Marx emphasizes (i.e., variable capital). From a micro-real perspective, a capitalist trades real wages (e.g., circulating capital) for labor to produce goods that capitalists will sell to commercial wholesalers, retailers and ultimately final consumers. Yet monetary wage-payments circulate much farther than individual workers' immediate consumption. They multiply the amount of value that can be realized in exchanges, effective demand, and profitability. This is all lost on the OCT.

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[108] Blaug 1985, 96.

[109] Cf. Marx and Engels 1989a, 417, 419, 424, 432. Cf. Marx 1991, chapter 8, especially 252. Cf. Schumpeter 1994, 597-8.

3.3. Productive and Unproductive Labor

Though Smith at times wavers, he and Ricardo both generally hold that *labor* produces the entire industrial product, hence its aggregate value, and the fund of profits.[110] The kind of labor into which capitalists invest circulating capital is what Smith and Ricardo call "productive labor", which they distinguish from "unproductive labor".[111] According to the OCT, a modern, developed economy only really appears when someone has accumulated enough general stock to keep him or herself alive and enough capital stock to hire or employ others by paying real wages to them (i.e., circulating capital). That person is a *capitalist*, who will do so *only if* it is profitable.[112] The difference between productive and unproductive labor is that a capitalist *advances* a real wage to a productive worker, in the sense that the latter replaces the costs of the wage and *adds a profit*, while a capitalist *spends* revenue or mere stock on unproductive labor,[113] which does not replace that cost or yield a profit. So, capital investment expenditure pertains solely to productive labor, which is the only kind of labor which "replaces a capital" and contributes to accumulation.[114]

However, Smith arguably mixes two definitions of productive labor, as Marx notes,[115] in a way which is bound up with the micro-real character of the OCT. The first sense in which he distinguishes "productive" from "unproductive labour" focuses more upon value than mere physical goods. What is decisive is whether labor "produces a value" for an employing capitalist,

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[110] Cf. Smith 1993, 46, I.vi: "The value which the workmen add to the materials, therefore, resolves itself in this case into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced". Cf. Smith 1993, 48, 50 I.vi. Ricardo 1951a, 5, introduction; 125, VI. Ricardo 1951a, 125, VI. Smith's wavering has to do with his 'cost of production theory', according to which different forms of revenue are different sources of the value of the product. Cf. Smith 1993, I.vi: "Wages, profit, and rent, are the three original sources of all revenue as well as of all exchangeable value. All other revenue is ultimately derived from some one or other of these".

[111] Smith's adoption of these concepts is a continuation and modification of the view of the Physiocrats, who preceded Smith, to whom he responds (cf. Marx and Engels 1988, 352-76; cf. Blaug 1985, 54-6; cf. Mazzucato 2018, chapter 1).

[112] Cf. Smith 1993, 46, I.vi; 64, I.viii.

[113] Smith 1993, 46, 48, 50, I.vi; 56, I.vii.

[114] Cf. Smith 1993, 194, II.iii.

[115] Marx and Engels 1989b, 8, 11, 17.

"adds…to the value" of the capitalists' "capital stock", "restor[es]" the capital spent by the capitalist upon labor's wages and provides an additional "profit".[116] So, what is decisive is not whether labor produces a real object. Both kinds of labor might produce *things*. Yet unproductive labor is an expense which only produces a useful object or service, while productive labor produces a *profit*. The capitalist does not really *pay* for productive labor out of his or her own revenue. The circulating "capital stock" spent employing productive labor "is… repaid [to the capitalist] with a profit by the price of the work" once the product is sold.[117] Ricardo similarly argues that value is produced by investing, or spending circulating capital productively to employ productive labor, which *productively* consumes circulating capital stock to "reproduce… a value". Unproductive labor *unproductively* consumes mere stock or revenue and does "not produce another value".[118]

The second sense in which Smith distinguishes "productive" from "unproductive labour" focuses more on mere physical goods than value. In this sense, labor is productive *only if* it "fixes and realizes itself in some particular subject or vendible commodity, which last for some time at least after that labor is past";[119] "the whole annual produce, if we except the spontaneous productions of the earth, [is] the effect of productive labour".[120] Unproductive labor (e.g. servants), meanwhile, "produces nothing which could afterwards purchase or procure an equal quantity of labour".[121] So, service work *tout court* is unproductive on this definition. In Ricardo's view, it is as though capitalists bartered a bundle of real consumer goods ("corn wages") for productive labor,[122] as though productive labor replaces those same real wages ("corn") which labor costs by producing other real goods, and adds additional real goods (i.e., accumulation of profit in real

[116] Cf. Smith 1993, 191, II.iii.
[117] Smith 1993, 163, II.i.
[118] Ricardo 1951a, 151, VIII fn. Cf. Ricardo 1951a, 391, XXXI.
[119] Cf. Smith 1993, 191-2, II.iii.
[120] Smith 1993, 192-3, II.iii.
[121] Smith 1993, 192, II.iii.
[122] Ricardo 1951a, 102, 103, V. Cf. Ricardo 1951a, 19, I.i; 50, I.vii.

terms), which seems patently absurd. One can also find statements in which Smith's two definitions occur side by side.[123] Ultimately, his view of productive labor is simply not entirely consistent but equivocates between an economic and a technical understanding of productivity.

By "unproductive" labor, the OCT does not mean that labor which is not "useful" or "necessary", which it often is.[124] As Smith puts it, "some of the most respectable orders of society", as well as "the meanest" and "most frivolous" of manual laborers, both belong to the class of "unproductive labour", whether in the private or public sectors of the economy. He gives the examples of merchants, sovereigns, judges, soldiers, public and private servants, lawyers, doctors, artists, performers, and landlords.[125] The point is simply that unproductive labor is an overhead cost of production which is deducted from capital's revenue or profit, rather than a source of profit. It is therefore a drain on accumulation. For example, a police officer is paid out of publicly gathered revenue (i.e., taxes) to perform civic services on which business depends. But a police officer does not reproduce the value of his wage *and* a profit for the employer; and he does not produce a real physical good. Or a tailor could be either a productive or unproductive worker, depending on whether the tailor makes products for a company or for a private master. Servants are the archetypical case of unproductive labor because they are paid out of individual revenue and do not produce profit or a real physical good. But merchants or commercial capitalists can also be "unproductive". Agricultural capitalists must share a portion of their profit with a merchant to sell their goods to final consumers on the market. Merchant's profits are an overhead cost that is subtracted from the productive capitalist's stock, though they are necessary and "useful" for the

[123] Smith 1993, 388, IV.ix. Smith is inconsistent about merchants or manufacture (cf. Smith 1993, 385, 388 IV.ix).
[124] Smith 1993, 192, II.iii.
[125] Cf. Smith 1993, 192, II.iii. It is important to note that Smith is not always consistent with this classification.

capitalist to reach final consumers.[126] "Unproductive" work has a decidedly more negative connotation, for Ricardo, for example, government workers, soldiers, and war.[127]

According to the OCT, productive and unproductive labor are employed in various proportions in society, depending on the nature of capital investments. The proportion between investments of circulating capital into productive labor and revenue spent on unproductive labor will determine the productivity of the entire economy. Smith writes:

> **The proportion between capital and revenue**, therefore, seems every where to **regulate the proportion between industry and idleness**. Wherever capital predominates, industry prevails: wherever revenue, idleness. Every increase or diminution of capital, therefore, naturally tends to increase or diminish the real quantity of industry, the number of productive hands, and consequently the exchangeable value of the annual produce of the land and labour of the country, the real wealth and revenue of all its inhabitants.[128]

3.4. Microeconomic Scale of Description: Profit, Accumulation, and Distribution

According to the OCT, capitalists invest circulating capital to employ productive labor to produce the real profit which they will accumulate as further capital. Yet the OCT understands this process in a primarily microeconomic manner, by focusing on individual capitalists and the production of real goods. Individual capitalists must receive revenue or profit *before* they can save it or spend it productively (i.e., reinvestment) and accumulate further capital. Individual revenue constrains or determines the possible profits which individuals can further accumulate or reinvest. The OCT then "aggregates up" this fundamentally microeconomic model to a macroeconomic one. Namely, it concludes that the amounts of individual revenues will constrain or determine the total amount of capital which the entire capitalist class can accumulate (i.e., fallacy of composition). But how is anyone supposed to receive anything to save or reinvest if everyone is waiting for revenue from

[126] Cf. Smith 1993, 385 IV.ix.
[127] Ricardo 1951a, 220, XVI; 224, XVII.
[128] Smith 1993, 199, II.iii. Cf. Smith 1993, 192-3, II.iii; Smith 1993, 213, II.iii.

others first, but no one is spending anything in the first instance? This is the fundamental methodological problem with the OCT which the post-Keynesian approach points out, to which Marx does not succumb.

(1) The OCT's view of profit express its micro-real character in two respects. First, it construes profit in psychological terms of capitalists' desire to save and invest to obtain a profit which they will accumulate as a further capital stock. A capitalist's only "interest"[129] or "sole motive"[130] for investing capital into production and hiring labor is a "private profit" over and above the costs of production. Capitalists' "desire" to save or reinvest capital stock and improve their position is simply stronger than the brute "passion" for immediate enjoyment or consumption,[131] which seduces other less continent souls into imprudent spending. Ricardo speaks of "the desire, which every capitalist has, of diverting his funds from a less to a more profitable employment".[132] Smith writes that a capitalist "intends only his own gain… pursuing his own interest", and, given the OCT's equation of the microeconomic and macroeconomic scales of description, he takes this to mean that the individual gain or interest *equals* the common gain or interest.[133] Yet these are fundamentally microeconomic observations, of limited macroeconomic applicability.

Second, the OCT understands profit as the net return that remains for individual capitalists' when their overhead costs of production or expenses are deducted from their gross returns (i.e., profits = income – expenses). Smith thinks of profit in the first instance as an additional sum of value over and above those overhead costs which individual capitalists must pay for the wages of labor (i.e., circulating capital), means of production and raw materials (i.e., circulating and fixed

[129] Cf. Smith 1993, 64, I.viii; Smith 1993, 46, I.v; Smith 1993, 48, I.vi.
[130] Cf. Smith 1993, 225, II.v.
[131] Cf. Smith 1993, 203, II.iii.
[132] Ricardo 1951a, 91, IV. Cf. 291, XXI.
[133] Cf. Smith 1993, 191-2, IV.ii: "[The individual capitalist] intends only his own gain, and he is this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. […] By pursuing his own interest he frequently promotes that of the society more effectively than when he really intends to promote it".

capital), and rent. He writes: "Whatever remains… after paying the rent and keeping up the stock [and paying labor], is called profit".[134] "It is this surplus only which is neat [i.e., net] or clear profit".[135] And Ricardo writes: "The remaining quantity of the produce of the land [cf. real analysis], after the landlord [i.e., rent] and labourer [i.e., wages] are paid, necessarily belongs to the farmer [i.e., capitalist], and constitutes the profits of his stock".[136] (Recall that Ricardo counts capital as "accumulated labour" under the category of labor, hence it does not appear here.)

Smith's account of the gross and aggregate revenue or profit of an entire nation illustrate the fact that the OCT's conception of profit is fundamentally microeconomic or bases any further aggregate-level analysis on microeconomic foundations. In his discussion of the parts of aggregate revenue (i.e., gross and net), Smith draws a conclusion about aggregate national revenue (i.e., macroeconomic scale of description) from his definition of *individual* profit (i.e., microeconomic scale of description) in a way which runs all of his various conceptual distinctions together into "a whole *nest*… of faulty procedure", to borrow an expression from Hegel and Kant.[137] To recall, the orthodox definition of profit is 'net revenue = gross returns minus expenses' such as raw materials or means of production. From the fact that expenditure on costs of production can make up no part of an individual capitalist's profit, Smith concludes that expenditure on costs of production can make up no part of the aggregate profit of the entire class of capitalists or entire nation or society. In other words, none of the value spent upon fixed capital or means of production would count as net revenue or profit at the aggregate-level. Smith thinks of society as a whole as if it were an individual, equating fixed capital with expenses or costs and circulating capital with net returns or

[134] Smith 1993, 51, I.vi.
[135] Smith 1993, 93, I.ix. Cf. Smith 1993, 193, II.iii: "Of the produce of a great manufactory, in the same manner, one part, and that always the largest, replaces the capital of the undertaker of the work [i.e., is an expense or overhead cost; e.g., fixed capital]; the other pays his profit, and thus constitutes a revenue to the owner of this capital".
[136] Cf. Ricardo 1951a, 112, VI.
[137] Hegel 1969, 195.

profits.[138] This is a *fallacy of composition*, which follows from his equation of the microeconomic and macroeconomic scales of description, the reduction of the aggregate-level to the individual-level, the model which is primarily microeconomic, and only secondarily macroeconomic ("aggregating up"). Smith writes:

> [An individual capitalist's] real wealth is in proportion, not to his gross [revenue], but to his neat revenue. [/] The gross revenue of all the inhabitants of a great country, comprehends the whole annual produce of their land and labour; the neat [i.e., net] revenue, what remains free to them after deducting the experience of maintaining; first, their fixed capital [i.e., means of production]; and, secondly, their circulating capital [i.e., real wages]; or what, without encroaching upon their capital, they can place in their stock reserved for immediate consumption, or spend upon their subsistence, conveniencies and amusements [i.e., revenue for individual consumption]. **Their real wealth too is in proportion, not to their gross, but to their neat revenue**. **The whole expense of maintaining the fixed capital** [i.e., costs subtracted from gross revenue] **must evidently be excluded from the neat revenue of the society.** Neither the materials necessary for supporting their useful machines and instruments of trade, their profitable buildings, &c. nor the produce of the labor necessary for fashioning those materials into the proper for, can ever make any part of it. […] The expense of maintaining the fixed capital in a great country, may very properly be compared to that of repairs in a private estate.[139]

For an individual capitalist, it is true, the expenses he or she must pay to obtain the means of production (i.e., "fixed capital") obviously cannot comprise a portion of his or her profit. And for the entire class of capitalists or society aggregate expenses paid e.g., for rent, interest, or fees, cannot comprise a portion of aggregate profit. Yet Smith applies the same definition of profit to different scales of description, which he *equates*. And thus, he overlooks the basic macroeconomic observation that one capitalist's investment expenditure (i.e., costs) *is* another capitalist's revenue or profit, and *vice versa*. One capitalist's net revenue or profit *is* the expense or cost of the other. As long as both invest in *the production of more, new products of labor*, rather than the mere

[138] Cf. Smith 1993, 174, II.ii: "though the whole expence of maintaining the fixed capital is thus necessarily excluded from the neat revenue of the society, it is not the same case with that of maintaining the circulating capital. […] The circulating capital of a society is in this respect different from that of an individual. That of an individual is totally excluded from making any part of his neat revenue, which must consist altogether of his profits. But though the circulating capital of every individual makes a part of that of the society to which he belongs, it is not upon that account totally excluded from making a part likewise of their neat revenue".

[139] Smith 1993, 172, 173, II.ii.

distribution of extant wealth, both contribute to the production of aggregate wealth, to aggregate growth and so to aggregate profit, which can be distributed to them in various shares. It does not matter whether their products are means of production or consumer goods, so long as their production is an addition to aggregate wealth. Capitalists who produce and sell the means of production (i.e., fixed capital) earn a profit or net revenue by selling them to other capitalists who produce and sell means of final consumption. For the latter, those means of production are an overhead cost or expense that must be subtracted from their gross revenue at a microeconomic scale of description. But those capitalists who profit from "the whole expense of maintaining fixed capital" nevertheless contribute to aggregate growth and hence the aggregate profit or the "net revenue of society". Smith seems to exclude the expenses on fixed capital or means of production from aggregate profit or net revenue and include circulating capital because he understands the entire economy in terms of production of real goods for *final* consumption, from the perspective an individual economic agent, who can only *eat* circulating capital (i.e., real wages), but not fixed capital (i.e., machines).[140] Marx notes the problem with Smith's view here,[141] and the macroeconomic view expressed in his "schemas of reproduction" and departments I and II of capital, discussed in the previous chapter, sidesteps this entire confusion,[142] as I also discuss below.

[140] Cf. Smith 1993, 193, II.iii: "Though the whole annual produce of the land and labour of every country, is, no doubt, ultimately destined for supplying the consumption of its inhabitants, and for procuring a revenue to them; yet when it first comes either from the ground, or from the hands of the productive labourers, it naturally divides itself into two parts. One of them, and frequently the largest, is, in the first place, destined for replacing a capital, or for renewing the provisions, materials, and finished work, which had been withdrawn from a capital [e.g., to pay those productive workers' wages]; the other for constituting a revenue either to the owner of this capital, as the profit of his stock; or to some other person [i.e., a landlord], as the rent of his land".

[141] In *Theories of Surplus Value* (Marx and Engels 1988, 407ff.), Marx discussion of Smith illustrates the difficulties when one conflates microeconomic and macroeconomic scales of description of individual and aggregate gross and net profit.

[142] Cf. Marx 1992, chapters 20 and 21.

One also finds similar statements in Ricardo. In his *Principles*, he writes that the sole interest of the individual capitalist concerns profit. And then he too proceeds to *equate* the interest of the individual capitalist with the interest of the entire "nation" or "state". He writes:

> **To an individual** with a capital of 20,000*l.*, whose profits were 2000*l.* per annum, it would be a matter quite indifferent whether his capital would employ a hundred or a thousand men, whether the commodity sold for 10,000*l.*, or for 20,000*l.*, provided, in all cases, his profits were not diminished below 2000*l.* **Is not the real interest of the nation similar?** Provided its **net real income**, its rent and profits be the same, it is of no importance whether the nation consists of ten or of twelve millions of inhabitants.[143]
>
> If countries with limited capitals, but with abundance of fertile land, do not engage in foreign trade, the reason is, because **it is less profitable to individuals, and therefore also less profitable to the state**.[144]

Ricardo appears to foreshadow Charles Wilson's apocryphal claim that "what's good for GM is good for America". He seems to commit a fallacy of composition here ("therefore"). And this statement is surprising because he is elsewhere quite clear that the wellbeing of a nation's population is matter of the "gross product" of industry, not net or profit, because the income of workers is a *cost* for capitalists that comprises a portion of the gross returns. Elsewhere, he writes: "the power of supporting a population [i.e., wage workers] depends always on the gross product [which includes costs such as real wages], and not on its net produce [i.e., real profits]".[145] So, the size and health of the working class depends upon the gross produce or returns. The capitalist class or even individual capitalists might obtain the *same* amount of net returns with a wide variety of different quantities of gross returns or different populations. But it makes a massive difference for a nation of 12 million if the gross produce only covers the needs of 10 million. It is only "a matter quite indifferent" or "of no importance" to an individual capitalist. So, to answer his question: no, the real interest of the *entire* nation is not similar to the individual capitalist.

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[143] Ricardo 1951a, 348, XXVI.
[144] Ricardo 1951a, 350, XXVI, fn.
[145] Ricardo 1951a, 390, XXXI. Cf. Ricardo 1951a, 388, XXXI; 392-3, XXXI.

Ricardo's view is ultimately somewhat different than Smith's, however, because he thinks the only costs of production are *labor* and *land-rent*. And the way in which it differs has its own problems. Given his LTV and his reduction of fixed and circulating capital to "accumulated labor", capital would not be costs or expenses deducted from gross returns. The primary cost of production which must be subtracted from gross returns, and hence the primary limit to profits, is investment expenditure on costs of labor (i.e., real wages): "nothing can affect profits but a rise in wages".[146] Ricardo agrees with Smith that labor produces the total product and therefore the total value in an economy from which wages, profits and rents are paid as deductions. Their upper limit is the total amount of the product of labor. Because the workers' subsistence wage is *less* than the total value that it produces (i.e., exploitation), it can leave room for capitalists' profits and landlords' rents. In the first instance, only changing wages can alter the amount of the product left over for capitalists' profits:[147] "…in proportion therefore as they [i.e., workers] get more, he [i.e., the employing capitalist] must retain less". "There can be no rise in the value of labour [i.e., wages] without a fall of profits".[148] (This is a microeconomic view of an individual capitalist's profit which Marx will contest, as I discuss below.[149])

The primary limit to profit, wages, can be increased secondarily by anything which raises the cost of labor. Rent is thus the secondary yet significant expense that can limit profits.[150] Assuming the division of the aggregate product or wealth is a fixed- or zero-sum game, if rent increases, then it can raise the costs of living or subsistence for workers (i.e., the cost of grain and housing), indirectly raising wages, and hence indirectly cutting into profits to a degree that could

[146] Cf. Ricardo 1951a, 118, VI.
[147] Ricardo 1951a, 114, VI. Cf. Ricardo 1951a, 110, VI; 114, VI; 115, VI.
[148] Cf. Ricardo 1951a, 35, I.iv.
[149] Cf. Marx 1991, 347.
[150] It is curious that interest, credit and financial capital do not appear in his *Principles*. He was a successful financier.

threaten expanded investment or production and employment itself.[151] If the price of corn is high, because it requires a lot of labor for its production (according to Ricardo), because the land is less fertile, then the capitalists who employ those workers will have to pay them more and thus reduce their profits. Demand for corn will motivate capitalists to gradually use up the more fertile land and move into less and less fertile land, progressively investing more with diminishing returns, until they merely break even, as it were. The point at which they break even establishes a limit to production and the standard of the cost that must be paid to workers in corn as well as what landlords can charge in rent. The capitalists who are fortunate enough to employ labor for production on the more or most fertile land will sacrifice a greater part of their surplus profits to landlords in the form of ground-rent in exchange for the privilege of using that land.[152] So, the relative or "differential" fertility of land determines the amount of ground-rent that landlords are capable of extracting from capitalists, which distributes profits unequally and cuts into their profit indirectly by affecting the cost of corn which workers require.[153] Ricardo writes:

> Although a greater value is produced, a greater proportion of what remains of that value, after paying rent, is consumed by the producers [i.e., the workers], and it is this, and this alone, which regulates profits.[154]

In sum, Ricardo's view would circumvent Smith's problem of fixed and circulating capital, gross and net profit (i.e., fallacy of composition) at the cost of the so-called "transformation problem", which applies to his LTV. Hence the OCT is problematic on all sides.

(2) The OCT's view of the accumulation of capital also expresses its micro-real character. As discussed above, a portion of stock is capital *only if* it is utilized to obtain a future revenue or

[151] Cf. Ricardo 1951a, 115, VI: "wages can never rise so high as to leave no portion of this sum for profits".
[152] Cf. Ricardo 1951a, 427, XXXII: "As rent is the effect of the high price of corn, the loss of rent is the effect of a low price".
[153] Cf. Ricardo 1951a, 110, VI; Ricardo 1951a, 126, VI (cf. 143-4, VII).
[154] Ricardo 1951a, 125, VI. It is remarkable that Ricardo refers to the *workers* as the "producers".

profit, which in turn will be capital *only if* it is also saved or reinvested to engage in further production of more real goods, which can be accumulated into a fund as stock or capital. So, Smith claims: "The rise of profit operates like compound interest".[155] This is the movement of accumulation. Profits are made and capital is accumulated when individual capitalists reinvest revenue or profits (i.e., productive expenditure), which the OCT calls "saving", not by hoarding revenue (i.e., non-spending). And it is important to note that the OCT regards "investment expenditure" in further real production and "saving" as synonymous,[156] because this assumption performs a sort of *Deus ex machina* function, as it were, according to which the economy is always in equilibrium and disequilibrium will only be an exogenous exception, as I address shortly. In a comment on the commercial capital, Smith writes: "The **profit is made by parting with it**; and it comes back with both its own profit, and the profit upon the whole price of [the initial investment]".[157] And similarly, Ricardo claims: "There can be no greater **error than in supposing that capital is increased by non-consumption** [i.e., hoarding]".[158]

However, the OCT models accumulation in relation to the revenue and profit of individual capitalists, then it "aggregates up" the individual acts of saving into its macroeconomic view of accumulation. According to the OCT, aggregate investment or real aggregate production or growth of industry are not the driving factors of the accumulation of capital (pace Keynes and Marx). Rather, the OCT claims that *individual capitalists' savings* (i.e., reinvestments) out of revenues and profits drives accumulation at an individual *and* aggregate scale of description, as I will address shortly. In a particularly striking passage, Smith writes:

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[155] Smith 1993, 94, I.ix.
[156] Bleaney 1976, 16, 22-3, 209.
[157] Cf. Smith 1993, 164, II.i. For discussion of Smith's view, cf. Meek 1954; Meek 1956, chapter 2; Verdera 1992.
[158] Ricardo 1951a, 151, VIII fn. For discussions of Ricardo's view, cf. Hollander 1904 and Hollander 1911; Edelberg 1933; Ricardo 1951b; Meek 1956, chapter 3.

> Capitals are increased by parsimony [i.e., saving], and diminished by prodigality and misconduct. [/] Whatever a person saves from his revenue he adds to his capital, and either employs it himself in maintaining an additional number of productive hands, or enables some other person to do so, by lending it to him for an interest, that is, for a share of the [other person's revenue]. **As the capital of an individual can be increased only by what he saves from his annual revenue or his annual gains, so the capital of a society**, **which is the same** with that of all the individuals who compose it, **can be increased only in the same manner**.
>
> **Parsimony, and not industry, is the immediate cause of the increase of capital. Industry indeed provides the subject which parsimony accumulates. But whatever industry might acquire, if parsimony did not save and store up, the capital would never be the greater. [/]** Parsimony, by increasing the fund which is destined for the maintenance of the working class of productive hands, tends to increase the number of those hands whose labour adds to the value of the subject upon which it is bestowed. It tends therefore to increase the exchangeable value of the annual produce of the land and labour of the country. It puts into motion an additional quantity of industry, which gives an additional value to the annual produce.[159]

Smith clearly equates the accumulation of an individual's wealth with the accumulation of total social wealth here, or micro- and macroeconomic scales of description. Similarly, Ricardo also holds that the goal of economic activity is production for consumption,[160] and net returns on production determine the accumulation of capital.[161] So, the degree of individual saving would determine the aggregate accumulation of revenue or profit as capital and hence productive investment expenditure in contrast to unproductive consumption.[162] For the OCT, industry and accumulation are not the drivers.

The essential point regarding the micro-real character of the OCT is the way in which it constructs its macroeconomic picture of accumulation by "aggregating up". According to the OCT,

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[159] Smith 1993, 199, II.iii.

[160] Cf. Ricardo 1951a, 318-9, XXII: "The object of all trade is to increase productions". Yet the ultimate aim of all production, for Ricardo, is *consumption*. Cf. Ricardo 1951a, 290, XXI: "No man produces, but with a view to consume or sell, and he never sells, but with an intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production".

[161] Cf. Ricardo 1951a, 334, XXIV: "High profits are favourable to the accumulation of capital" (cf. ibid., ch. VI).

[162] Cf. Ricardo 1951a, 150, VIII: "When the annual productions of a country more than replace its annual consumption, it is said to increase its capital; when its annual consumption is not at least replaced by its annual production, it is said to diminish its capital. Capital may therefore be increased by an increased production, or by a diminished unproductive consumption".

individual capitalists' profits can be accumulated as capital or reinvested (i.e., saved) *only after* they receive revenue or profit first and then reinvest (i.e., save) them. So, individual capitalists would have to receive income *before* they can save or reinvest it. Individual incomes would constrain aggregate investment and accumulation of capital. And any aggregate-level accumulation of capital is supposed to be a simple addition of individual-level savings. So, the OCT holds that the individual revenues and profits of capitalists who save them are the only limit to production and the aggregate accumulation of capital.[163] For example, Smith *equates* the formation and limits of profits and the accumulation of further capital at the microeconomic (i.e., individual) and macroeconomic (i.e., "national") scales of description. He writes:

> **The capital of all the individuals of a nation, has its limits in the same manner as that of a single individual**, and is capable of executing only certain purposes. The capital of all the individuals of **a nation is increased in the same manner as that of the single individual**, by their continually accumulating and adding it to whatever they save out of their revenue.[164]

As I have indicated above, the OCT assumes that capitalists' savings are automatically reinvested in further production in a way which simply *redistributes* the same amount of real consumption differently. This assumption leads it to conclude that markets will always be in equilibrium in principle, which is perhaps the most dubious aspect of the micro-real view.[165] It rules out the possibility of any imbalance between production and consumption or supply and demand (i.e., Say's Law), which would be possible if money were involved and the model adopted a macroeconomic scale of description. Smith writes:

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[163] Ricardo 1951a, 291-2, XXI. Ricardo 1951a, 296, XXI.

[164] Smith 1993, 220, II.v.

[165] Cf. Sherman 1979, 4: "All savings are *not* invested, so aggregate demand does *not* equal aggregate supply, except by accident". Financial profits can be reinvested in unproductive, speculative ventures, stocks, bonds, or real estate, or perhaps they must be used unproductively to repay debts (i.e., deflation). For the heterodox view, cf. Hudson 2015, 168: "debt service [i.e., payments to rentiers] simply transfers purchasing power from debtors to creditors, with no effect on the overall spending on current output [i.e., consumption]. This assumes that creditors will spend the debt service they receive on consuming as much as indebted consumers and workers would have done". For the mainstream view, cf. Bernanke 2000, 24: "debt-deflation [i.e., mass repayment of debts or rents] represented no more than a redistribution from one group (debtors) to another (creditors)".

> **That portion [of income] which [a capitalist] annually saves**, as for the sake of profit it is immediately employed as a **capital, is consumed** in the same manner [as income for immediate consumption by productive workers], and nearly in the same time too, but **by a different set of people**, by labourers, manufacturers, and artificers, who re-produce with a profit the value of their annual consumption. […] **The consumption is the same but the consumers are different**.[166]

If a capitalist saves (i.e., reinvests), the story goes, then he or she abstains from present individual consumption in expectation of future consumption; he or she hires workers to presently engage in productive consumption of capital (e.g., means of production or raw materials) and pays a real wage (i.e., circulating capital) to workers who will consume in the place of the capitalist.[167] The idea that workers consume in the place of capitalists when the latter invest is supposed to automatically establish an equilibrium between production and consumption, supply and demand (Say's Law).[168] Yet, if *every individual* saves or reinvests, then there will be no one to work and consume or spend unproductively and hence no revenue or profit, as the so-called underconsumptionists would argue, but rather an economic POU. This is the contradiction inherent in the OCT's equation of micro- and macroeconomic scales of description (i.e., fallacy of composition). Marx will reverse the OCT's view of the direction of determination here, much like the post-Keynesian view (i.e., individual capitalists can receive revenue *only if* or *only after* all other capitalists invest in production, e.g., costs and wages; all capitalists *must* spend first).[169]

(3) Finally, it is important to consider the way in which the OCT conceives of the distribution of the aggregate product of labor and the aggregate net revenue or profit. The way in which the OCT does so will limit its ability to explain phenomena such as the economic POU, while Marx conceives of the production and distribution of value throughout the economy in such

[166] Smith 1993, 200, II.iii.
[167] Cf. Mitchell, Wray, Watts 2019, chapter 11.
[168] Cf. Say 1834, 138-9, I.xv; Baumol 1977, Baumol 1999; Keynes 1964, 18, 21-2, 26.
[169] Cf. Marx 1990, 436; 739; Marx 1976c, 43-8, IX. Cf. Kalecki 1971, 78-9.

a way that the POU is possible and can be explained. In short, the OCT can only predict that costs on wages or landlords might exogenously strangle capitalist production and accumulation, while Marx argues that the accumulation of surplus-value as capital gives rise to its own endogenous limits, phenomena such as the POU or the "rabble", as I discuss in the next chapter.

Consistent with the OCT's equation of micro- and macroeconomic scales of description, Smith's so-called cost of production theory analyses the value of a "a particular commodity" into its component parts in the same way as it analyses "all of the commodities which compose the whole annual produce of labour of every country" into its individual component costs of production (i.e., laborers' wages, capitalists' profits, landlords' rent).[170] The various forms of income or revenue of the classes of which the economy consists are also the costs of production of commodities.[171] Labor produces the "general stock out of which each man's riches are drawn", Ricardo writes, which is broken up into the relative shares of income of the three classes which constitute a capitalist society according to their claims upon it.[172] All the advocates of the OCT consider workers, capitalists, and landlords to be the fundamental social classes, which can be disaggregated into subgroups (e.g., industrial, commercial, or financial capitalists; productive or unproductive workers). And so, wealth is produced and distributed from productive industrial labor to the rest of society and unproductive sectors as revenue. (Here Marx will object to the way in which the OCT regards aggregate value as a mere sum of primitive, individual, "constituent elements", or equates the different scales of description[173])

[170] Marx objects that Smith conceives of these three costs as "original sources" of value. Cf. Smith 1993, 50, I.vi.
[171] Smith 1993, 50, I.iv. Cf. Smith 1993, 291, IV.ii; 53, 56, I.vii; 451, V.ii;193, II.iii.
[172] Ricardo 1951a, 267, XX. Cf. Ricardo 1951a, 5.
[173] Cf. Marx 1991, 1002; cf. Marx 1991, 993: "It would be wrong however to say that the value of wages, the rate of profit and the rate of rent are independent constituent elements of value, with the value of the commodity, minus its constant component, arising from their combination; in other words, it would be wrong to say that these form the constituent components of commodity value or of the price of production".

The "unproductive class" of persons or sectors of society, Smith writes, "adds nothing to the value of the sum total of the rude produce of the land. Instead of increasing the value of that sum total, it is a charge and expense which must be paid out of it".[174] Apart from unproductive workers, the "unproductive class" of non-workers consists of unproductive segments of the capitalist class (e.g., financial capitalists) and those who do not contribute to production at all, but only consume unproductively (i.e., landlords).[175] With the sole exception of Malthus,[176] every classical political economist regards the class of landlords as a feudal remnant which has monopolized the earth and demands a portion of other people's income or profit in exchange for the use of their real assets with the sanction of the state. They "produce nothing" for the public, Smith writes, and "reap where they have never sowed" by demanding others pay for the "for the license to gather".[177] Similarly, Ricardo claims that the rents of landlords are a mere "transfer of value" or an unproductive deduction from aggregate wealth produced by labor.[178] Rents simply raise subsistence wages and cut into the profits of capitalists, on which real production and development depends. So, he also concludes, "the interest of the landlord is always opposed to that of the consumer and manufacturer".[179] "All classes, therefore, except the landlords, will be injured by the increase in the price of corn. […] the interest of the landlord is… opposed to the rest of the community".[180] As John Stuart Mill would later put it: "They grow richer, as it were, in their sleep, without working, risking, or economizing".[181] Nearly all classical political economists thought that

[174] Smith 1993, 385 IV.ix; Smith 1993, 192, II.iii.
[175] Cf. Smith 1978, 563.
[176] Cf. Malthus 1836, book II, chapter I, §§ 9-10.
[177] Smith 1993, 165, II.i. Cf. Smith 1993, 47-8, I.vi; 64, I.viii: "As soon as land becomes private property, the landlord demands a share of almost all the produce which the labourer can either raise, or collect from it. His rent makes the first deduction from the produce of labour which is employed upon land". Cf. Smith 2000, 135, X.x.i.
[178] Ricardo 1951a, 400, XXXII.
[179] Ricardo 1951a, 335, XXIV, cf. 424, XXXII.
[180] Ricardo 1951a, 336, XXIV.
[181] Mill 1985, 169.

such exogenous costs would threaten to bring capitalist production to a "stationary state",[182] which Marx mockingly calls "the bourgeois 'Twilight of the Gods'—the Day of Judgement".

4. Marx's Concept of Capital: Macro-Monetary

In this section I argue that Marx's view of capital falls under the characterization of a "macro-monetary theory", as Fred Moseley has put it. It is an explanation of the formation and accumulation of what I will call "aggregate profit", which he calls "surplus-value", though I use these terms synonymously for reasons I address below. Aggregate profit is the origin of individual profits, which are merely forms or portions of it. In what follows I show how his concepts of capital, the composition of capital, productive and unproductive labor, and the accumulation and distribution of surplus-value differ from those of the OCT. In particular, I highlight the way in which Marx's category of variable capital is a more precise successor concept for the OCT's category of circulating capital. In the following chapter, I make use of these concepts to show that and how Marx can explain the economic POU and the "rabble" which Hegel recognizes.

4.1. Monetary Analysis

4.1.1. Capital is Not a Thing

In *Wage Labor and Capital*, Marx identifies OCT's concept of capital as I have characterized it above (i.e., real analysis), according to which, borrowing Keynes's formulation, it is just a "self-subsistent entity".[183] Marx writes:

> Capital consists of raw materials, instruments of labour, and means of subsistence of all kinds, which are employed in producing new raw materials, new instruments, and new means of subsistence [i.e., Smith and Say's definitions]. All these components of capital are created by labour, products of labour, *accumulated labour* [i.e., Ricardo's definition].

[182] Mill 1985, 111-17.
[183] Keynes 1964, 106.

> Accumulated labour that serves as a means to new production is capital. ***So say the economists***.[184]

In volume III of *Capital*, he calls this the "vulgar conception of capital".[185] Every society has used real, physical means of production to produce goods, but not every society has been a capitalist society which uses *capital* in a very specific sense to produce and accumulate aggregate profits in money-form (ΔM, M'). To call the "weapon" which a tribesman uses to catch his game the "hunter's capital", for instance, renders the concept so general that it has no specific grasp on capital as it functions in modern society.[186] Technological definitions are far too general, because nothing is a value, commodity, capital, or a source of value *qua* real physical thing, for Marx, without any further determination or qualification.

In *Capital*, Marx proposes two alternative characterizations of capital of his own. They extend beyond the narrow confines of mainstream economics and classical political economy into a domain which economists separate off into sociology—at the cost of obscuring Marx's object.[187]

First, capital is a kind of social relation. In *Wage Labour and Capital*, Marx continues:

> A cotton-spinning machine is a machine for spinning cotton. Only under certain conditions does it become capital. Torn away from these conditions, it is as little capital as gold is itself money, or sugar is the price of sugar. […] *Capital* is also a **social relation** of production. It is a *bourgeois relation of production*, a relation of production of bourgeois society.[188]

And similarly in volume III of *Capital*, Marx unpacks his conception in somewhat greater detail:

> …**capital is not a thing, it is a definite social relation of production** pertaining to a particular historical social formation, which simply takes the form of a thing [i.e., value-form: commodities, money, etc.] and gives this thing a specific social character. **Capital is not the sum of the material and produced means of production. Capital is the means of production as transformed into capital, these being no more capital in themselves**

[184] Cf. Marx 1976c, 28.
[185] Marx 1991, 548.
[186] Ricardo 1951a, 23, I.iii.
[187] Cf. Schumpeter 1954, 120: "In the work of the *scholar* Marx we have to distinguish between a sociological and an economic part—however disagreeable such a distinction may be to his disciples. […] For us Marx is only of importance as an economist". Cf. Schumpeter 2008, chapters 2 and 3. Cf. Schumpeter 1994, 25-7, 384-5.
[188] Marx 1976c, 28-9.

> **than gold or silver are money** [in themselves]. It is the means of production monopolized by a particular section of society, the products and conditions of activity of labour-power, which are rendered autonomous vis-à-vis this living labour-power and are personified in capital through this antithesis. It is not only the workers' products which are transformed into independent powers, the products as masters and buyers of their products, but the social powers and interconnecting form of this labour also confront them as properties of this product. Here we therefore have one factor of a historically produced social production process in a definite social form, and at first sight a very mysterious form.[189]

As I argued in the previous chapter, for Marx value is a social relation between quantities of physical things in which it exists ("forms of value"), either money or commodities, which mediate the relations between persons in capitalism.[190] "Social relations" such as value "are… material [*dinglich*] relations between persons and social relations between things".[191] And as I will argue shortly, Marx also thinks that capital is just "value in [the] process" of its own augmentation (*Verwertung*).[192] The activities of persons in a capitalist economy also mediate the circulation of commodities and money in the market and ultimately the process of accumulation of money and commodities as capital. "Capital is not a thing, but a social relation between persons which is mediated through things".[193] So, the production and accumulation of capital simply "reproduces the capital relation on an expanded scale".[194] Fancy as these statements may sound, Marx is arguably just making a point that is trivially true, if one expands the understanding of economic categories to social phenomena. When workers produce and exchange things for money and capitalists accumulate profit, they stand in certain social relations of relative symmetry (i.e.,

[189] Marx 1991, 953. Cf. Marx 1991, 373.
[190] Cf. Rubin 2008, 69: "value (*stoimost*) does not characterize things, but human relations in which things are produced". Cf. Harvey 2018a, 35: "Value is a social relation, and you cannot actually see, touch or feel social relations directly; yet they have an objective presence…" "…value is immaterial, but *objective*. […] To find value in a commodity just by looking at a commodity is like trying to find gravity in a stone" (39).
[191] Marx 1990, 166.
[192] Marx 1990, 256.
[193] Marx 1990, 932.
[194] Marx 1990, 763. Cf. Marx 1990, 724.

exchange) or asymmetry (i.e., production); and a physical implement is *capital* only if it is used to produce a monetary expression of aggregate-profit (i.e., surplus-value) for capitalist.

Second, capital is a process. Both the OCT and Marx hold that labor is necessary for producing commodities, value, capital, and accumulating profits and capital. Yet Marx completely reconceptualizes the matter. Marx coins the term "valorization" (*Verwertung*)[195] and appears to adopt the notion of "*mieux-value*" from Sismondi to designate a "surplus-value",[196] which I gloss as aggregate profit, as I discuss shortly. By "valorization" Marx means the process which produces quantities of monetary value or a "value product"[197] by producing commodities which are sold for a value greater than the value of their cost of production—hence a "surplus-value". Capitalist economies are not primarily concerned with producing real goods which people need to live (i.e., use-values), but rather with producing aggregate profit. "Capitalist production [is] the production of surplus-value",[198] the exponential production and accumulation of which Marx's account wants to explain. And, in a sense, to say that a capitalist *accumulates* profit, as Marx understands that term, is a pleonasm on par with round circles. Capital is just the social process in which aggregate-profit is produced, reinvested, and accumulated on an ever-expanding scale.

Unlike the OCT, Marx's concept of capital includes real stocks of physical goods (e.g., means of production, consumption), but also dynamic flows of physical goods, and above all flows

[195] Cf. Marx 1990, 302, chapters 4 and 7. Cf. Marx 1992, 185. Though I have primarily stressed the similarity between Marx and Keynes, one must also note the affinity of Schumpeter's dynamic view of capitalism (c.f., Schumpeter 1951, 159).

[196] Marx's own French term for *Mehrwert* is "*plus-value*". Cf. Sismondi 2019, 92, 229-231. Marx engages with Sismondi's concepts of value and capital sporadically in his *Grundrisse*. Cf. Marx 1993, 759. Cf. Sismondi 2019, 76, 81.

[197] Marx 1990, 639, 321, 254; Cf. Marx 1992, 458, 462, 464, 470; Marx 1991, 482.

[198] Marx 1990, 975. Cf. Marx 1990, 449: "The driving motive and determining purpose of capitalist production is the self-valorization of capital to the greatest possible extent, i.e. the greatest possible production of surplus-value…" Cf. Marx 1990, 254. Cf. Marx 1990, 644: "Capitalist production is not merely the production of commodities, it is, by its very essence, the production of surplus-value".

of *money* (e.g., nominal wages, profits, interest, etc.), which are all various forms of *value*.[199] It integrates static and dynamic aspects, real and monetary aspects, into a fluid, holistic model. Thus, it goes *beyond* the OCT without discarding the latter's better insights. In volume I, Marx writes:

> The capitalist process of production, therefore, seen as a total, connected **process**, i.e., a process of reproduction, produces not only commodities, not only surplus-value, but it also produces and reproduces the **capital-relation** itself; on the one hand the capitalist, on the other hand the wage-labourer.[200]

And in volume II, he writes:

> **Capital**, as self-valorizing value, does not just comprise class relations, a definite social character that depends on the existence of wage-labour. It **is a movement** [*Bewegung*—a process], **a circulatory process through different stages… Hence it can only be grasped as a movement, and not as a static thing**. Those who consider the autonomization [*Verselbstständigung*] of value as a mere abstraction forget that the movement of industrial capital is this abstraction in action. Here value passes through different forms, different movements in which it is both preserved and increases, is valorized.[201]

Elsewhere in volume II, Marx presents a more precise conceptual framework for representing the process which he thinks that capital is in its broadest social scope.[202] Marx represents it as:

$$M\text{-}C_{[MP+LP]}\ldots P\ldots C'\text{-}M'$$

This series is meant to describe a "quantum of value that is going to function as capital", which Marx also calls the "cycle" or "circulation of capital".[203] Industrial or productive capital begins with money (M), which is exchanged for the commodities (C) which are means of production (MP) and labor-power (LP), which are used in a process of production (…P…) of more, different

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[199] Cf. Marx 1990, 294: "It is therefore a matter of indifference whether value appears in cotton, in a spindle, or in yarn: its amount remains the same. … Their forms are altered… but their value is [not] affected…" Cf. Marx 1990, 295: "Value is independent of the particular use-value by which it is borne, but a use-value of some kind has to act as its bearer".

[200] Marx 1990, 724.

[201] Marx 1992, 185. Cf. the notion of "real abstraction" coined by Sohn-Rethel 1978.

[202] Marx 1992, 109. Cf. Moseley 2016, XIII: "the logical framework of the theory is not a physical quantities input-output matrix, but is instead the *circuit of money capital*, expressed symbolically as M – C ... P ... C′ – M′, which implies that the initial money capital M is the starting point of Marx's theory and is *taken as given* as known data, both in the macro theory of the production of surplus-value and in the micro theory of the distribution of surplus-value". Cf. Fine and Saad-Filho 2016, chapter 4.

[203] Cf. Marx 1990, 709.

commodities (C'), which are then exchanged on the market for a sum of money (gross revenue: M') that is greater than the initial costs of production (M). The net sum that remains (ΔM), when initial the costs of production (M) are subtracted from the gross returns (M'), is what Marx calls "surplus-value" (i.e., aggregate profit). Yet, as I discuss shortly, one must be careful not to mix up the concept of surplus-value with the more customary category of individual profit (e.g., Mankiw).

In volume I, Marx claims that it is specifically the "movement" or process of increasing a given value, the production of surplus-value (ΔM), which transforms it into capital. He writes:

> M' = M + ΔM, i.e. the original sum plus an increment. This increment or excess [ΔM] over the original [M] value I call 'surplus-value' [*Mehrwert*]. The **value** originally advanced, therefore, not only remains intact while in circulation, but increases its magnitude, adds to itself a surplus-value, or is valorized [*verwertet sich*]. And **this movement [*Bewegung*—process] converts it into capital**.[204]
>
> Value therefore becomes **value in process, money in process, and, as such, capital.** It comes out of circulation, enters into it again, preserves and multiplies itself within the circulation, emerges from it with an increased size, and starts the same cycle again and again.[205]

So, X quantity or value in the form of money (M) is capital, according to Marx's definition, *only if* its expenditure ultimately results in the return of more value in the form of money (M'), just as Marx claims that a product of labor is a commodity or a value *only if* it is exchanges for another value in the form of money. Otherwise, it is just a physical object or perhaps just a mere waste.

It is important to note that Marx's formulation of capital in volume I as "M-C-M'" elides the process of production (…P…C') that is necessary for aggregate profit or surplus-value to be produced. To be precise, "M-C-M'" is an abbreviation which describes the capital of merchants or commercial capitalists (e.g., wholesale or retail commodity traders), who "realize" the value and surplus-value of commodities produced in industry in monetary exchange on the market.[206]

[204] Marx 1990, 251-2.
[205] Marx 1990, 256.
[206] Marx 1991, 381, 395, 398, 400.

Similarly, one could describe the financial capital with the even more abbreviated or abstract formula "M-M'" (i.e., interest), as Marx does in volume III, which elides not only production (…P…), but also commercial exchange of commodities on the market (i.e., M-C, C-M).[207] This is the "most superficial and fetishized form" of value and capital. It always presupposes increased production. So, one must be cautious about the metaphysical and theological language he uses to satirize and criticize the common notion that commodities or money are inherently valuable or that capital is an original source of income. For instance, capital seems to be an "automatic subject" with the "occult ability to add value to itself".[208] He writes:

> …in the circulation M-C-M both the money and the commodity function only as different modes of existence of value itself… It is constantly changing from one form into the other, without becoming lost it this movement… value is here the subject of a process in which, while constantly assuming the form in turn of money and commodities, it changes its own magnitude, throws off surplus-value from itself considered as original value, and thus valorizes itself independently.[209]

And in volume III, he states:

> Capital thereby already becomes a very mystical being, since all the productive forces of social labour appear attributable to it, and not to labour as such, as a power springing forth from its own womb.[210]

It may seem to capitalists as though capital is the so-called factor of production that generates their income, revenue, or profits. Similarly, it might seem to landlords or bankers that their real or financial assets are the source of their revenues (i.e., interest or rent). But this belief succumbs to the illusion which Marx calls "fetishism".[211] There is no mystery when the valorization of capital is properly understood. Value is the grammatical subject of the process of capital accumulation, not commodities or money in themselves. But this is not to say that value is the agent of

[207] Marx 1991, 515, 493.
[208] Marx 1990, 255.
[209] Marx 1990, 255.
[210] Marx 1991, 966.
[211] Marx 1990, 165, Marx 1991, 968; cf. Heinrich 2012, 111, 134, 159, 190, 323, fn. 27.

production.[212] Only labor creates the aggregate fund of wealth and value or surplus-value, which is variously distributed though avenues such as profit, interest, or rent on the market. Physical objects or money cannot by themselves create anything without the mediation of labor or value without the mediation of monetary exchange.[213] Capital which does act is capital instantiated in the labor-power which capitalists purchase through investments of value into wages, in which case labor-power has become a self-acting form of value or capital (i.e., variable capital). So, labor is doing all the work, and what appear to be capacities or activities of capital are just those of labor.[214] Just as Marx claims that a physical object is capital *only if* it is placed into certain social relations of production in which labor uses it to form aggregate profit (i.e., surplus-value), the latter and hence capital itself emerges only if productive labor produces the aggregate product. Thus, Marx calls the modern economy "a mode of production in which the worker exists to satisfy the need of the existing values for valorization" or the accumulation of capital.[215] In contemporary terms, one could call it an "emergent order" or "complex system" which cannot be reduced to individual components.[216]

4.1.2. Surplus-Value and Capital are Macro-Monetary Phenomena

Unlike the OCT, Marx's account does not start from a microeconomic standpoint which represents individual economic agents or relative prices or profits before "aggregating up" those individual

[212] Value is not literally an independent agent or metaphysical entity. That understanding of capital would be what Heinrich 2012 calls the "capital fetish" (111, 134, 159, 190. Cf. Marx 1991, chapter 48).
[213] Cf. Marx 1992, 566, 574.
[214] Cf. Marx 1990, 1052: "Since – within the process of production – living labour has already been absorbed into capital [i.e., as variable capital], all the *social productive forces of labour* appear as the *productive forces* of capital, as intrinsic attributes of capital, just as in the case of money, the creative power of labour had seemed to possess the qualities of a thing". Cf. Marx 1976c, 32.
[215] Marx 1990, 772. Marx refers to this same thought as the "valorization requirements" of capital (Marx 1990, 784, 790, 889, 252).
[216] Cf. Ladyman and Wiesner 2020.

elements into a macroeconomic view (i.e., "fallacy of composition"). Rather, the opposite is the case. His concept of surplus-value (ΔM) is not the profit of an individual or firm. And his framework for understanding the production of surplus-value (M-C…P…C'-M') does not describe an individual or firm. The reason why it was so important in the previous chapter to frame Marx's value-theory in terms of a macroeconomic scale of description and the method of monetary analysis is that the perspective which they provide is essential for understanding his primary object of explanation.[217] It is "surplus-value", which I gloss as aggregate profit, as I will discuss directly.

Marx's study of the history of *Theories of Surplus Value* clearly presents the plain meaning of the term "surplus-value" and the reason why it is a macroeconomic concept, as I claim. There he examines the first articulation of the concept by Sir James Stuart. What Stuart calls "positive profit" is what Marx means by "surplus-value" (i.e., aggregate profit), while "relative profit" is a merely individual profit. Marx quotes Stuart's *Principles of Political Oeconomy* as follows:

> *Relative profit*, is what implies a loss to somebody; it marks a vibration of the balance of wealth between parties, but implies no addition to the general stock… *Positive Profit*, implies no loss to anybody; it results from an *augmentation* of labour, industry, or ingenuity, and has the effect of swelling or augmenting the [general] *public good*…[218]

An individual may obtain what Stuart calls "relative profit" through exchange on the market ("profit upon alienation") at a loss to another individual. It merely *distributes* extant wealth in various ways on the market and has nothing to do with labor or the production of wealth which is distributed ("implies no addition to the general stock"). So, it is a microeconomic definition of profit. For example, one agent could buy a quantity of extant commodities exceptionally cheaply and sell them exceptionally expensively. Obviously, that agent would have thereby profited in some sense. One agent could also profit relatively vis-à-vis another just as well if the one simply

[217] Cf. Heinrich 2012, 63-5 and Moseley 2016. Cf. Heinrich 2006, 193 and Heinrich 2012 149, 234, fn. 40.
[218] Quoted in *Theories of Surplus Value*, Marx and Engels 1988, 348. Order modified.

obtains something from the other (e.g., gifts, theft). But at the aggregate-level, both would not be any richer. At this individual-level scale of description, the one agent's profit or gain is the other agent's loss. The first is now relatively richer than the second. But taken together, as an aggregate, they are both just as rich (or poor) as they were at the outset. All that has really happened is an allocation or redistribution of the total amount of extant goods or money that were already present in the economy at the time of exchange. And this is why individual profit is merely *relative*. Marx writes: "…exchange can only increase [person] A's magnitude of value by reducing that of [person] B. So far is it gives A a greater value than it has before the exchange, it gives B a smaller value. A+B, therefore, has the same value after exchange as it had before it".[219]

What Stuart calls "positive profit" is an increase in the sum-total of extant goods or wealth which can be distributed in various ways among individuals. This increase requires production, because the redistribution of extant wealth does not produce anything. The only way in which two individuals can both be richer at the end of the day than they were at the beginning is for both to produce some new items which they exchange with one another, as Keynes suggested above.[220] So, labor increases ("augments") the aggregate sum or absolute mass of what there is to be distributed ("general stock"). The returns constitute an aggregate addition to value. And so, this is a macroeconomic or aggregate-level concept of profit. Stuart's distinction presents the core of Marx's view that the capitalist economy is a mode of production of surplus-value or aggregate profit, which is the source of individual profits that are distributed in various ways, and which essentially requires the investment in employment or exploitation of labor. Indeed, that claim follows analytically from a macroeconomic scale of description and the assumption that products

[219] Marx and Engels 1989a, 100.
[220] Cf. Keynes 2015, 385-6.

are exchanged for the value they are worth—that the commodities and money exchanged on the market are of equivalent values—though it does a lot of work for Marx's further analysis.[221]

Marx's framework and argument for it uses the concepts which he appropriates from Stuart. In volume I, he claims: "Circulation, or the exchange of commodities [on the market], creates no value",[222] and hence no surplus-value. And he gives several supporting examples.

First, the profit of one economic agent might be obtained by simply marking up the price that he or she charges for some commodity above what he or she paid for it on the market (i.e., commercial profit: M-C-M'). Suppose this agent marks up the price of the commodity by $10. Yet suppose that *every* other agent also intends to gain a profit of $10 by marking up his or her wares to the sum of $10. "Our friend gained 10 as a seller only to lose it again as a buyer",[223] Marx writes. No one would really gain anything, because the price at which each agent *obtained* what he or she intended to resell for a higher price would have also increased, undercutting the intended profit margin. As long as the absolute quantity of commodities remains the same, increasing prices by itself cannot increase the quantity of value (e.g., inflation). Similarly, if all commodity's prices were equally increased by the same multiple (e.g., x100), then nothing would effectively change in the distribution of commodities or value and no profit occurs. Marx thinks money is essential, unlike orthodoxy, yet prices are just a matter of *distribution* of aggregate profit or surplus-value, not its *production*.

[221] Cf. Sowell 1972, 185; Cohen 1981, 213-14.
[222] Marx 1990, 266. Cf. Marx 1990, 263-9: "Circulation is a necessary condition for the creation of surplus-value, but does not create surplus-value". Cf. Marx 1990, 266: "If equivalents are exchanged, no surplus-value results, and if non-equivalents are exchanged, we still have no surplus-value". Cf. Marx 1990, 268: "Capital cannot therefore arise from circulation, and it is equally impossible for it to arise apart from circulation".
[223] Marx 1990, 263.

Second, someone (A) might exchange £40 worth of wine for £40 and then exchange that £40 with someone else (B) for £50 worth of corn. From his or her own microeconomic perspective, the first person (A) has profited to the value of £10. However, Marx writes:

> **Before the exchange we had £40 of wine in the hands of A, and £50 worth of corn in those of B, a total value of £90. After the exchange we still have the same total value of £90. The value in circulation has not increased by one iota; all that has changed is the distribution between A and B.** What appears on the one side as a loss of value appears on the other side as surplus-value; what appears on the one side as a minus appears on the other side as a plus. The same change would have taken place if A, without the disguise provided by the exchange, had directly stolen the £10 from B. **The sum of values in circulation can clearly not be augmented by any change in their distribution**…[224]

At the aggregate-level perspective, surplus-value is neither relative nor a creature of exchange. How can Marx suppose that the value and price of an individual commodity can come apart here as they do, if value is supposed to be actual only in exchange? The reason why Marx can assume that a commodity can be bought at its value and sold above it, or bought below its value and sold at it, such that relative or individual profits can be possible in market-distribution, has to do with his macro-monetary view. The value of x individual commodity is just the individual portion of the aggregate or absolute value of the whole lot of commodities to which it belongs and which it expresses in a partial way. The value of the wine here is the portion of value of the aggregate lot of bottles of wine produced, which that wine expresses. Suppose the whole lot of wine consists of three bottles and an absolute or aggregate value of $120. If this wine bottle is worth $40 but exchanged for $50 (i.e., above its value), then some other bottle of the same lot elsewhere might exchange for $30 (i.e., below its value), while another exchanges for $40 (i.e., at its value), but at any rate some combination or distribution of offsetting prices summing to $120 would be necessary. On this point Marx is clear. He writes:

> …if a commodity is sold above or below its value, there takes place merely a change in the distribution of surplus value [i.e., aggregate value] between different capitalists, between

[224] Marx 1990, 265.

> the buyer and the seller. This difference in distribution, or alteration in the proportions in which different people share in the surplus value, does not change anything, either in its magnitude or its nature.[225]

Finally, Marx gives the example of the class of capitalists. Just as surplus-value cannot be produced on the market, capitalists *as an entire class* cannot profit within the market alone. That is, *all* capitalists cannot get rich by 'buying low and selling high'. "The capitalist class of a given country, taken as a whole, cannot defraud itself", as Marx puts it.[226] It is self-evident that, if exchange is always fair, or the sums of money and commodities exchanged on the market are always *equivalent* values, then a *surplus-value* can never come to be because of exchange on the market. This basic fact of aggregate-level accounting necessitates the consideration of industry and labor beyond the market which can explain the difference in values which appear within the market over a course of economic activity (M-C…P…C'-M'). Marx writes: "…for [surplus-value] to be formed, something must take place in the background, which is not visible in the circulation" of money and commodities.[227] Marx's model presents a kind of "inference to the best explanation" here.[228] For surplus-value or aggregate profit (ΔM) to be formed, production must occur outside of the market, and those products of labor must be sold on the market for a gross value (M') greater than their initial costs of production (M). Labor must be employed or exploited to produce an aggregate product which will be sold to obtain that surplus-value (ΔM). Workers must be hired in exchange for a wage that is *less than* the aggregate sum of prices or absolute value of products

[225] Marx and Engels 1991, 75. Cf. Moseley 2016, 75-6.
[226] Marx 1990, 266. Cf. Mitchell, Wray, Watts 2019, 423: "…Marx was not interested in a 'swindler' theory of profit, that is, a theory based on a 'buy low, sell high' strategy [i.e., individuals adding an price-increment over costs]. Prior to Marx, this was a common explanation of the source of profits, that is, the argument that profits are created out of trade. However, Marx wanted to explain the source of [all forms of] profits in the production process itself. In other words, his question was: *Will all capitalists be able to achieve* M'?" Cf. Sweezy 1970, 60.
[227] Marx 1990, 268. Cf. Marx 1992, 566, 574.
[228] Cf. Harman 1965. Cf. Peirce 1955, 151.

which they produce when they are exchanged.[229] As Marx puts it in *Wage Labour and Capital*, "capital can multiply itself only by exchanging itself for labour-power",[230] because labor-power is the only commodity (C) on earth which, when it is consumed by capitalists, produces *more* commodities (C'), which can be sold for a greater value (M') than wages and other costs of production (M).

So, on the one hand, the exploitation or employment of labor is a condition of possibility, as it were, for an aggregate profit (i.e., surplus-value) to be formed,[231] just as aggregate profit (i.e., surplus-value) is the condition of possibility of individual capitalists' profits. And, seen in this way, labor's role in the production of surplus-value is completely different from Ricardo's explanation of exchange values (i.e., LTV).[232] Yet on the other hand, circulation of commodities and money in market exchange is the other necessary but insufficient condition. It "realizes" the value of commodity and hence surplus-value, which is to say that products of labor are commodities or values, and capitalists obtain surplus-value *only if* the surplus-product is sold. Yet, circulation can only distribute that value in various ways, but not modify it.

Of course, Marx himself does not use the terminology of "micro-" or "macroeconomics", which did not come into use until the 20th century. This terminology is simply useful, I propose, to make his seemingly idiosyncratic account more accessible. Similarly, I use the term *aggregate*

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[229] Cf. Marx 1990, 272: "For the transformation of money into capital, therefore, the owner of money [i.e., capitalist] must find the free worker available on the commodity-market…" Cf. Marx 1990, 279: "The process of the consumption of labour-power is at the same time the production process of commodities and of surplus-value".

[230] Marx and Engels 1986b, 32.

[231] Cf. Nozick 1974, 261-2; Robinson 1966, 16: "The fact of exploitation [of labor] makes profit possible…"

[232] Cf. Mitchell, Wray, Watts 2019, 436: "According to the labour theory of value, labour produces all value, but receives only a portion of the value it has produced. The rest goes to capitalists as profits (and to other classes such as feudal lords, government officials, and religious authorities as rent, taxes, tithes, and other deductions from the surplus value created by workers). Equilibrium is not defined as a position of market clearing, but rather as a tendency toward equal rates of profit on capital. Today's Marxists carry on in this tradition". Cf. Roemer 1990, 257: "For Marx, the labour theory of value was not a theory of price, but a method for measuring the exploitation of labour. The exploitation of labour, in turn, was important for explaining the production of a surplus in a capitalist economy".

profit to show that his concept of surplus-value does not denote anything esoteric, mysterious, or a special kind of object to which only his theory has access. "Surplus-value" simply marks a distinction between macroeconomic and microeconomic scales of description. It is a macroeconomic (i.e., aggregate) concept of profit, while individual profit is a fundamentally microeconomic concept (e.g., Mankiw's view). Marx himself gives very clear indications that his meaning is captured by the terms I propose, and that "surplus-value" is just the aggregate profit produced and accumulated in a capitalist economy. For example, in volume III, he writes:

> The total mass of profit is the same as the total mass of surplus-value…[233]
> The sum of the profits for all the different spheres of production must accordingly be equal to the sum of surplus-values…[234]
> Profit, considered in its absolute amount, is equal to the surplus-value…[235]
> Profit… is the same thing as surplus-value, save in mystified form.[236]

And in *Theories of Surplus Value*, he similarly writes:

> …the total profit will be=to the total surplus value which all these capitals yield, for instance, during one year.[237]
>
> The absolute amount of profit is equal to the absolute amount of surplus-value.[238]
> *ABSOLUTE PROFITS* (=*SURPLUS VALUE*).[239]
>
> …we mean by profit, the total sum of surplus-value which is seized in the first place by industrial capitalist, [irrespective of] how he may have to share this later with the money-lending capitalist (in the form of interest) and the landlord (in the form of rent).[240]
>
> … profit and surplus value are treated as identical [by Ricardo], which is only correct for the aggregate capital.[241]
>
> The *surplus value* produced within a given period of circulation…, when measured against the *total capital* which has been advanced, is called—*profit*. […] Considered with respect to its material, profit is absolutely nothing but surplus value itself. Considered with respect

[233] Marx 1991, 355.
[234] Marx 1991, 273.
[235] Marx 1991, 999. Cf. Moseley 2016, 88-9.
[236] Marx 1991, 127.
[237] Marx and Engels 1989a, 415-16.
[238] Marx and Engels 1989b, 60
[239] Marx and Engels 1989b, 63
[240] Marx and Engels 1989b, 94.
[241] Marx and Engels 1989b, 61.

> to its magnitude, it therefore does not differ from the surplus value produced by capital over a particular turnover time. It is surplus value itself, but *calculated* differently.[242]
> Just as the surplus value of the individual capital in each particular sphere of production is the measure of the absolute magnitude of the profit—in so far as this is merely a converted form of surplus value—so is the *total surplus value* produced by the total capital, hence the whole of the class of capitalists, the absolute *measure of the total profit of the total capita*, whereby profit should be understood to include all forms of surplus value, such as rent, interest, etc. …[243]

In volume I, Marx indicates that his framework presents a fundamentally a macroeconomic standpoint which considers the industrial production of aggregate profit (i.e., surplus-value), the "fund" which divided up, from which all kinds of individual profits or rents are paid out as deductions or transfers in various ways. It is the basis for subsequent considerations about the distribution of that fund within the market (e.g., competition).[244] Marx states that he initially adopts "an **abstract** point of view" on the capitalist process of production and accumulation as a whole in order to focus upon its essential features. He claims that focusing on the various forms of individual profits ("fragments" of surplus-value) would simply obscure the matter. "An exact analysis of the process, therefore, demands that we should **for a time, disregard all phenomena that conceal the workings of its inner mechanism**".[245] So, Marx's framework temporarily brackets any details that present themselves from the perspective of individuals in everyday life. It focuses upon the formation of aggregate profit or surplus-value, which is later "split up" into various forms of individual revenue. As discussed in the previous chapter, it gives an account of the formation of the sum of *value* of all products of labor (e.g., GDP, income = expenditure), the "total annual commodity product",[246] or the "total value annually produced" and exchanged within

[242] Marx and Engels 1991, 69. Cf. Moseley 2016, 73-6.
[243] Marx and Engels 1991, 98-9. Cf. Moseley 2016, 54; Marx 1993, 760, 767.
[244] Marx 1976a, 47. Because they are costs, wages and salaries are paid out of and into gross returns: M'
[245] Marx 1990, 710.
[246] Marx 1992, 473. Cf. Robinson 1966, chapter VI.

a given period (i.e., P…C-M),[247] which is just the sum total of prices realized in exchange.[248] It then conjoins consecutive processes of formation of ever greater aggregate values.

For instance, two successive periods of production and exchange (i.e., P…C-M) can be taken as a single, conjoined process: i.e., (1) P…C-M and (2) P'…C'-M'. One can subtract the aggregate value of the product of the first process (M) from the aggregate value of the second process (M') to obtain an *aggregate profit* which has been produced throughout the entire series of expansionary developments by the entire economy ($\Delta M = M' - M$), which can then be variously distributed. As Fred Moseley puts it, the order of explanation starts with the formation of surplus-value, then descends to an account of the division and distribution of parts of it to various groups.[249] Yet capitalists' aggregate investment determines the aggregate production, growth, and profit, while prices simply distribute the aggregate value as forms of revenue.[250]

4.1.3. Criticism of the OCT's Concept of Profit

Neither Smith nor Ricardo sufficiently distinguishes between the macroeconomic concept of aggregate profit (i.e., surplus-value) and the microeconomic concept of individual profit, which is

[247] Marx 1991, 960.

[248] Cf. Marx 1991, 265, 273, Marx and Engels 1989a, 415-16.

[249] Cf. Moseley 2016, XII: "Marx's theory is constructed in terms of *two main levels of abstraction*: first the *production* of [the mass of] surplus-value and the determination of the total surplus-value in the economy as a whole and then the *distribution* of surplus-value and the division of the predetermined total surplus-value into individual parts". Cf. Moseley 2016, 22: "[T]he prior determination [of the total surplus-value] is not temporal, but logical [i.e., in the order of explanation]. In the first stage of the theory, the total surplus-value is explained by the total surplus labor in the economy as a whole, and then this total surplus-value is taken as given in the subsequent stage of the theory, in which the division of the total surplus-value into individual parts is explained".

[250] Cf. Mitchell, Wray, Watts 2019, 482: "… the mark-ups desired at the micro level depend on macro-level spending. […] Thus, holding all else equal, for profits to increase, capitalist spending must rise. Aggregate profits are determined by total capitalist spending (capitalists get what they spend). [/] This is without reference to micro-level pricing behaviour. If capitalist spending is zero (in the simple model) then aggregate profits are zero. No amount of pricing power can affect aggregate profits in such a condition. [/] How can we reconcile the microeconomic outcomes with the macroeconomic conditions? Given that macro profits are determined by investment… micro-level pricing power determines the distribution of profits among capitalists. Those that have more pricing power can get their desired mark-up [e.g., monopolies]; those with less market power set lower mark-ups and might even make losses. [/] […] pricing *per se* does not create profits".

the form in which portions of aggregate profit appear to individual capitalists as relative profits. As I have already argued, they even seem intent on equating the micro- and macroeconomic scales of description. And they conceive of the aggregate product of labor in *real* terms paid to and from individuals. Marx criticizes Smith's "crudely empirical conception of profit", which the latter describes as though it were perceived from the standpoint of the individual shopkeeper.[251] Smith "confuses" or "mixes up" surplus-value with the *form* in which it appears as profit for an individual capitalist or rent for a landlord.[252] For example, Smith might imagine that some commercial worker performs "productive labor" because individual profits accrue to the employing merchant-capitalist (i.e., distribution), though commercial wholesale or retail trade does not contribute to aggregate profit-formation (i.e., production) at all.[253] Marx also objects that Ricardo "has not, any more than the other economists, investigated surplus-value as such, i.e., independently of its particular forms, such as profit, ground-rent, etc."[254] Ricardo "identifies surplus-value and profit".[255] Marx writes:

> Ricardo never concerns himself with the origin of surplus-value. He treats it as an entity inherent in the capitalist mode of production, and in his eyes the latter is the natural form of social production. Whenever he discusses the productivity of labour, he seeks in it not the cause of the existence of surplus-value, but the cause that determines the magnitude of that value".[256]

Ricardo *does* think that labor produces the entire value. But he is so preoccupied with explaining quantities of value in terms of quantities of labor that he takes everything interesting for granted.

[251] Marx and Engels 1988, 390. Cf. Marx 1992, 276.
[252] Cf. Marx and Engels 1988, 396. Cf. Marx and Engels 1988, 388. Cf. Marx and Engels 1988, 395.
[253] Cf. Smith 1993, 385, 388, IV.ix.
[254] Marx 1990, 660. Cf. Marx and Engels 1989b, 9: "Nowhere does Ricardo consider *surplus-value* separately and independently from its particular forms—profit (interest) and rent".
[255] Marx and Engels 1989b, 12.
[256] Marx 1990, 651.

These points are troubling for Marx because he thinks that Smith and Ricardo's theories *do* implicitly contain a "general theory of surplus-value" (i.e., aggregate profit).[257] Yet their other assumptions (i.e., those of micro-real theory) simply obscure the important questions to such a degree that the phenomenon of surplus-value itself is not immediately evident at all. If Smith and Ricardo *were* to distinguish rigorously between aggregate profit (i.e., surplus-value) and individual profit, many of their problems, at least as Marx sees them, might vanish. Yet, of course, this would mean fundamentally revising the foundations of their theories (i.e., OCT). Thus, Marx also claims that "we have to separate what [Ricardo] himself failed to separate. *His theory of surplus value* as distinct from its particular forms, profit, rent, interest. Secondly his theory of *profit*."[258] If one does not distinguish aggregate or absolute profit (i.e., surplus-value) from individual or relative profit and thus place economic analysis on a macroeconomic and monetary footing from the start, then problems crop up. The phenomenon of capitalist production itself will remain obscure and resist explanation (Smith), or the "transformation problem" will appear (Ricardo).[259] But above all for the purposes of my argument, it will be impossible to understand the accumulation of capital and the way in which it can give rise to the economic POU, as I discuss in the next chapter.

4.2. Dynamic Model

To propose a stronger theory of the accumulation of capital than that of the OCT, Marx coins several new terms to address more precisely what the OCT designates with the terms "fixed" and "circulating capital" and the proportion between them. The OCT's cruder, physical concepts of the elements of production (i.e., real analysis) are the predecessors of the value-theoretic concepts

[257] Marx and Engels 1988, 389-92. Regarding Ricardo, cf. Marx 1992, 301.
[258] Marx and Engels 1989a, 397. cf. ibid. 439. Cf. Marx and Engels 1989b, 9, 51.
[259] Cf. Heinrich 2012 and Moseley 2016.

which Marx proposes (i.e., monetary analysis). In order roughly to denote the means of production, the OCT uses the term "fixed capital", and in order roughly to denote real wages of labor, the OCT uses the term "circulating capital", as discussed above. The fact that these concepts differ only relatively by degree and therefore cannot be clearly distinguished, as Ricardo remarks, is not the only problem with them. The OCT denotes both raw materials used in production *and* commodities within the market or real wages of labor with the same category of "circulating capital". So, it does not single out labor specifically, though labor is the only factor which produces commodities, contributes to aggregate profit-formation and the accumulation of capital. Moreover, wage-payments to labor are a point at which capitalists pay *money into circulation on the market*, further stimulating effective demand and profitability. (This will be essential for understanding the POU.) The distinctions between capital invested into physical producer goods (i.e., means of production and raw materials) and labor (i.e., wages) must be redrawn more strictly.

4.2.1. Constant and Variable Capital

The successor concepts for "fixed" and "circulating" capital that Marx proposes are "constant capital" and "variable capital". In chapter 25 of volume I, he clearly expresses his awareness of the distinction, which he emphasizes, between viewing capital in its physical or real and value-theoretic or monetary dimensions. He calls the former its "technical composition" (e.g., machinery or raw materials and labor) and the latter its "value composition" (e.g., capital investments in machinery or raw materials and labor-power). The ratio or proportion between the quantities of value which capitalists invest in constant capital and variable capital, and the extent to which the technical composition determines the value composition, Marx calls the "organic composition of

capital".[260] This piece of Marx's theory will be the most important for my argument about the economic POU and Hegel's "rabble", to which I return in the next chapter. They enable Marx to recognize the POU (pace the OCT) and explain it (pace Hegel). Namely, the process of accumulation of capital changes the organic composition of capital in a way which can give rise to complex and unintended effects, such involuntary unemployment and thus modern poverty.[261]

By "constant capital" Marx means that monetary value which capitalists invest in production, which buys means of production and raw materials to produce more commodities and thus contribute to the formation of aggregate profit (i.e., surplus-value). He calls it "constant" because its value constitutes a portion of the aggregate value of the total product but does not vary quantitatively throughout the processes of production and exchange, and it is not the essential surplus-value which characterizes the accumulation of value as capital.[262] It is a so-called *sunk cost* the value of which cannot be altered *post-factum*, and so it "cannot add more value… than [the means of production and raw materials] themselves possess".[263] Seen from a macroeconomic scale of description, extant goods which are sunk costs can be *distributed* in various ways, but this does not change the aggregate value spent—of which they are a part. Once a quantity of value in the form of money is exchanged for means of production with the intention of producing products for sale for a profit, that invested value can only be gradually recuperated in the final value obtained on the market when the products for which they are used are sold, as those means of production depreciate and are gradually used up (or retired) by producing more commodities for sale. [264] A *greater* value can be obtained only if *labor* is involved, uses those means of production to produce

[260] Marx 1990, 762. Cf. Marx 1992, 294.
[261] Marx calls this the "relative surplus population or industrial reserve army" of the unemployed (Marx 1990, 781).
[262] Cf. Marx 1990, 317: "That part of capital, therefore, which is turned into means of production, i.e., the raw material, the auxiliary material and the instruments of labour, does not undergo any quantitative alteration of value in the process of production. For this reason, I call it the constant part of capital, or more briefly, constant capital".
[263] Marx 1992, 291.
[264] Cf. Marx 1990, 311.

more commodities, which will be exchanged for a monetary value greater than the total costs of production. So, constant capital is a first, necessary element of the process of production of commodities and surplus-value and accumulation of capital, but it is not sufficient *per se*.

By "variable capital", Marx means that monetary value which capitalists invest in production, which buys labor-power (*Arbeitskraft*) by paying money-wages or salaries in exchange with workers. The payment of monetary wages to workers is also important because it is the point at which money is paid into circulation and indeed will further circulate throughout the economy, contributing not only to the employed workers' own consumption, but to that of many, furthering effective demand and profitability, as I will discuss in the following chapter. Marx calls it "variable", because it is not a constant value, but rather is subject to *quantitative alteration* throughout the entire process of production and exchange.[265] And it is the second, necessary element, the catalyst for the formation of surplus-value, seen from a macroeconomic perspective. Labor-power is the only commodity on the market which, when it is purchased and consumed, can produce more commodities which, when they are sold, yield a greater value than was initially paid for it.[266] Thus labor-power is the only commodity that extends beyond the mere distribution of extant wealth on the market to the production of *more* wealth and value. Indeed, variable capital is invested *only if* capitalists expect that it will result not only in the recuperation of the value

[265] Cf. Marx 1990, 317: "On the other hand, that part of capital which is turned into labour-power does undergo an alteration of value in the process of production. It both reproduces the equivalent of its own value and produces an excess, a surplus-value, which may itself vary, and be more or less according to circumstances. I therefore call it the variable part of capital, or more briefly, variable capital. The same elements of capital which, from the point of view of the [physical] labour process, can be distinguished respectively as the objective and subjective factors, as means of production and labour-power, can be distinguished from the point of view of the valorization process, as constant and variable capital".

[266] Marx 1990, 272: "For the transformation of money into capital, therefore, the owner of money [i.e., capitalist] must find the free worker available on the commodity-market…"; the historical "relation" of labor and capital (Marx 1990, 273).

invested in means of production and raw materials (i.e., constant capital) and wages, but also result in a profit.[267] In volume II, Marx writes:

> The **essential feature of the definition of variable capital** – and hence of the transformation of any sum of values at all into capital – **is that the capitalist exchanges a definite, given (and in this sense constant) value for value-creating power**; a magnitude of value for the production of value, for self-valorization.[268]

The amount of value paid to workers (i.e., per hour or year) in wages is constant. But the amount of value that capitalists obtain because of workers' employment (i.e., exploitation) in the form of revenue or profit is not constant at all. On the one hand, labor produces "a new use-value in which the old exchange-value re-appears".[269] On the other hand, labor engages in "the creation of new value",[270] "[a]s long as the product is sold" and the value of the product and surplus-value (ΔM) are realized.[271] The value which capitalists invest in labor-power as wages takes the form of *actual* labor in the process of production, which results in a sum of products which, when sold, result in a wide variety of values. So, labor replaces its wage *and* creates profit.[272] Indeed, *only* labor transforms money (M) into more money (M') surplus-value (ΔM) in the aggregate. Marx writes:

> The activity of labour-power... not only reproduces its own value but produces a value over and above this. This **surplus-value is the difference** [ΔM] between the value of the product [M'] and the value of the elements consumed in the formation of the product [M], in other words the means of production and the labour-power. […] **The excess of the total value of the product over the sum of the values of its constituent elements is the excess of the capital which has been valorized over the value of the capital originally advanced.** The means of production, on the one hand, labour-power on the other, are merely the different forms of existence which the value of the original capital assumed when it lost its **monetary form** and was transformed into the various factors of the labour-process.[273]

[267] Cf. Marx 1990, 254: the capitalists' aim "is the unceasing movement of profit-making".
[268] Marx 1992, 297.
[269] Marx 1990, 316. Cf. Marx 1990, 307.
[270] Marx 1990, 316.
[271] Cf. Marx 1992, 156.
[272] Cf. Marx 1990, 307: "By the very act of adding new value [the worker] preserves their former values".
[273] Marx 1990, 317.

Marx's conception is more precise than the OCT. First, the OCT's concepts of fixed and circulating capital conceive of capital in physical terms (i.e., real analysis) while Marx's concepts of constant and variable capital conceive of capital in value-theoretic terms (i.e., monetary analysis). The OCT places raw materials under the same category as living labor (i.e., "circulating capital") which it distinguishes from the means of production (i.e., "fixed capital"). Yet Marx places raw materials among other inert things, under the same category as the means of production (i.e., "constant capital"), and he isolates wages and labor under their own category (i.e., "variable capital"). And capital investment into labor deserves its own category, because the activation of labor-power in real production is the only variable which can explain the production and accumulation of aggregate profit as capital, as the OCT recognizes vaguely.

Second, the OCT conceives of the capital which capitalists pay to workers when they invest in production, circulating capital, as a real wage (e.g., "corn"), as though capitalists traded groceries with workers who consumed them directly, and the story would end there. Yet Marx conceives of the capital which capitalists pay to workers when they invest in production (i.e., variable capital) as value in money-form, or a nominal wage, which workers spend back to capitalists in the market in exchange for the commodities which they produce and need to consume in order to live. "We always consider the value advanced in **money**",[274] he writes. So, capital is not corn in the mouths of workers, but the value which is transformed from money in the hands of the capitalist to labor-power under the command of the capitalist to actual labor in production and eventually surplus-value when products are sold for monetary returns again (i.e., M-C…P…C'-M'). The value which capital is, is temporarily incarnated, as it were, or exists in the physical form of labor-power. The worker is an "appendage" of capital.[275] So, what seems like capital's capacity

[274] Marx 1992, 263.
[275] Marx 1990, 425, 482, 719, 755-6, 798-9, 937.

to "valorize" or "multiply itself" is just that of the working class, though labor also really is the variable form of value or capital.[276]

4.2.2. The Turnover Times of Fixed and Circulating Capital in Terms of Value

Having placed the concept of capital on a solid value-theoretical foundation, Marx also continues to similarly reconceive of the dynamic of capital's reproduction in more suitable terms. The periods of production are periods of "turnover" of capital, which means periods in which the *value* invested *returns* to the investor (i.e., capitalist). It is the cycle in which invested values are recuperated while producing surplus-value (e.g., industry) or obtaining profit (e.g., commerce). It is not just the physical *things* that are either fixed or circulate, either more or less durable. Physical characteristics of things (e.g., immobility) do not determine whether something is fixed or circulating capital (pace Smith and Ricardo).[277] Rather, "value circulates" or returns to capitalists over the lifetime of the investment at varying degrees of frequency.[278] The physical things which labor produces, and which capitalists sell to consumers, do not circulate in the sense that they literally return. Their value is regained with profit, if revenue is greater than costs of production, but they are lost or destroyed in final consumption. They are just temporary "bearer[s] of value" or "form[s] of existence of value".[279] The "function" or "role" which they perform within the process of production of surplus-value decides whether they are fixed or circulating capital,[280]

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[276] Cf. Marx 1990, 256. Cf. Marx 1992, 253: "The worker pays in his own person, and this forms one of the mysteries of capital's self-preservation…" Cf. Marx 1992, 299: "The real material of the capital laid out on wages is labour itself, self-acting, value-creating labour-power, living labour, which the capitalist has exchanged for dead, objectified labour, and incorporated into his capital, this being the way that the value existing in his hands is first transformed into a self-valorizing value". Cf. Marx 1990, 342.

[277] Marx 1992, 242.

[278] Marx 1992, 243. Cf. Marx 1992, 248. Cf. Marx 1992, 238: value "does not circulate in its [physical] use form. It is rather its value that circulates…" Cf. Marx 1992, 266: "The value contained in the product circulates together with the product itself".

[279] Marx 1992, 240.

[280] Marx 1992, 241. Cf. Marx 1992, 298.

which Marx also calls "*fluid* capital".[281] This reformulation eliminates the relativity, ambiguity, and tension in these concepts found in Smith.

The *fixity* or *constancy* of fixed capital consists in the fact that its entire value is invested (i.e., sunk) "all at once" and only gradually recuperated throughout the lifetime of the functioning of the material in which it is invested.[282] Fixed capital is just a constant value which circulates (i.e., returns to its owner) at a rate which is slower than the circulation (i.e., return) of the value of the commodities for which it is used to produce. The period in which the value invested as fixed capital is simply longer than the periods of production and sale of commodities (i.e., returns) for which it was invested. It is not fully used up and the value of its cost is not fully recuperated in one wave of production.[283] An industrial capitalist might invest a sum of value in means of production to produce some kind of commodity. Many waves of commodities may be produced and sold, yield incremental returns, and thus gradually recuperate the value invested in the fixed capital. That investment or fixed cost might be recuperated half-way through the productive lifetime of the machines, before they are retired or replaced. But their total value (i.e., cost) comprises a portion of the total value of the product over the entire period of production and hence a portion of the average value of each individual product. The sense in which the value of fixed capital is "transferred" or "reappears" in the value of the products is just the value of investments being recuperated in further production.[284] It is no literal sort of transmigration of spooky *value-stuff*.

The circulating or "fluid" character of a portion of capital consists in the fact that its value is periodically invested and recuperated before the total value invested in production (e.g., fixed

[281] Marx 1992, 238.
[282] Marx 1992, 251. Cf. Marx 1992, 239-40.
[283] Marx 1992, 247.
[284] Marx 1992, 255.

capital, costs of machinery) is recuperated.[285] Here Marx captures the OCT's conception in value-terms. A value invested in production counts as circulating capital only if it is invested periodically (e.g., on labor-power or raw materials) and the period of its function is shorter than the period of the function of investments in fixed capital (e.g., means of production). As Marx puts it, the value of the fluid capital "enters in its entirety into the product, and thus returns again completely from circulation with the sale of the product and can be advanced afresh".[286] It is value that returns to the capitalist when the value invested in wages, for instance, is recuperated by the sale of the products of labor, before or sooner than the recuperation of the value invested in means of production. So, circulating capital is not literally he physical "corn" in workers' mouths.

4.2.3. Criticism of the OCT's Concept of Fixed and Circulating Capital

Marx claims that the OCT confuses or conflates the sharper value-theoretic categories on which he focuses with the more traditional physical categories, though it may be more accurate to say that the OCT never really had those sharper categories in the first place. At any rate, all the issues which Marx points out arguably stem from what I call the micro-real character of the OCT.

First, Marx claims that the OCT confuses industrial capital and commercial or merchants' capital with fixed and circulating or fluid capital. "The distinction between fixed and fluid capital is confused with the distinction between productive and commodity capital".[287] Indeed, I have tried to show that the OCT virtually equates these pairs of distinct concepts. As already suggested, the problem is the way in which these concepts become incoherent at any scale of description larger than an individual or microeconomic one (i.e., fallacy of composition). Namely, certain

[285] Marx 1992, 289.
[286] Marx 1992, 246.
[287] Marx 1992, 304-5.

commodities variously count as fixed and circulating capital, depending upon who possesses them at one time or another. Grain (seed) is fixed capital for the farmer who provides the baker with grain (flour) and circulating capital for the baker who provides the farmer with bread.[288]

Second, Marx claims that the OCT "identified" the capital invested in workers' wages with circulating commodity capital.[289] Commodity capital or commercial capital is just the commodity form of value in one part or moment of the total process of circulation of productive capital.[290] Certainly, workers only consume commodities which are means of individual consumption, not the means of production or fixed capital. But neither are all circulating commodities real wage goods either. Workers do not eat wool or iron ore or crude oil. The OCT's picture of circulating capital conceives of capitalists' payment to workers as though capitalists *directly traded or bartered* "real wages"[291] ("corn") or consumer goods with workers for labor. This leads one to believe that capitalists buy workers' foodstuffs for them rather than the latter's labor-power. And it obscures what happens in capitalist economies. Capitalists pay workers' wages in money, labor becomes a form of capital in production, and worker's groceries are not capital. He writes:

> In particular it is the part always present as **money capital that the economists forget**, although precisely this circumstance is very necessary for the understanding of bourgeois economy…[292]
> Developed capitalist production in fact assumes that the **worker is paid in money**, just as it assumes in general that the production process is mediated by the circulation process, i.e. a **money economy**.[293]

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[288] Marx 1992, 240: "the same use-value that emerges from one labour process in the shape of a product can enter another labour process as means of production. It is only the function of a product as a means of labour in the production process that makes it fixed capital". Marx 1992, 284, 288-9, 304-5.

[289] Marx 1992, 305. Cf. Marx 1992, 275: "[Smith's] example of circulating capital is [commercial, or] merchant's capital, which is transformed from commodity into money and from money into commodity – the change of form C-M-C that pertains to commodity circulation".

[290] Marx 1992, 273, 280, 282, 290.

[291] Marx and Engels 1989b, 37f. Keynes also rejects the classical view that capitalists pay workers in real wages. Cf. Keynes 1964, 5 & 16-17Cf.

[292] Marx 1992, 333.

[293] Marx 1992, 298. Cf. Marx 1992, 195, 245, 263. Cf. Marx and Engels 1988, 392: "Wages… are not a commodity in its immediate form, but… money, the commodity in its independent form as exchange value, as the direct materialisation of social labour, of general labour time. With this money, the labourer naturally buys commodities…"

Capitalists pay for workers' ability to produce more commodities (*Arbeitskraft*) and hence more value or surplus-value. And the workers themselves use that money in market exchange to buy whatever commodities they can, which they need to reproduce themselves, thereby returning that money to capitalists. So, the *value* of the money-wage paid to the worker (i.e., variable capital) is "fluid" or circulates, not the real wage that the worker consumes (e.g., corn).[294] If one is not clear on this, for Marx, then it is impossible to understand the workings of capital. He writes:

> **What the capitalist buys is not the worker's means of subsistence, but his actual labour-power. It is not the worker's means of subsistence that form the variable part of the capitalist's capital, but his active labour-power.** What the capitalist consumes productively in the labour process is labour-power and not the worker's means of subsistence. It is the worker himself who converts the money he receives for his labour-power into means of subsistence, so as to transform these back into labour-power and keep alive [i.e., consumption], just as the capitalist, for example, converts a part of the surplus-value of the commodities that he sells for money into means of subsistence for himself…[295]
>
> …what is incorporated into the production process is labour-power, the actual worker, and not the means of subsistence with which the worker maintains himself.[296]
>
> …**the creation of surplus-value**, and hence the capitalization of the sum of value advanced, arises neither from the money form nor from the natural form of wages, i.e. of the capital laid out on the acquisition of labour-power. It **arises from the exchange of value [i.e., nominal wage] for value-creating power [i.e., labor-power], from the conversion of a constant quantity into a variable one**.[297]

The OCT obscures the unique, value-creating function of labor when it understands capital investment into both raw materials and labor together under the same physical category of "circulating capital". It conceives of both raw materials and labor as *constant* values, because it thinks that capital is invested into the real wage, rather than labour-power.[298] While the value of *wages* are constant, the value which purchased labor-power can produce for capitalists is *variable*,

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[294] Cf. Marx 1992, 245.
[295] Marx 1992, 245. Cf. Marx 1992, 591.
[296] Marx 1992, 285.
[297] Marx 1992, 298-9.
[298] Marx 1992, 300.

unlike raw materials. So, the OCT loses its specific hold on the production of surplus-value and thus on capitalist production in general.

Third, Marx claims that the OCT *equates* physical categories with value-theoretic categories, by only focusing on the former.[299] It treats the distinction between different degrees of physical durability or the rate at which physical goods must be replaced as though it were the same as the distinction between constant and variable values. On the advocates of the OCT, he writes:

> …their basic error [is] their **confusion of the categories of fixed and circulating capital with the categories of constant and variable capital**…[300]

> The distinction between variable and constant capital… [is] confused with that between circulating and fixed capital, is eventually completely reduced to the latter distinction…[301]

The consequence of the OCT's confusion of fixed and circulating capital with constant and variable capital is that it conceives of capital as though it were simply a physical thing, numerous examples of which I have tried to give in the previous section, rather than a function in the capitalist mode of production of aggregate profit. Marx writes: "value is confused with a concrete [*dinglich*] property",[302] "as if this characteristic [of being a kind of capital] belonged to these things materially".[303] This is the so-called capital fetish, which considers capital as though it were a real physical thing of value which is also a source of value.[304] The very definitions of fixed and circulating capital ought to belie such a view, however, because they both involve the process of turnover, which presupposes monetary exchange and circulation.[305]

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[299] Marx 1992, 294.
[300] Marx 1992, 241. Cf. Marx 1992, 299.
[301] Marx 1992, 305. Cf. Marx 1992, 297. Cf. Marx 1992, 293-4.
[302] Marx 1992, 241.
[303] Cf. Marx 1992, 281.
[304] Heinrich 2012, 111, 134, 159, 190. Cf. Marx 1991, chapter 48.
[305] Marx 1992, 281: "Turnover implies that reproduction is mediated by circulation, i.e., the sale of the product, but its transformation into money and transformation from money into its own elements of production". Marx 1992, 527: "The reconversion of the annual commodity product [i.e., gross returns] can no more be resolved into the mere unmediated mutual exchange of its various components than simple commodity circulation is identical with

The OCT's conceptual confusions are a problem, according to Marx, because they ultimately obscure the workings of capital and labor's production of aggregate profit, which is a capitalist economy's *conditio sine qua non*. If one understands fixed and circulating capital in physical terms (i.e., real analysis), then the "all-important distinction between variable and constant capital is thereby obliterated, and with it the whole secret of surplus-value formation and of capitalist production…"[306] If one does not distinguish constant and variable values, then it is not clear how the nominal wage which the capitalist invests in production and pays to the worker (variable capital) can become a *variable* source of surplus-value. In merely physical terms, circulating capital appears to be a *constant* value of the real wage which the worker eats or wears. Marx concludes:

> As soon as the part of capital laid out on labour is distinguished from that laid out on means of labor only by its reproduction period and thus its term of circulation [i.e., fixed and circulating capital]… then **every pertinent difference** between capital laid out on labour-power [i.e., variable capital] and that laid out on means of production [i.e., constant capital] **is destroyed**.[307]

> The capitalist production process is thus success fully transformed into a complete **mystery**, and the origin of the surplus value present in the product completely withdrawn from view. [/] What is also brought to fulfilment here is the **fetishism** peculiar to bourgeois economics, which transforms the social, economic character that things are stamped with in the process of social production into a natural character arising from the material nature of these things.[308]

Based as it is on the physical categories which it uses, rather than the value-theoretic categories which Marx proposes, the OCT becomes either inconsistent or circular:

Inconsistent, because the OCT equivocates about the meaning of the "value of labor". On the one hand, both Smith and Ricardo hold that the labor involved in production produces the

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the direct exchange of products [i.e., barter]. Money plays a specific role in it, one which is expressed in the very manner in which the fixed capital value is reproduced". Cf. Marx 1992, 570-1.

[306] Cf. Marx 1992, 296.

[307] Marx 1992, 301.

[308] Cf. Marx 1992, 302.

entire value of the product, which is greater than the wages paid to workers, leaving room for profits and rents.[309] As Marx puts it: "The value of labour is therefore equal to the value of the product of labor".[310] And if capitalists paid for the value of the actual labor, which is just the value of the product, then there would be no surplus-value. But, on the other hand, capitalists are also supposed to exchange circulating capital in the form of a real subsistence-wage for a quantity of labor of an equivalent value.[311] And if wages are the value of labor, then it is not clear what the source of surplus-value is. So, is the value of labor equal to the value of its product, or is the value of labor equal to the value of its wage? If the value of labor is equal to the value of the product, the profit is only possible on the basis of exploitation. If the value of labor is equal to the value of the real wage, then it is not clear how labor is supposed to be the source of all value.

Circular, because the Ricardo's LTV (which belongs to the OCT) would explain even the value of labor in terms of the quantity of labor it requires. If the amount of labor involved in a commodity's production is supposed to determine its value, and labor itself is a commodity which capitalists buy and use to produce more commodities, then the quantity of labor required to produce labor (i.e., real wages) determines the value of labor, and the entire theory washes out in a tautology: the value of labor determines value of labor, a "vicious circle"[312] Marx calls "absurd".[313]

In either case, if workers are paid a real wage that is equivalent to the value of their labor, then either surplus-value is impossible or it is mysterious. Yet Marx's modified concepts of variable capital and labor-power offer a way out of this confusion. Capitalists do not buy or pay for labor with a real wage, and it is not labor which they buy or pay for. Capitalists invest variable

[309] Cf. Smith 1993, 46, 48, 50, I.vi; 56, I.vii.
[310] Marx and Engels 1988, 378; cf. Marx and Engels 1989b, 39: "The value of labour=[the value of its] its product". Cf, Marx and Engels 1988, 408.
[311] Cf. Smith 1993, 50, I.vi.
[312] Marx and Engels 1988, 378; cf. Marx and Engels 1989b, 37.
[313] Marx and Engels 1989b, 37. Marx 1990, 678. Cf. Marx 1976c, 8.

capital by paying a nominal or money-wage to workers, and they buy the *labor-power* (*Arbeitskraft*) of the worker, who produces surplus-value by *actually* laboring, and who spends that money-wage back into the economy with his or her own consumption (i.e., effective demand). "It is not labour that is bought and sold as a commodity, but rather labour-power".[314] Smith speaks of "labour instead of…labour capacity",[315] and Ricardo's "confusion between LABOUR and labour capacity"[316] ultimately "obscures" the origin of surplus-value on which the capitalist mode of production depends.[317] Marx writes: "what they [i.e., OCT] called the 'value of labour' is in fact the value of labour-power, as it exists in the personality of the worker, and it is as different from its function, labour, as a machine is from the operations it performs".[318]

Marx suggests that part of the OCT's difficulties might be due to the fact that it seems to adopt a commercial model of capital, making merchants into the paradigm case for understanding fixed and circulating capital even in production. A commercial model focuses solely upon buying and selling commodities on the market. Smith, Marx claims, conflates transformations of value in circulation (e.g., C-M-C) with physical changes in production.[319] Commercial profits are made by *buying low and selling high* (M-C-M'). Yet if one thinks of the relation between capital and labor as one of trading commodities — circulating capital or real wages for work — then one couches production terms of exchanging goods of equal values, as I have argued above. And doing so obscures the fact that aggregate profit (i.e., surplus-value) can be formed *only if* variable capital is invested in production for labor-power, if wages are paid to workers to produce a surplus-product

[314] Marx 1992, 101.
[315] Marx and Engels 1988, 380.
[316] Marx and Engels 1989b, 40. Cf. Marx and Engels 1989b, 36-7: "Instead of *labour*, Ricardo should have discussed labour *capacity*. But had he done so, *capital* would have also been revealed…"
[317] Marx and Engels 1989b, 41.
[318] Marx 1990, 678. Cf. Marx 1976a, 8.
[319] Marx 1992, 275. For a related discussion of the historical significance of the commercial model, cf. Meiksins Wood 2017.

that will be exchanged for a surplus-value (M-C…P…C'-M'). Regarding Smith's influence: "There is no way of seeing how [an aggregate] profit is supposed to arise through the change of form between money and commodity, through a mere transformation of value from one of these forms to the other. Explanation of this is even made absolutely impossible in so far as Smith begins with [commercial, or] merchant's capital, which moves solely within the circulation sphere".[320] Thus, Marx claims, Smith established the classical micro-real framework,[321] which subsequent "bourgeois" political economists such as Ricardo adopted, consequently perpetuating the same errors and obscuring the workings of *value* in capitalist economies for subsequent generations.[322]

4.3. Productive and Unproductive Labor

Marx reinterprets the classical distinction between productive and unproductive labor in macro-monetary terms. It is an important part of his explanation of unequal distribution of wealth, which is relevant for understanding the economic POU and "rabble". As I discuss in the next chapter, the way in which the organic composition of capital or ratio of constant capital to variable capital rises with accumulation causes increasing productivity, unemployment and sagging effective demand.

4.3.1. Labor which Produces Surplus-Value

The reason why "variable capital" is so important for Marx's theory is that it is the portion of investment which pays for "productive labor". And productive labor is that activity which is

[320] Marx 1992, 272. Cf. Marx 1992, 277. Cf. Marx 1992, 291-2.
[321] Marx 1992, 297.
[322] Marx 1992, 293, 295, 297, 301, 305. Cf. Schumpeter 1954, 117; Cf. De Vivo 1982, Steedman 1982, Tsoulfidis 1998, Fees 2006. Marx claims Ricardo only retains the problematic distinction to explain the *deviation* of relative prices in the market from quantities of labor time in production for capitals of different compositions (i.e., transformation problem). Cf. Marx 1992, 293: "Ricardo introduces the distinction between fixed and circulating capital only in order to present the exceptions to the law of value, i.e., those cases in which the rate of wages affects prices".

essential for a capitalist economy, because it produces the aggregate product and hence aggregate profit or surplus-value upon which everything depends.[323] But it is also a point of entry for money into circulation on the market (i.e., effective demand), which is another essential part of Marx's theory that I address in the following chapter on the POU and the "rabble".

Marx accepts a view of productive labor which is similar to Smith's first definition of the term. It is labor that is paid out of capital to replace the value of its wage and contribute to aggregate profit-formation,[324] while unproductive labor is that labor which is paid out of revenue and does not replace the value of its wage with any surplus-value or aggregate profit.[325] "The only labourer who is productive is one who produces surplus-value for the capitalist, or in other words works for the self-valorization of capital", Marx writes.[326] So, in capitalism, labor is productive *only if* it produces surplus-value or contributes to aggregate profit-formation for capitalists. And so, it is not *what* the worker does or really produces which decides whether his or her labor counts as "productive" or "unproductive". Indeed, service work can be productive, for Marx.[327] The essential distinction is whether the worker is paid out of variable capital to augment capital (i.e., surplus-value) or is an *overhead cost* (*faux frais*) of production which is paid out of revenue and does not contribute to the augmentation of the value of capital but rather subtracts from it.

Marx's example a schoolteacher is helpful here. A teacher may be a productive worker, for instance, if he or she is employed by a charter school, or an unproductive worker, if he or she is

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[323] Marx discusses the distinction between "productive" and "unproductive" labor at numerous points throughout his writings. Cf. Marx 1993, 266 passim, 305n. Cf. Marx and Engels 1989a, 14-17, Marx and Engels 1994, 139-141; Marx 1990, 1038-49, Marx 1992, 208-13ff. For discussions of this distinction, cf. Gough 1972, Mohun 1996 and Mohun 2003.

[324] Marx and Engels 1988, 12-3ff. Cf. 30, 390: "This is Adam Smith's general theory of surplus value".

[325] Marx and Engels 1989a, 13. Cf. Marx and Engels 1989a, 16: "The unproductive labourer produces [for his or her employer] a mere use value, not a commodity…"

[326] Cf. Marx 1990, 644.

[327] For Marx, the distinguishing characteristic of productive service work is that the process of production (…P…) of the commodity and the process of its consumption *coincide* in time. For example, an electrician employed by a capitalist firm produces the service that the consumer consumes immediately (Heinrich 2012, 134).

employed by the state or a public institution (i.e., paid out of revenue to produce mere use-values). It does not matter whether the worker produces sausage in a factory or an education in a school, so long as that activity valorizes capital.[328] Marx's example of artists elsewhere is also helpful. They might produce and sell their products independently in the way the OCT models exchange generally (i.e., C-M-C), such as when Milton wrote *Paradise Lost*. Or capitalist entrepreneurs might employ singers, for example, as wageworkers to produce spectacular commodities for profit (i.e., M-C…P…C'-M').[329] Everything depends solely upon whether labor produces surplus-value for capitalists or not. The fact that the unproductive artisan's work is "the activation of *his own* nature" has nothing to do with productivity in capitalist economies. A wage worker who augments the value of a capitalist's capital also does so through his own life-activity,[330] but he is not an artist.

Marx's distinction is essential for understanding his theory of capital accumulation, class, and the distribution of the aggregate value-product throughout the classes and subclasses with constitute the economy. Marx defines classes in terms of the function which individuals perform in the system or process of production of surplus-value or aggregate profit and the relation in which they stand to the value that labor produces, which is to say the form of revenue that they receive, which is a deduction from that aggregate value. Workers get wages, capitalists get profits, and landlords get rent. It might *seem* that there are "three sources of revenue" (i.e., labor, capital, and land), as Smith occasionally claims.[331] Yet Marx argues that the sole source of revenue is the aggregate value produced by labor in industry and realized on the market in exchange (M').[332]

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[328] Cf. Marx 1990, 644.
[329] Cf. Marx 1990, 1043-4.
[330] Cf. Marx 1976c, 19: "If the silk-worm's object in spinning were to prolong its existence as a caterpillar [rather than to become a butterfly], it would be a perfect example of a wage-worker".
[331] Cf. Smith 1993, 50, I.vi: "Wages, profit, and rent are the three "original sources of all revenue as well as of all exchangeable value. All other revenue is ultimately derived from them". Cf. Smith 1993, 46, 48, I.vi; 56, I.vii.
[332] For Marx's discussion of the distinction between the essence (value) and appearance (revenue) of value-production, cf. Marx 1991, chapter 48 and "*Revenue and its Sources*" (Marx and Engels 1989b, 449-541).

4.3.2. Criticism of the OCT's Concept of Productive and Unproductive Labor

Marx claims that Smith has "jumbled together" and confused two very different definitions of productive and unproductive labor.[333] He rejects Smith's second definition, on which labor is productive only if it produces a "real" physical object (i.e., use-value), which excludes service work *tout court*.[334] That kind of labor would be productive in an "absolute sense", because it would be socially "reproductive", but it would not be productive in the "capitalist sense" — which is the only one relevant for an economic theory of modern, capitalist economies — because it does not necessarily produce "surplus value".[335] Similarly, Ricardo thinks that production and labor are the historical constant which is everywhere and always the same, while only the laws of *distribution* of the products of labor change from one mode of production to the next.[336] For Marx, this narrowly physical view of labor and production cannot recognize the specific form of labor in modern economies. And so, the OCT loses his specific hold on economic value and capitalism.[337]

A productive worker is not simply one whose labor yields a profit for his or her individual capitalist employer. Many workers in the commercial or financial sectors or real estate procure individual profits for their employers but are nevertheless one and all unproductive because those sectors do not directly produce the aggregate product which constitutes the aggregate value and hence forms the aggregate profit (i.e., surplus-value). Marx's view is concerned with the industrial

[333] Marx and Engels 1989a, 8, 11, 17.
[334] Cf. Smith 1993, 191-2, II.iii.
[335] Marx and Engels 1989a, 8.
[336] Cf. Ricardo 1951a, 5: "The produce of the earth—all that is derived from its surface by the united application of labour, machinery, and capital, is divided among the classes of the community; namely, the proprietor of the land [i.e., landlords], the owner of the stock or capital necessary for its cultivation [i.e., capitalists], and the labourers by whose industry it is cultivated. [/] But in different stages of society, the proportions of the whole produce of the earth which will be allotted to each of these classes, under the names of rent, profit, and wages, will be essentially different; depending mainly on the actual fertility of the soil, on the accumulation of capital and population, and on the skill, ingenuity, and instruments employed in agriculture. [/] To determine the laws which regulate this distribution, is the principle problem in Political Economy…"
[337] On Smith Marx writes e.g.: "Here the definition of form, the determination of productive and unproductive labourers by their relation to capitalist production, is abandoned" (Marx and Engels 1989a, 18).

production and commercial distribution ("realization") of *aggregate* profit (i.e., surplus-value), the fund from which all profits, interest and rent are paid, not just *individual* profits (*pace* the OCT).

4.4. Macroeconomic Model of the Accumulation of Surplus-Value as Capital and Distribution

Everything which this dissertation has addressed so far has been so much preparation for appreciating the difference between OCT and Marx's views of accumulation of profit as capital. That distinction is the essential lynchpin for my argument in this dissertation. Namely, the OCT can neither recognize nor explain the economic POU and hence the "rabble" *because* of the limited way in which it understands the accumulation of capital, *because* of its assumptions or fundamental concepts (e.g., Say's Law). This will be the topic of the following chapter, in which I return to the topic of the POU, the OCT and Marx's view of both, which is the culmination of my argument. Now it is essential to consider how Marx's view of accumulation fundamentally differs from that of the OCT so that it will also be clear in the following chapter why he *can* recognize and explain the economic POU and the "rabble" as symptoms of a deeper cause. (It is the changing composition of capital investments which disrupts effective demand and displaces workers from employment.)

Like the OCT, Marx thinks that capitalists accumulate capital when they save or reinvest their revenues or profits, rather than consume them. And his view can seem very similar to the OCT. However, they are very different, for reasons pertaining to what I call their micro-real and macro-monetary perspectives. In his *Theories of Surplus Value*, Marx addresses the OCT's view that accumulation of capital is the process in which capitalists "convert" (i.e., reinvest, save) revenues and profits which capital investments yield into new circulating capital to employ more workers (i.e., productive consumption) and conduct production on an expanding scale. Marx calls

this view "one sided", because accumulation is not just the "conversion" of revenue or profit into new circulating capital.[338] It is the production of more *capital* by labor (i.e., surplus-value), which means production of *both* more means of production (i.e., fixed capital) *and* more means of consumption (i.e., circulating capital). Capital *is* just the process of production and accumulation of the surplus-value instantiated in all products, which are two sides of the same coin. "Does a worker in a cotton factory produce only cotton goods? No. He produces capital. He produces values which serve anew to command his work and to increase by means of it new values".[339]

Though it might not be immediately obvious, Marx disagrees with OCT's view that capitalists' "parsimony" or saving revenue and profit is the driving factor of accumulation rather than industry.[340] Industry drives accumulation, for Marx. So, he also disagrees with the OCT's view that individual capitalists must receive revenues and profits *before* the capitalist class can save or reinvest and accumulate further capital. Individual capitalists' incomes *only* constrain their individual expenditure (i.e., micro-determination). They do *not* determine or constrain the total accumulation of capital. Rather the opposite. The total investment of the entire capitalist class in industrial production of surplus-value determines or constrains the amounts of income which individual capitalists can obtain as portions of aggregate profit (i.e., macro-determination).

Several of Marx's apparently more straightforward statements might give the misleading impression that his view is not so different from the OCT's, or can at least sound similar. He claims that "surplus-value" is the "substance of accumulation",[341] which capitalists *must* receive and reinvest to compete.[342] He calls accumulation "the production of capital by capital", which results

[338] Marx and Engels 1989b, 103.
[339] Marx 1976c, 32. That labor-power is bought and sold for a wage to produce surplus-value defines capitalism (Marx 1990, 274).
[340] Cf. Smith 1993, 199, II.iii; Kalecki 1971, 78-9; Kalecki 1968. Cf. Mitchell, Wray, Watts 2019, 409-13, 479-485.
[341] Marx 1990, 751.
[342] Cf. Marx 1990, 742: "Accumulate, accumulate! That is Moses and the prophets!".

in its exponentially "accelerated accumulation".[343] Thus, he calls "reproduction on an increasing scale" a "spiral", rather than a circle,[344] much as Smith compared profit to "compound interest".[345] In volume I, Marx writes:

> … reproduction on an expanded scale, i.e., accumulation, reproduces the capital relation on an expanded scale, with more capitalists, or bigger capitalists, at one pole, and more wage-labourers at the other pole. The reproduction of labour-power which must incessantly be re-incorporated into capital as its means of valorization, which cannot get free of capital, and whose enslavement to capital is only concealed by the variety of individual capitalists to whom it sells itself, forms, in fact, a factor in the production of capital itself. Accumulation of capital is therefore the multiplication of the proletariat.[346]

And in volume III, Marx similarly writes:

> …the capitalist production process essentially consists of this production of surplus-value, represented in the surplus product or the aliquot portion of commodities produced in which unpaid labour is objectified. It should never be forgotten that **the production of this surplus-value – and the transformation of a portion of it back into capital, or accumulation, forms an integral part of surplus-value production – is the immediate purpose and the determining motive of capitalist production.** Capitalist production, therefore, should never be depicted as something that it is not, i.e. as production whose immediate purpose is consumption, or the production of means of enjoyment for the capitalist. This would be to ignore completely its specific character, as this is expressed in its basic inner pattern.[347]

Marx's model of accumulation is expressed in his schema of expanded reproduction, which is a development on his schema of simple reproduction, which I discussed in the previous chapter. The difference between Marx's macro-monetary view and the OCT's micro-real view is evident there. To recall, the schema of simple reproduction describes an economy in which the total output of the department which produces means of production (I) and the department which produces the means of consumption (II) equals inputs of those departments. The output of the department which

[343] Marx 1990, 775.
[344] Marx 1990, 745; Marx 1990, 727, 780; Marx and Engels 1989b, 153-4.
[345] Smith 1993, 94, I.ix.
[346] Marx 1990, 763. Cf. Marx 1990, 772: "It cannot be otherwise in a mode of production in which the worker exists to satisfy the need of the existing values for valorization…"
[347] Marx 1991, 351-2.

produces means of production (I) equals the constant capital inputs of that department (I) plus those of the department which produces the means of consumption (II); and the outputs of the department which produces the means of consumption (II) equal the payments for wages for workers employed in both departments (destined for consumption) plus the income of the capitalist class, the surplus, which it uses to purchase its own means of consumption (from department II).[348] This is represented by Table 3.1. as follows:

Simple Reproduction	Constant	Variable	Surplus	**Output:**
Department I:	$4,000	$1,000	$1,000	$6,000[a]
Department II:	$2,000	$500	$500	$3,000[b]
Input:	$6,000[a]	$1,500[b]	$1,500[b]	$9,000

(Table 3.1. Simple Reproduction)

This is a harmonious picture of a circular flow of money and commodities in which inputs and outputs always sync. There is no over- or underproduction, no disproportion between the departments of production and employment, no turbulence or problems. It is also an ideal which exists nowhere in the empirical world. The difference between simple reproduction, which does not describe capitalist economies, and expanded reproduction, which does, is that the capitalist class in the latter does not use the entire surplus to purchase their own means of consumption. They use part for consumption, but also save a portion of the surplus-value, reinvesting some as constant capital into means of production (I) and some as variable capital into wages of labor-power, which will spent be on means of consumption (II).[349] "One part of the surplus-value is consumed by the capitalist as revenue, the other part is employed as capital, i.e. it is accumulated".[350] Capitalists use it to employ productive workers, who consume the means of

[348] Cf. Marx 1990, chapter 23 and Marx 1992, chapter 20.
[349] Cf. Marx 1990, chapter 24 and Marx 1992, chapter 21, esp. 586-9. Here one would also have to consider credit-creation as well.
[350] Marx 1990, 738. Cf. Cf. Marx 1992, 579: "…one portion of surplus-value is spent as revenue, and another portion is transformed into capital. Only with this precondition does real accumulation take place. But the idea that

production to produce aggregate profit for capitalists,[351] and who consume the means of individual consumption to reproduce themselves. Assuming capitalists simply hoard their individual revenue, rather than consume it, and no depreciation of capital, the sequence of three cycles of accumulation or expanded reproduction of surplus-value as capital may be represented with the same figures by Table 3.2. as follows:

1. Accumulation	Constant	Variable	Surplus	Revenue	Capital
Department I:	$4,400	$1,100	[$500]	[$500]	=
Department II:	$2,120	$530	[$150]	[$350]	$8,150
2. Accumulation	Constant	Variable	Surplus	Revenue	Capital
Department I:	$4,840	$1,210	[$550]	[$1,500]	=
Department II:	$2,332	$583	[$265]	[$830]	$8,965
3. Accumulation	Constant	Variable	Surplus	Revenue	Capital
Department I:	$5,324	$1,331	[$605]	[$2,105]	=
Department II:	$2,565.2	$641.3	[$291.5]	[$1,121.5]	$9,861.5

(Table 3.2. Expanded Reproduction or Accumulation)

Clearly, capitalists save or reinvest the surplus in each of these three rounds by adding part to the constant and part to the variable capital investments (here a ratio of 4:1). The surplus to be reinvested, the constant and variable capital, revenue, and total capital thereby grow with each round at a compound rate. So, accumulation can only be understood as the process of flows from aggregate investment, through the hands of consumers and back and forth between the two departments of capital, and finally back to the capitalist class.[352] This is the point at which there

accumulation is achieved at the expense of consumption… is an illusion that contradicts the essence of capitalist production, in as much as it assumes that the purpose and driving motive of this is consumption, and not the grabbing of surplus-value and its capitalization, i.e., accumulation". Cf. Marx 1992, 583: "half of the surplus-value is to be accumulated, … to be transformed into capital, one quarter of this… into variable capital, … leaving [the rest] to be transformed into constant capital".

[351] Cf. Marx 1990, 736: "…the consumption of the surplus product by productive, instead of unproductive, workers is a characteristic feature of the process of accumulation".

[352] Cf. Marx 1992, 592-3: "Just as department I has to supply the additional constant capital for department II out of its surplus product, so department II supplies in the same way the extra variable capital for department I." Cf. Marx 1992, 593: "What is for department I simply the exchange of revenue for means of consumption, merely a

will necessarily be turbulence at the very ground level of capital accumulation. For accumulation to occur in a harmonious way, a proportion between investment inputs, employment, production-outputs, and consumption must constantly be preserved between the departments which produce the means of production (I) and means of consumption (II). Yet, in an uncoordinated capitalist system, *disproportions* and hence relative overproduction or underconsumption between these departments are *inevitable*.[353] This also means that the chaotic disproportion of variable to constant capital inputs and outputs will create involuntary unemployment (i.e., the "rabble"), as I will discuss in the following chapter. Marx calls this feature of capital accumulation "a development of all the circumstances that produce in the working class a relative surplus population".[354]

The distinction of individual and aggregate profit illustrates how Marx's model is a fundamentally macro-monetary one, which starts from the macroeconomic scale of description before moving to the microeconomic one (i.e., macroeconomic determination). It is easy to imagine how one capitalist (e.g., a merchant) might withdraw more value (M') from the market than he or she invested into it (M),[355] as a matter of individual profit. Yet it is far more difficult to imagine how *all* capitalists can obtain a profit at the aggregate level.[356] It is necessary to consider the consumption and investment spending of capitalists as well as the employment and

commodity exchange oriented to consumption, is now for department II not just (as with simple reproduction) the transformation of its constant capital back from the form of commodity capital into its natural form, but rather the actual process of accumulation itself, the transformation of a part of its surplus product from the form of means of consumption into that of constant capital".

[353] Cf. Marx 1992, 596: "The precondition for simple reproduction, that $I_{(v+s)} = II_{(c)}$ is in compatible with capitalist production from the start…" The "transition" from simple to expanded reproduction "can never be achieved without difficulty" (Marx 1992, 772). Cf. Marx 1992, 593: "With production on an expanding basis, $I_{(v+s)}$ must be equal to II_c, plus the part of the surplus product that is reincorporated as capital, plus the extra portion of constant capital needed to expand production in department II, and the minimum for this expansion is that without which genuine accumulation, i.e. the actual extension of production in department I, cannot be carried out". Cf. Marx and Engels 1989b, 154f. Cf. Sowell 1967, Sowell 1972, Sowell 2006.

[354] Marx 1992, 589.

[355] Cf. Marx 1992, 421: "The capitalist who stores up money has to that extent sold without buying".

[356] Cf. Marx 1992, 422: "difficulties start to arise when we assume not partial [i.e., relative] accumulation of money capital but general accumulation within the capitalist class" as a whole.

consumption spending of workers. The total amount of money which workers-consumers can spend on the products of labor is the total amount of money that capitalists invest (i.e., variable capital) in workers' wages (M). Clearly, workers cannot pay capitalists more than the wages which capitalists pay to workers in exchange for their labor-power; they cannot buy all of the commodities that they produce. Yet the value that capitalists intend to obtain (M') by exchanging the aggregate product for more money and hence the surplus-value (ΔM) is obviously greater than the sum of money which capitalists pay to workers in wages (M). So, there is not enough money at *workers'* disposal (i.e., effective demand) to realize the surplus-value that they produce for capitalists' profits. Marx asks rhetorically: "Where does the extra money come from to realize the extra surplus-value that now exists in the commodity form?"[357] Heterodox voices ("underconsumptionists") and some Marxists have raised this point as a half-baked objection to the OCT,[358] much as Henry Ford once wrote: "It is bad financial policy to reduce wages because it also reduces buying power".[359] Yet the matter is hardly so simple. It is a macro-level question.

Capitalists can exploit (i.e., employ) workers to make as much surplus product (C') as is technically possible, but they can obtain a surplus-value (ΔM) in exchange for it at the end of this process only if they can sell that product for more money (M') than the costs of production (M')., thereby realizing their profits. And they can exchange the product for more money only if there is enough disposable income or effective demand in the economy generally (i.e., not only of worker-consumers) to buy the products at a profitable rate. In volume III, Marx writes: "The conditions of immediate exploitation [i.e., production] and for the realization of that exploitation [i.e., monetary

[357] Marx 1992, 419. Marx also recognizes that the velocity of circulation of money must be able to vary (Marx 1992, 400, 411, 413, 415) and that a credit system will be necessary for capitalism to work. Cf. Marx 1992, 420: "It would clearly not be possible [without credit]". Cf. Marx 1991, 418, 572; cf. Schumpeter 2017, 95.
[358] Cf. Sweezy 1970, X.2; Keynes 1964, 324-7 and chapter 23;, Bleaney 1976; Sherman 1991, chapter 9.
[359] Ford 1922, 163. Though his ideas might sound Keynesian, Ford is closer to classical theory than Keynes.

exchange] are not identical", because the product must be sold.[360] So, the realization of aggregate profit depends on the aggregate expenditure of money in circulation. There are two points here:

First, workers' wages and disposable income (i.e., workers' effective demand) are simply a function or one portion of the total amount of money that capitalists invest into the economy as a class (e.g., capitalists' effective demand), which determines the total amount in circulation and thus the limit to total consumption and total possible profit (i.e., surplus-value). Capitalists pay workers' wages, which flow back to capitalists in the sector which produces consumer goods (i.e., department II) in the market. Yet capitalists also spend on investments in means of production (i.e., products of department I), which creates additional employment, effective demand, and profit there. And they also spend on their own individual means of consumption (i.e., products of department II). All the money which workers receive in wages flows back to capitalists, and all the money which capitalists spend on consumption and investment (i.e., means of production *and* wages) flows back to capitalists (i.e., revenues and profits). As Michał Kalecki puts it, "workers spend what they get; capitalists get what they spend".[361] So, the capitalist class's aggregate investment expenditure is the driving factor of production of commodities but also realization of surplus-value in exchange, which is equally if not more important here. In volume I, Marx writes:

> To put it mathematically: the rate of accumulation [i.e., aggregate reinvestment of surplus-value in production] is the independent, not the dependent variable; the rate of wages is the dependent, not the independent variable.[362]

So, the limits of wages cannot *ultimately* pose any limit to aggregate profit and the accumulation of capital at the aggregate-level of the entire economy, because wages are just a function of aggregate investment which are more or less immediately returned to capitalists. And by the same

[360] Marx 1991, 352.
[361] Quoted in Mitchell, Wray, Watts 2019, 480.
[362] Marx 1990, 770. Cf. Sardoni 1997. This is just Keynes's theory *in nuce*, if one understands it in a way which is liberated from Ricardo's LTV. It distinguishes Marx from "crude underconsumptionism" (cf. Sweezy et. al. 2013).

token, workers' wages cannot be a source of aggregate profit.[363] Yet workers do not need to buy back all the products they produce (e.g., Tesla cars) for aggregate profit to be realized, so long as someone buys them, and that can be other workers or non-workers (e.g., capitalists, creditors, landlords, rentiers, etc.). So, Marx disagrees with Smith and Ricardo (and Mankiw) that profit is basically what is *left over* after capitalists deduct costs from returns.[364] Wages or costs only limit profits and accumulation of capital from the microeconomic perspective of an individual firm. If the total value produced is assumed to be fixed, then wage share would limit the profit share. But from a macroeconomic perspective, it is precisely not fixed. It is a variable which depends upon the aggregate investment of capitalists, which is the independent variable. The more capitalists spend, the more they get, as it were.

Second, workers are not the only consumers or even the most fundamental ones, as I have just argued, who spend money into circulation. The money which capitalists spend on their own individual consumption (i.e., products of department II) and invest in means of production (i.e., products of department I) is the surplus-money which will realize the surplus-value (ΔM) embodied in the surplus-product (C') in the market. As Marx puts it in volume II:

> A certain sum of money is required for [the] circulation [of that part of the annual product which represents surplus-value in the commodity form]. This sum of money belongs just as much to the capitalist class as does the annually produced mass of commodities that represents surplus-value. **It was originally cast into circulation by the capitalist class itself.** It is continuously divided among them afresh by circulation.[365]

[363] Cf. Marx 1992, 584: "this constantly repeated removal from and return to the starting-point – the capitalist's pocket – in no way increases the amount of money driving round this circuit. So this is not a source of monetary accumulation…" Cf. Marx 1990, 713: "instead of taking a single capitalist and a single worker, we take the whole capitalist class and the whole working class. The capitalist class is constantly giving to the working class drafts, in the form of money, on a portion of the product produced by the latter and appropriated by the former. The workers give these drafts back just as constantly to the capitalists, and thereby withdraw from the latter their allotted share of their own product. The transaction is veiled by the commodity form of the production and the money-form of the commodity".

[364] Cf. Marx 1991, 347 "The tendential fall in the rate of profit is linked with a tendential rise in the rate of surplus-value, i.e., in the level of exploitation of labour. Nothing is more absurd, then, than to explain a fall in the rate of profit in terms of a rise in wage rates, even though this too may be an exceptional case". Cf. Marx and Engels 1989b, 149.

[365] Marx 1992, 423. Cf. Sardoni 1997.

> …paradoxical as it may seem at first glance, **the capitalist class itself casts into circulation the money that serves towards the realization of the surplus-value** contained in its commodities.[366]
>
> He advances himself money against the surplus-value that he still has to hunt out (whether this is advanced to him from his own pocket or from someone else's by way of credit). But this money is also a circulating medium in which he can later realize his surplus-value.[367]

So, the total monetary expenditure of the capitalist class is the basis which realizes the products of labor as surplus-value and therefore *any* profit which individual capitalists may obtain. An individual capitalist can receive revenue only if all other capitalists invest and cannot receive revenue if all other capitalists do not spend on productive investments. Capitalists cannot receive a quantity of profit greater than the monetary sum they spend as a class. The direction of "causation"[368] of accumulation here is the exact opposite of the way in which the OCT claims.

Considering the view of the polish Marxist, Michał Kalecki, who is considered a founder of post-Keynesian macroeconomics, will help support and clarify the view in question as well as my claim that Marx's view is in basic agreement with the post-Keynesian view and opposed to that of the OCT. Two points must be emphasized here. The first concerns the difference between micro- and macroeconomic scales of description, and the second concerns the way in way in which the determination of profit and saving or investment work in relation to one another, which appears differently depending on which scale of description one adopts in considering them. Regarding the latter point on determination of profit and investment, in 1933 Kalecki lucidly writes:

> Gross profits = Gross investment [by capitalists] + capitalists' consumption. [/] What is the significance of this equation? Does it mean that profits in a given period determine capitalists' consumption and investment, or the reverse of this? The answer to this question depends on which of these items is directly subject to the decisions of capitalists. Now, capitalists may decide to consume and to invest more in a given period than in the preceding

[366] Marx 1992, 409.
[367] Marx 1992, 496.
[368] Cf. Mitchell, Wray, Watts 2019, 552.

> one, but they cannot decide to earn more. **It is, therefore, their investment and consumption decisions which determine profits, and not vice versa.**[369]

So, in this view, "saving does not determine investment", as Smith, the OCT or microeconomists might have it, "but, on the contrary, it is precisely investment which creates savings".[370] Kalecki recognizes and addresses the fact that this view will seem "'paradoxical'" to many and certainly to advocates of the OCT or any micro-real perspective, because it contradicts what seems to be "common sense" from an individual-level scale of description.[371] Regarding other point flagged above, he clarifies matters by explicitly distinguishing micro- and macro-level scales of description. The view in question is only paradoxical when viewed in the wrong scale. The OCT's claim that saving determines investment "is correct with regard to a single capitalist, [but] does not apply to the capitalist class as a whole", whereas his view that "investment… creates savings" is correct with regard to the capitalist class as a whole but does not apply to the single capitalist.[372] Saving determines investment and accumulation of capital for individual capitalists seen from a

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[369] Kalecki 1971, 78-9. Cf. Kalecki 1968; Steindl 1976, 231, 237, 243, 245; Robinson 1978; Mitchell, Wray, Watts 2019, 409-13, 479-485. Cf. Kalecki 1991, 25: "Capitalist income = Investment + Capitalist Consumption [/] This equation is of fundamental importance… It enables us to explain the fluctuations of production. Let us consider investment, capitalist consumption, and worker's consumption in a certain period. In which of these three items of national income may spontaneous changes occur [which could explain profits]? It is first obvious that workers' consumption cannot be subject to such a change. Indeed, it can neither exceed nor fall short of their earnings [i.e., wages]. But the position is quite different as far as capitalist expenditure is concerned. In the next period they may increase their consumption or their outlay on investment above their present income, drawing on bank credits or on reserves of their own. The capitalists may also reduce their expenditure on consumption and investment below their present income, paying off credits or increasing their reserves. Once they have done it, however, the above equation shows clearly that the income of the capitalists as a whole will increase or diminish precisely by as much as their [aggregate] expenditure was increased or decreased. The aggregate production is bound to reach the level at which the profits derived from it by the capitalists are equal to their consumption and investment. Since workers spend as much on consumer goods as they receive in wages, the remainder of the national income, being the capitalist share, is just equal to their expenditure on consumer and investment goods. Therefore, the capitalists as a class determine by their expenditure their profits and as a consequence the aggregate production".

[370] Kalecki 1990, 318.

[371] Kalecki 1971, 88.

[372] Cf. Kalecki 1971, 12: "The conclusion that the increase in capitalists' consumption increases in turn their profits, contradicts the common conviction that the more is consumed the less is saved. This approach, which is correct with regard to a single capitalist, does not apply to the capitalist class as a while. If some capitalists spend money, either on investment or consumer goods, their money passes to other capitalists in the form of profits. Investment or consumption of some capitalists creates profits for others. Capitalists as a class gain exactly as much as they invest or consume, and if—in a closed system—they cease to construct and consume they could not make any money at all".

microeconomic scale of description, but investment and accumulation of capital for the entire capitalist class determines individual saving seen from a macroeconomic scale of description. Different scales of description present different directions of determination of these terms.

Kalecki's view is often referred to as "post-Keynesian", though it is arguably just Marx's view of accumulation of surplus-value as capital stripped down to the essentials. For the sake of my argument distinguishing the micro-real character of the OCT from the macro-monetary character of Marx's theory, it is a helpful point of reference which is recognized in the literature yet rarely considered primarily "Marxist". If my interpretation is correct, the affinity should come as no surprise, given that the leading post-Keynesian is a *Marxist* who independently discovered Keynes's theory before the publication of the *General Theory* (1936) on the basis of *Capital*.[373]

Finally, Marx's macro-monetary view of accumulation is also the basis for his view of class and the distribution of value among classes, as was the case with the very different view of the OCT. The working class consists of productive industrial workers who produce commodities which constitute surplus-value, unproductive commercial or clerical workers who "realize" that value on the market, and unproductive workers who administer the entire process for capitalists. Examples of unproductive labor are "managers" who "supervise" and "discipline" the rest of the working class;[374] "clerks" who are employed and facilitate the process of circulation of commodities in commercial sectors, which "realize" the value of commodities and therefore surplus-value by changing its form from commodities into money;[375] those who work in the financial sector of the economy;[376] and those involved in real estate or who work for landlords.[377]

[373] For accounts of the relation between Kalecki, the OCT, and Marx, cf. Halevi and Kriesler 1991 and 2020.
[374] Cf. Marx 1990, 450, 549-60, 986; Marx 1991, 509-10; Marx and Engels 1989b, 504.
[375] Marx 1992, 208-10. Cf. Marx 1991, Ch. 16.
[376] Cf. Marx 1991, chapters 24 & 48; Marx and Engels 1989b, 449-541.
[377] Cf. Marx 1991, chapter 48; Marx and Engels 1989b, 449-541.

Marx also includes the "great mass of so-called 'higher grade' workers—such as state officials, the military, artists, doctors, priests, judges, lawyers, etc."[378] and the so-called "middle class".[379] The revenue of each segment of the working class (i.e., wages or salaries) is a deduction from the gross value produced (M'). Unproductive labor is simply activity which is paid out of revenue or income and therefore constitutes an overhead cost (*faux frais*) of production. It is often "useful" and even "necessary" within the capitalist mode of production, though it does not itself produce surplus-value.[380]

The capitalist class similarly consists of industrial capitalists involved in the production of commodities and surplus-value (M-C…P…C'-M'); unproductive commercial capitalists who are involved in the "realization" of the value or surplus-value of commodities on the market (M-C-M');[381] and unproductive financial capitalists who are involved with financing enterprise and allocating capital (M-M').[382] Industrial capital is the immediate basis of production of surplus-value (ΔM), though industrial capitalists must share it with other commercial and financial capitalists and landlords. It is "split up into various parts" which constitute the various forms of profits or revenue of commercial capitalists and creditors (i.e., interest) and landlords (i.e., rent).[383] Commercial capitalists buy commodities from industrial capitalists *below* their value and ultimately resell them *at* their value (e.g., MSRP). So, their profits are a deduction from the aggregate profit or surplus-value produced in industry (ΔM) which are necessary but unproductive.[384] Financial capitalists are supposed to lend money or credit-debt to facilitate

[378] Marx and Engels 1989a, 30.
[379] Cf. Marx and Engels 1989b, 196, 198; Marx 1991, 567. This is not to be confused with the marginal, self-employed "petit bourgeoisie".
[380] Cf. Marx 1990, 450, Marx 1992, 209.
[381] Marx 1991, 443.
[382] Marx 1991, 515.
[383] Marx 1990, 709-10. Cf. Marx 1976a, 46.
[384] Marx 1991, 381, 395, 398, 400.

enterprise, and their revenue — interest — is a deduction from the aggregate profit or surplus-value produced in industry (ΔM) or individual incomes (M').[385] The class of landlords receives its revenue (i.e., rent) in exchange for allowing workers and capitalists to use its real assets (i.e., land), and so its income is a deduction or "transfer" from workers' wages or salaries (M') and capitalists' profits (ΔM). Its role is neither productive, nor useful, nor necessary, according to Marx.[386]

So, the aggregate profit or surplus-value (ΔM), which productive labor produces and unproductive labor realizes in markets, is distributed from industrial capitalists to commercial and financial capitalists in the forms of profit and interest and to landlords in the form of rent in exchange for the "functions" that they perform in the whole process of social production. In his *Theories of Surplus Value*, Marx formulates his macroeconomic model of aggregate profit or surplus-value and the forms of revenue into which it is distributed more precisely as: [387]

$$P=P'+I+R$$

The surplus-value or aggregate profit (P) equals the profits of industrial and commercial capitalists (P') plus the interest of financial capitalists (I) plus the rent of landlords (R). It is the "*whole fund* which the employing capitalist may divide, in whatever proportions, with the landlord and the money-lender".[388] The more(less) one receives, the less(more) the others receive.[389] So, land or

[385] Cf. Marx and Engels 1989b, 469: "*Interest* is therefore nothing but a part of the profit (which, in its turn, is itself nothing but SURPLUS VALUE, unpaid labour), which the industrial capitalist pays to the owner of the borrowed capital with which he 'works', either exclusively or partially". Insurance companies' profits are analogous (cf. Marx 1992, 215, 256).

[386] Cf. Marx and Engels 1989a, 466: "…rent is a payment for the '*use*' of natural things…" Cf. Marx and Engels 1989b, 470: "*Rent* is likewise simply a name for a part of the surplus value which the industrialist has to pay out, in the same way as *interest* is another part of the surplus value which, although it accrues to him (like rent), has to be handed over to someone else". Cf. Marx 1991, 960: "Landed property has nothing to do with the actual production process. Its role is limited to transferring a part of the surplus-value produced from capital's pocket into its own". (Cf. Marx 1991, part 6)

[387] Cf. Marx and Engels 1989b, 94: "…we mean by profit, the total sum of surplus-value which is seized in the first place by industrial capitalist, [irrespective of] how he may have to share this later with the money-lending capitalist (in the form of interest) and the landlord (in the form of rent).

[388] Marx 1976a, 47.

[389] Cf. Marx 1991, 362.

credit are not literally sources of revenue. They simply *entitle* landlords or creditors to shares in other peoples' income. Interest and rent are simply deductions from aggregate profit (ΔM).[390]

5. Conclusion

In this chapter I have argued that the OCT and Marx's theories of capital are fundamentally different. While the former adopts what I call a micro-real perspective on the production of profit and the accumulation of profit as capital, the latter adopts what I call a macro-monetary perspective. One major problem with the OCT's conception of (circulating) capital, I have argued, is that it does not enable the OCT to isolate the sole factor which produces surplus-value (i.e., variable capital, labor-power). A further problem, I have argued, is that its conception of capital and accumulation does not have a specific handle on the way they actually function, which is evident from a macro-monetary view of the determination of profit by investment. This difference between these two theories will explain their different responses to the topic of the economic POU. In the following chapter I address the way in which the problems of the OCT and the strengths of Marx's theory, as I have reconstructed them, bear on their ability to recognize and explain unintended consequences of the accumulation of profit as capital—the economic POU and Hegel's "rabble". In short, given the way in which it conceives of value, profit, and the accumulation of profit as capital, the POU will be inconceivable for the OCT. Yet Marx's conceptual resources enable him to recognize and explain it in terms of the changing proportion of capital investments (organic composition of capital) which occurs during capitalist accumulation. As capital

[390] Cf. Marx 1976a, 45-6: "*Rent, interest, and industrial profit* are only different names for different parts of the *surplus value* of the commodity, or the *unpaid labour enclosed in it*, and they are *equally derived from this source and from this source alone*. They are not derived from *land* as such or from *capital* as such, but land and capital enable their owners to get their respective shares out of the surplus value extracted by the employing capitalist from the labourer". Cf. Marx 1991, chapter 48.

accumulates, real productivity increases (cf. overproduction), while wage payments and employment can decrease (cf. underconsumption, lack of effective demand). The OCT's concepts of value and capital, I argue, constrain its ability to even recognize this problem, let alone explain it. For Marx, meanwhile, the problem which Hegel recognizes would be "a matter of course".[391]

[391] Peirce 1955, 151. Cf. Harman 1965.

Chapter Five: Capital Accumulation and the Economic POU

1. Introduction

The purpose of this chapter is to return to the economic problem of overproduction or underconsumption (POU) and involuntary unemployment (i.e., Hegel's "rabble") with which this dissertation began and put the findings of the previous two chapters to work—to show why the OCT can neither recognize nor explain the POU, while Marx's theory can claim that it is "a matter of course" in modern, capitalist economies.[1]

In the previous two chapters, I characterized the OCT and Marx's respective views of value and capital as micro-real and macro-monetary theories to clearly present the fundamental differences between them.[2] To recall, the OCT conceives of value and capital in exclusively "real" terms from a fundamentally microeconomic perspective, while Marx conceives of value and capital in "monetary" terms from a fundamentally macroeconomic perspective. The central problem running throughout the previous two chapters and continuing into this one is that the assumptions which the OCT takes for granted doctor its conclusions at every turn in a way which guarantees that supply and demand, production and consumption, and markets are in harmonious equilibrium *a priori*. Indeed, the economic POU or "general gluts" of unsold commodities are only conceivable in relation to disposable monetary income (i.e., effective demand), while real analysis can only conceive of relative excess or shortage of specific goods in relation to one another (i.e., barter-model). In short, the OCT's happy conclusions rest on question-worthy assumptions.

In what follows I address the OCT and Marx's respective views of the accumulation of capital, which are based on their respective views of value and capital, and which bear directly on

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1 Peirce 1955, 151. Cf. Harman 1965.

2 I borrow the latter expression from Moseley 2016 and similarly coin the former for the sake of clear distinction.

their differing views of the impossibility or inevitability of the POU in modern, capitalist economies. First, the OCT and Marx's views of value and capital determine their respective views about the accumulation of capital: the way in which it works, whether it has limits, whether those limits are exogenous and contingent or endogenous and necessary, and whether they can give rise to the unintended consequences such as the economic POU or involuntary unemployment or not. Second, the OCT and Marx's views on accumulation of capital determine their views on the POU and involuntary unemployment. So, it is specifically the topic of accumulation of capital and its limits which is decisive in the final analysis.

Because of its micro-real orientation, I argue, the OCT will hold that any limits to the accumulation of capital are *external* or *exogenous* to it. According to the OCT, any limits it might run up against are therefore contingent and accidental. The accumulation of capital cannot conceivably give rise to its own limits and in turn to unintended consequences or problems such as the POU or involuntary unemployment. From the OCT's perspective, overproduction or underconsumption can never be a general problem and unemployment is just a passing anomaly.

Because of his macro-monetary orientation, I argue, Marx will hold that the accumulation of capital can give rise to *internal* or *endogenous* limits to further investment and accumulation.[3] These limits are therefore necessary and substantial. According to Marx, the accumulation of capital gives rise to its own limits and in turn to the unintended consequences of the economic POU and involuntary unemployment. The internal limits to the accumulation of capital manifest themselves precisely as the POU and involuntary unemployment, which are just a consequence of accumulation itself. They are the *proof* of the endogenous limits of accumulation of capital, as it

[3] For a classic discussion of the "limits to capital", cf. Harvey 2018b.

were. As Marx puts it in *Theories of Surplus Value*: "The bourgeois mode of production contains within itself a barrier to the free development of the productive forces".[4]

To be clear, the essential lynchpin of my argument in this chapter, which presents the payoff of this dissertation, as it were, is that the OCT thinks that the limits to capital accumulation are exogenous and the POU is impossible *because* of its unargued assumptions, because it equates the micro- and macroeconomic scales of description or reduces the latter to the former and because it conceives of value and capital in "real" terms, excluding money completely. In other words, the micro-real character of the OCT is the *reason why* it is committed to its dismissive and arguably impaired view the POU and unemployment. Based on its assumptions, it claims that there is no conceivable way in which an endogenous limit to accumulation could give rise to those problems. Minus these assumptions, however, the OCT's story is off, as Marx's alterative theory can show.

2. Two Kinds of Theories: Micro-Real of Macro-Monetary

In the previous two chapters, I adopted numerous categories from economic theory and drew numerous distinctions between the OCT and Marx's theory to characterize them as what I call micro-real and macro-monetary theories, respectively, and to argue that they are fundamentally different. In what follows, I unpack the consequences of those two distinctly different outlooks as they bear upon the OCT and Marx's respective views of the accumulation of capital and its limits and their views of the POU and unemployment in turn. Namely, the OCT will hold that an individual capitalist's ability to accumulate capital is externally constrained by the revenue or profit he or she receives on the market, *and* the entire capitalist class's ability to accumulate capital are also externally constrained by the revenue or profit that they receive on the market (i.e.,

[4] Marx and Engels 1989b, 172, 153.

"aggregating up"). Marx, meanwhile, will hold that, indeed, an individual capitalist's ability to accumulate capital are externally constrained by the revenue or profit he or she receives on the market, *but* the entire capitalist class's ability to accumulate capital is internally constrained by the aggregate amount of capital that the entire capitalist class invests in production. While this claim might initially sound paradoxical, the difference between the OCT's micro-real and Marx's macro-monetary perspectives will show that it is in fact perfectly sensible. And it will illuminate the OCT and Marx's views on the economic POU and unemployment.

2.1. Exogeneous or Endogenous Limits to the Accumulation of Capital

What I call the OCT's micro-real perspective determines its conclusions about the limits to the accumulation of capital at both the microeconomic (i.e., individual) and macroeconomic (i.e., aggregate, class) scales of description. Because it equates the microeconomic and macroeconomic scales of description, or reduces the latter to the former, it will regard the limits to aggregate accumulation of capital as *the same* as the limits to individual accumulation of capital. And once the OCT construes aggregate accumulation as though it were the same as individual accumulation, it will seem plausible or even obvious or necessary to the OCT at least, that all limits to the accumulation of capital are exogeneous and that the accumulation of capital could not possibly give rise a limit which could in turn give rise to economic POU, which it believes is impossible. The post-Keynesian alternative, with which I will argue Marx agrees, if fundamentally opposed.

(1) First, the OCT starts from an observation about the individual capitalist which is obvious from a microeconomic scale of description. An individual must receive revenue or profit *first, before* he or she can save or reinvest it and accumulate it as more capital. An individual cannot just spontaneously have capital to invest and accumulate. So, an individual's stream of

revenue or profit constrains or determines the amount of value that he or she can save or reinvest in further production as capital and therefore also constrains the amount of capital which he or she can accumulate.[5] Recall the definition of profit which holds for an individual scale of description: *net returns equal total gross returns minus total expenditure on costs*.[6] Expenditure on costs, therefore, cuts into revenue and profits and thus constrains the amount which an individual can reinvest and accumulate as well. For example, recall Fisher's claim that "interest" on credit-debt presents a limit to the amount of profit which an individual can reinvest and accumulate as capital, or Patten's claim that "rent" on land presents a limit to the amount of profit an individual can reinvest and accumulate as capital.[7] There are also other expenses or costs than rent or interest, such as the *means of production* (i.e., fixed capital, raw materials) which must be bought from other individuals and *wages* which must be paid to workers, who will spend those wages on *means of consumption*.[8] From an individual perspective, if these costs increase(decrease), then the revenue and profits which an individual can accumulate as capital will obviously decrease(increase). In these cases, these factors which constrain the ability of an individual to accumulate are *external*, beyond the individual's control, the limits are exogeneous for individuals.

Second, the OCT then applies its questionable premise that the microeconomic and macroeconomic scales of scale of description are equivalent, which is to say that what is true of individuals at a microeconomic scale of description would also be true of the entire class of

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5 The OCT makes "the classical assumption that all savings are at all times automatically invested, which of course removes any possibility of such a deficiency [of effective demand]" (Bleaney 1976, 209; cf. 16, 23). Cf. Bernanke 2000, 24. Cf. Sherman 1979, 4: "All savings are *not* invested, so aggregate demand does *not* equal aggregate supply, except by accident". Cf. Keynes 1964, 96-7; Hudson 2015, 168.

6 Cf. Smith 1993, 172, 173, II.ii: "His real wealth is in proportion, not to his gross [revenue], but to his neat revenue".

7 Fisher 1896, 522; Patten 1891, 357.

8 Cf. Smith 1993, 172, II.ii: "Their [i.e., capitalists] real wealth too is in proportion, not to their gross, but to their neat revenue. The whole expense of maintaining the fixed capital [i.e., costs subtracted from gross revenue] must evidently be excluded from the neat revenue of the society".

individuals or the entire economy at a macroeconomic description.[9] That is, the OCT "aggregates up" its microeconomic description of accumulation into a macroeconomic picture of the aggregate-level accumulation of capital, which arguably leads to the following *fallacy of composition*.[10]

Third, and finally, the OCT concludes that the entire capitalist class must receive revenue or profit *first, before* it can save or reinvest it and accumulate it as more capital, just like an individual. So, the entire class of capitalists' stream of revenue or profit constrains or determines the amount of value that it can save or reinvest in further production as capital and therefore also constrains the amount of capital which it can accumulate,[11] just like an individual. Capitalists' necessary expenditure on costs would cut into or constrain revenue and profits, and so expenditure on costs would present the limit to the amount of revenue or capital which they can accumulate on both the individual aggregate levels. The OCT's equation of micro- and macroeconomic scales of description here means that *individual* capitalists must receive sufficient revenue and profits first, before *all capitalists* can save or reinvest and accumulate capital at the aggregate-level.[12] This is the questionable leap from the micro- to the macroeconomic scale of description, which I address momentarily. The OCT concludes that the limits to individual accumulation, which are external (e.g., costs), are also the limits to aggregate accumulation, which it also takes to be external, because it equates these scales of description.

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[9] Cf. Smith 1996, 293, IV.ii: "What is prudence in the conduct of every private family, can scarcely be folly in that of a great kingdom". Cf. Ricardo 1951a, 248, XXVII: "That which is wise in an individual is wise in a nation".

[10] Mitchell, Wray, Watts 2019, 409, 411, 490, 560.

[11] The OCT makes "the classical assumption that all savings are at all times automatically invested, which of course removes any possibility of such a deficiency [of effective demand]" (Bleaney 1976, 209; cf. 16, 23). Cf. Bernanke 2000, 24. Cf. Sherman 1979, 4: "All savings are *not* invested, so aggregate demand does *not* equal aggregate supply, except by accident". Cf. Keynes 1964, 96-7; Hudson 2015, 168.

[12] Cf. Smith 1993, 220, II.v: "The capital of all the individuals of a nation, has its limits in the same manner as that of a single individual… The capital of all the individuals of a nation is increased in the same manner as that of the single individual, by their continually accumulating and adding it to whatever they save out of their revenue".

In sum, the OCT conceives of the *direction of determination* of capital accumulation, in my own terminology, as running from the individual-level receipt of revenues and profits and their reinvestment to the aggregate-level of total accumulation of capital. In other words, the amount of accumulation at the individual-level determines the amount of accumulation at the aggregate-level ("aggregating up"). The OCT holds that the limits to aggregate-level accumulation of capital are *exogeneous*, rather than *endogenous*, because the limits to individual-level accumulation of capital are *exogenous*, and it equates these scales of description. This is why it will be inconceivable for the OCT that the accumulation of capital could give rise to its own endogenous limit, which could take the form of the POU or involuntary unemployment. Yet this contentious conclusion arguably rests on a *fallacy of composition*, which I now address directly.

Before addressing the alternative to the OCT's view, it is important to note the problem with it clearly and succinctly. In short, the OCT basically claims that *everyone* must wait until they receive income *first, before* they can spend it on investment (i.e., saving), because an *individual* must wait until he or she receives income *first, before* he or she can spend it on investment (i.e., saving), because the OCT equates what is true for *everyone* with what is true for *an individual* (i.e., macro- and microeconomic scales of description). However, if *everyone* is waiting for income—not spending—then *no one* will receive any of the income which they are waiting to receive, because *one persons' spending is another persons' income*. This is the fundamental macro-monetary observation which micro-real theories such as the OCT overlook, because they equate the individual- and aggregate-level scales of description.

(2) The post-Keynesian alternative to the OCT's view, with which I will argue that Marx agrees, is the exact opposite of the OCT's view of accumulation of capital. They reverse the direction of determination of accumulation of capital. It does not run from individuals to

aggregates (pace the OCT), but rather from the aggregate-level to the individual-level. That is, aggregate-level spending (i.e., microeconomic scale of description) constrains or determines the total amount of value which individuals can receive as income, revenue, or profits (i.e., microeconomic scale of description). More specifically, the total amount of value which capitalists spend on consumption *and* investment or saving (i.e., means of production and wages) will determine the entire amount of value which forms the incomes, revenues, and aggregate profit (i.e., surplus-value) which workers and capitalists receive, which consumers can spend on products (i.e., effective demand), and can be distributed in various ways to classes. Mitchell, Wray, and Watts refer to what I call the *direction of determination* with the stronger language of "causation", and they claim that *aggregate spending determines income* (pace the OCT).[13] In sum, they write:

> … the mark-ups desired at the micro level depend on macro-level spending. […] Thus, holding all else equal, for profits to increase, capitalist spending must rise. **Aggregate profits are determined by total capitalist spending** (capitalists get what they spend). [/] This is without reference to micro-level pricing behaviour. **If capitalist spending is zero (in the simple model) then aggregate profits are zero. No amount of pricing power can affect aggregate profits in such a condition.** [/] How can we reconcile the microeconomic outcomes with the macroeconomic conditions? Given that macro profits are determined by investment… micro-level pricing power determines the distribution of profits among capitalists. Those that have more pricing power can get their desired mark-up [e.g., monopolies]; those with less market power set lower mark-ups and might even make losses. [/] […] pricing *per se* does not create profits.[14]

First, they remark that aggregate profits are not formed by "aggregating up" individual profits, which individual capitalists may imagine that they obtain by *marking up prices*. That would be a fallacy of composition. Prices *distribute* that aggregate profit (surplus-value), but do not alter it.

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[13] Cf. Mitchell, Wray, Watts 2019, 552: "Most [macro]economists [today] accept that at the aggregate level, causation goes from expenditure to income. The reasoning is that a nation can decide to spend more [e.g., public deficit spending, private credit], thereby generating more income, but it cannot simply decide to have more income. The key is that financial institutions can provide finance for the additional expenditure, which then creates more income. While we accept that at the level of the individual household, firm or even local government, income largely determines spending; at the aggregate level it is spending that determines income".

[14] Mitchell, Wray, Watts 2019, 482.

Second, they reconfigure the conception of the *limits* to accumulation of profit as capital in relation to micro- and macroeconomic scales of description. Seen from a microeconomic scale of description, the income of an *individual economic unit* (e.g., firm or household) externally limits its ability to invest and accumulate, because individuals must acquire money *before* they can make payments. But this is not true at a macroeconomic scale of description. The entire class of all economic units must spend *first, before* anyone else can receive or that money to pay for anything, because one person's income is another person's expenditure. Capitalists can withdraw more money from the economy in the form of profits *only if* they spend and productively invest more money into the economy, because workers' wages ultimately just come from capitalists anyways. Workers cannot spend more money into the economy than they receive as wages (M), for which they depend on capitalists' investments or employments, such that they would realize capitalists' profits (M'). Workers' individual consumption expenditure cannot constitute surplus-value (ΔM). This means that the aggregate expenditure of the capitalist class (i.e., consumption and investment) is the driving force but also *endogenous* limit of income formation (M') and aggregate profit-formation (ΔM) from which all incomes and profits are paid as deductions.[15] The limit to income, revenue, or profit, is *internal* or *endogenous* to the entire economy, seen from a macroeconomic scale of description. So, the individual economic unit simply cannot provide the analogous model by which one can understand macroeconomic phenomena (pace the OCT): "our own personal budget experience generates no knowledge that is relevant" for macroeconomic considerations.[16]

Given what has just been said about the dependence of incomes and profits upon capitalists' aggregate consumption and investment expenditure, any fluctuations in expenditure by members of the capitalist class can have significant effects upon employment or workers or

[15] Cf. Sherman 1979, 3: "Investment is the motor force of expansion". Cf. Steindl 1976, 231, 237, 243, 245.
[16] Cf. Mitchell, Wray, Watts 2019, 15.

unemployment, the disposable income of consumers (effective demand) and profitability. In short, positive or negative changes in capitalists' expenditure, if it crosses certain immanent thresholds, can give rise to macroeconomic *cycles*, which Marx will discuss. And this issue also turns upon the distinction between micro- and macroeconomic scales of description. For example, while it is "rational" for an individual capitalist to want to pay his or her workers low wages, to cut costs, to increase relative profit margins in the short run (and every capitalist certainly wishes he or she could do so), it would be catastrophic if *every* capitalist actually did so. For, the effective demand for many capitalists' products is provided by workers having disposable income, which is to say wages which they receive from other capitalists. On this point, Kalecki writes:

> …one of the main features of the capitalist system is the fact that what is to the advantage of a single entrepreneur does not necessarily benefit all entrepreneurs as a class. If one entrepreneur reduces wages he is able *ceteris paribus* to expand production; but once all entrepreneurs do the same thing, the result will be entirely different. [/] Let us assume that wages have been in fact generally reduced, and likewise taxes as a counterpart of cuts in civil servants' salaries. Now the entrepreneurs, owing to the 'improved' price-wage relation [i.e., expected profits], utilize their equipment up to capacity level and in consequence unemployment vanishes. Has depression been overcome? By no means, as the goods produced have still to be sold. […] the capitalists must spend immediately all their additional profits on consumption or investment [in order to realize their expected profit in the place of workers' lessened disposable income or effective demand]. It is, however, most unlikely that this should happen.[17]

[17] Kalecki 1990, 188. Cf. Keynes 2015, 341-2. Cf. Elster 1986, 37-8: "… the realm of social contradictions. Let me begin with an example that was made famous by John Maynard Keynes but is already in Marx. It is a central paradox of capitalism that each capitalist wants his workers to have low wages, because this is good for his profits; yet he wants the workers employed by all other capitalists to have high wages, because this creates a demand for his products. Each capitalist, in other words, wants to be in a position which, for purely logical reasons, not everyone can occupy. Although the desire of each capitalist is internally consistent, their desires taken together are contradictory. There is no possible world in which they could all see their desires satisfied. [/] This is not merely a logical paradox. It is closely related to the recurring crises in the capitalist economy. To see this, take a case where loss of export markets leads to a fall in the demand for cars and hence in the profits of the car industry. Automobile producers will often react by laying off workers or by cutting their wages. For simplicity, consider only the second response. From their local [i.e., microeconomic] point of view, the behavior of the firms is quite rational; yet it also has consequences for other firms, because part of the demand for their products comes from automobile workers. These firms will, in a similarly rational response, also impose lower wages, thereby hurting everybody else in the same way as they were themselves hurt by the car producers. The end result of this vicious circle can be a state of mass unemployment".

If all capitalists pay all workers low wages, then all capitalists who sell consumer goods will have trouble selling them, realizing profits, will ultimately receive low profits, and could send the economy into a tailspin if they scale back their own production. This is just the downturn of the cycle, which is the opposite of the boom.

As I argue in the rest of this chapter, Marx adopts a macro-monetary view in line with the one I have just presented. Though it would go beyond the scope of this dissertation, I would argue that he already anticipates it. At any rate, his view of the changing "organic composition" of capital investment by the class of capitalists will be the macroeconomic basis for his explanation of the economic POU and what he calls the "relative surplus population or industrial reserve army", of the unemployed, which is just Hegel's "rabble" by another name. The OCT, meanwhile, will either be unable to imagine such a possibility (Smith) or vehemently deny it (Say, Mill, Ricardo).

3. The OCT on the Effects of Accumulation and Impossibility of the POU

3.1. Smith on the Effects of Accumulation: Competition, Falling Profit, and Surplus Exports

Smith does not entertain the possibility that a general economic POU involuntary unemployment could arise, as Hegel recognizes, and Marx tries to explain. There are potentially *historical* reasons for this, as Marx puts it: "Adam Smith did not yet know the phenomenon of overproduction, and crises resulting from overproduction".[18] But another possible *theoretical* reason is the way in which Smith frames matters. From the standpoint of a micro-real theory, it does not seem that the dynamics of accumulation of capital could give rise to such problems endogenously. For example, he thinks that real individual incomes, revenues, or profits constrain the entire economy's accumulation of wealth, not *vice versa*. He thinks that poverty is the cause of unemployment. He

[18] Marx and Engels 1989b, 154.

does not think that unemployment, which itself arguably has a deeper economic cause (i.e., capital investment), is the cause of poverty,[19] as Marx will claim. But he does anticipate several important theoretical aspects which Marx will develop in his own theory. In short, he thinks that increased accumulation of capital gives rise to increased competition, which gives rise to falling profits, and any surplus products will simply be exported before they can glut the market (i.e., POU).

There will be no problem to explain, from Smith's perspective. He thinks of the composition of capital as the ratio of real stock that individual capitalists invest in means of production (fixed capital) and labor (circulating capital), but most importantly of capital stock invested productive labor in relation to revenue spent on unproductive labor. This latter ratio influences profitability and dynamics of capital accumulation or economic development. It will not ultimately present an explanation of the possibility of rising productivity, falling effective demand, and increasing unemployment (i.e., POU) as capital accumulates, however, as Smith's model is always in equilibrium, supposing capitalists and markets enjoy "perfect liberty".[20]

(1) The more circulating capital that individual capitalists can invest to employ *productive* labor, according to Smith, the greater the individual profits that they can obtain. And the greater their profits, the more they will be able to save or reinvest and accumulate as further capital. Capital stock spent as revenue on unproductive labor, meanwhile, is a mere overhead cost or drain on profits and accumulation. Capitalist will naturally try to eliminate such expenses to maximize the profits that they can accumulate as further capital. Yet, with the progressive accumulation of capital also comes increased *competition* between capitalists (i.e., cost cutting), higher demand and

[19] Cf. Smith 1993, 87, I.viii: "In a year of sudden and extraordinary plenty, there are funds in the hands of many of the employers of industry, sufficient to maintain and employ a greater number of industrious people than been employed the year before…. The contrary happens in a year of sudden scarcity. The funds destined for employing industry are less than they had been the year before. A considerable number of people are thrown out of employment…"

[20] Smith 1993, 54, 61, I.vii; 388, IV.ix.

higher wages for productive workers, which tend to *undermine the rate of profit* that capitalists receive on their investments.[21] Smith writes: "the increase of stock, by increasing the competition, necessarily reduces the profit".[22] Elsewhere he continues:

> **As capitals increase in any country, the profits which can be made by employing them necessarily diminish.** It becomes gradually more and more difficult to find with in the country a profitable method of employing any new capital. There arises in consequence a **competition** between different capitals, the owner of one endeavouring to get possession of that employment which is occupied by another. But upon most occasions he can hope to justle that other out of this employment, by no other means but by dealing upon more reasonable terms. He must not only sell what he deals in somewhat cheaper, but in order to get it to sell, he must sometimes too buy it dearer.[23]

Smith holds that individual capitalists' costs constrain their revenues or profits and hence their ability to accumulate capital. He will understand costs as exogenous limits upon individuals' accumulation of capital to constrain aggregate accumulation, as I discussed in the previous chapter. Apart from interest and rent, the primary external barrier or limit to increased profit-formation and accumulation of capital is wages for workers. Labor contributes to profit-formation in production but is also a cost of production that increases with expanded production. When employment is low or unemployment high, workers are willing to accept lower wages and compete with one another for lower-paying jobs, which means higher profits to accumulate; when employment is high or unemployment low, because the economy is flourishing, workers will only accept higher wages and capitalists must compete for workers by offering competitive wages, cutting into individual capitalists' profits and accumulation.[24] So, not only does employment increase when production

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[21] Cf. Meek 1954; Meek 1956, chapter 2; Verdera 1992.

[22] Smith 1993, 128, I.x.

[23] Smith 2000, 384, II.iv.ii. Cf. Smith 2000, 387, II.iv.ii: "The whole capital of the country being augmented, the competition between the different capitals of which it was composed, would naturally be augmented along with it. The owners of those particular capitals would be obliged to content themselves with a smaller proportion of the produce of that labour which their respective capitals employed".

[24] Cf. Smith 1993, 156, I.xi: "…the rate of profit does not, like rent and wages, rise with the prosperity, and fall with the declension of the society. On the contrary, it is naturally low in rich, and high in poor countries, and it is always the highest in the countries which are going fastest to ruin".

expands. As capitalists employ more workers, they also pay each worker more, squeezing or cutting further into the profits which can be accumulated as the economy approaches full employment. He writes:

> **The increase of [capital] stock, which raises wages, tends to lower profit.** When the stocks of money rich merchants are turned into the same trade, their mutual **competition naturally tends to lower its profit**; and when there is a like increase of stock in all the different trades carries on in the same society, the same competition must produce **the same effect in them all**.[25]

It is noteworthy that, while Keynes and Marx will hold that that the wages of labor are an endogenous factor of capital accumulation, because workers simply return the wages they receive from capitalists to them in buying products, Smith thinks that wages are an exogenous limit to capitalists' profits, which shows his microeconomic perspective. Smith does not start from a macroeconomic scale of description or conceive of the economy as a "totality", in the Hegelian-Marxian jargon.[26] Rather, he "aggregates up". So, he does not think that the limits to accumulation which capitalists pose to one another in competition are an internal or endogenous limit which capital investment and accumulation places upon itself. And so, Smith will not hold that the economic POU or involuntary unemployment could possibly emerge from capital's own limits.

(2) Smith never seriously considers the possibility of the POU because of his view of the supply and demand for products of labor and his view of what happens when the former exceeds the latter in the course of accumulation of capital. In short, Smith thinks that any excess of products will simply be exported, foreclosing any consideration of the POU. Recall how Smith's model construes the modern economy as though everyone were basically a small producer or merchant

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[25] Smith 1993, 89, I.ix.

[26] Cf. Lukács 1971, 27. Much of the Hegelian verbiage that is germane to Marxism can be cached out and captured in other terms of macroeconomics, I would argue. Yet, it is worth noting that Keynes' distinctly macroeconomic perspective is also arguably influenced by one strain of Hegelian thought that survived the purge of absolute idealism in Cambridge and Oxford at the turn of the 20th century by Moore and Russell. It is the concept of "organic unity" which Keynes adopted from Moore and applied to economics. Cf. Keynes 2015, 7.

who *barters* excess or surplus products, rather than a waged or salaried worker or capitalist.[27] Because he does not distinguish, but rather equates micro- and macroeconomic scales of description, he holds the same view for nations as individuals. It seems obvious and unproblematic to him that any unconsumed national surplus will simply be *exported*. Before any *problem* of overproduction or underconsumption could emerge, producers would simply ship whatever unconsumed products they have abroad, rather than being forced *en masse* to sell them dangerously close to or below the cost of production (e.g., crises). Regarding consumer goods, he writes:

> **When the produce of any particular branch of industry exceeds what the demand of the country requires, the surplus must be sent abroad** and exchanged for something for which there is a demand at home. Without such exportation a part of the productive labour of the country must cease, and the value of its annual produce diminish. The land and labour of Great Britain produce generally more corn, woolens, and hardware than the demand of the home market requires. The surplus part of them, therefore, must be sent abroad, and exchanged for something for which there is a demand at home. **It is only by means of such exportation that this surplus can acquire a value sufficient to compensate the labour and expense of producing it.** The neighbourhood of the sea-coast, and the banks of all navigable rivers, are advantageous situations for industry, only because they facilitate the exportation and exchange of such surplus produce for something else which is more in demand there.[28]

Regarding capital goods, he similarly writes:

> When the **capital stock** of any country is increased to such a degree that it cannot be all employed in supplying the consumption and supporting the productive labour of that particular country, **the surplus part of it naturally disgorges itself into the carrying trade**, and is employed in performing the same offices to other countries.[29]

So, overproduction or underconsumption should not present any fundamental problem or limit.

There is a massive conceptual problem here, however, which illustrates the fundamentally microeconomic scale of his model and its limits. Just as Smith thinks that individuals barter their

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[27] Smith 1993, 31-2, I.iv; 205, II.iii; 225, II.v.
[28] Smith 1993, 223, II.v.
[29] Smith 1993, 224, II.v. Cf. Smith 1993, 232, III.i: "According to the natural course of things, therefore, the greater part of the capital of every growing society is, first, directed to agriculture, afterwards to manufactures, and last of all to foreign commerce".

excess products, which they produce but do not need, for other products, which they need but do not produce, he also thinks that surpluses of nations will simply be traded with other nations who need them and can provide their own unneeded surpluses in return. Domestic overproduction or overaccumulation will simply be exported to foreign markets, not result in a glut of domestic markets. From the perspective of real analysis, it may seem possible for each individual nation to specialize in the production of some real good and trade it in an international market in this way (i.e., Ricardian "comparative advantage", which Smith does not endorse).[30] But from the perspective of macro-monetary analysis, such a win-win scenario is impossible in the global balance of trade. Namely, *every* country could not simultaneously solve this problem in the way that Smith names, because not every country can be a net exporter, just as it is impossible for *every* country to run a relative trade surplus, without another country who would be a net importer or run a corresponding trade deficit. So, not every country can deal with it as Smith proposes. Yet Smith dismisses this concern as mercantilism.[31] So, while Hegel also will also claim that the economic POU necessitates export, he does not imagine it as a harmonious equilibrium of commerce. He recognizes the inconsistency within global economic expansion, resulting in violent conquest, colonialism, and imperialism.[32]

Finally, is essential to recognize an important notion which Smith uses, which subsequent heterodox thinkers (e.g., Sismondi, Malthus, at times Hegel, Keynes, and Marx) will use to argue to greater effect to claim that market demand *can* limit production and give rise to POU, as I discuss below. It is called "effective demand". Smith defines this term as follows:

> …the demand of those who are willing to pay the natural price of the commodity… sufficient to effectuate the bringing of the commodity to market. **It is different from**

[30] Cf. Ricardo 1951a, chapter VII; Shaikh 1979; Shaikh 1980.
[31] Smith 2000, 521, IV.ii.ii.
[32] A relevant point of comparison here is the fact that, in the context of the American revolution, Smith argued the British empire would be better off to emancipate the colonies and pursue a policy of harmonious economic trade.

> **absolute demand.** A very poor man may be said in some sense to have a demand for a coach and six; he may like to have it; but his demand is not an **effectual demand**, as the commodity can never be brought to market in order to satisfy it.[33]

Smith's contribution consists in the recognition that, from an economic perspective, it is not enough to simply need something ("absolute demand"). Consumption follows trade. And one can consume something that one needs *only if* one has some other real good or service, according to Smith, which someone else demands in exchange for it. This is the condition for demand to be "effectual". Some heterodox successors will develop this notion very differently by adding the notion of disposable income of consumers (e.g., money, wages) and the way in which it could limit production. Given his micro-real perspective, however, Smith will not consider that a lack of effective demand can present limits to accumulation of capital. Overproduction is either just the case of an individual capital in relation to the market (i.e., relative overproduction),[34] or it would be national phenomenon, in which case the solution is export. In any case, there is harmony.[35]

3.2. Say and Mill on the Impossibility of the POU

Some of Smith's orthodox successors develop what is implicit in his micro-real theory to argue explicitly that the economic POU or any other endogenous limit to accumulation is impossible, such as Jean Baptiste Say (1803)[36] and James Mill (1808), who passed Say's view to Ricardo.[37] Say frames exchange as barter, then he claims the POU is impossible, because exchange is barter.

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[33] Cf. Smith 1993, 54, I.vii.

[34] Smith 1993, 109, I.x: "…the narrowness of the market may not admit the employment of a larger capital in the business".

[35] Smith 1993, 214-15, II.v: "In all commodities which are produced by human industry, the quantity of industry annually employed is necessarily regulated by the annual demand, in such a manner that the average annual produce may, as nearly as possible, be equal to the average annual consumption".

[36] Cf. Say 1834, chapter 15.

[37] Cf. Mill 1808 chapters VI and VII. In what follows I only address Mill's view insofar as it coincides with Say's.

(1) Say's view is an expression of the OCT *par excellence*. He refers to the possibility of unsold or unsalable goods on the market as a "glut" and rejects Sismondi's heterodox view of "general gluts" (POU), which I will address in the following section.[38] Say echoes Smith's claim that "Money… necessarily runs after goods [i.e., C-M-C], but goods do not always or necessarily run after money" [i.e., M-C-M'],[39] when he asks rhetorically: "how are [consumers] to pay for [goods]?". "With money! But [consumers] must first acquire the money itself with which they are to pay…"[40] So, he thinks that people use goods (C) to buy money (M), which they use to buy goods (C) for final consumption. Moreover, he abbreviates this process (C-M-C) and abstracts entirely from money, as though an individual directly traded one product with one other individual for another product (C_a-C_b). They "barter",[41] he writes. Economic exchange is supposed to be a process in which one person or nation trades the productive activity of another for its own productive activity (i.e., barter of labors),[42] and money as an inessential *means* of exchanging goods in order to satisfy needs.[43] Similarly, Mill claims that one must imagine trade as "barter", and the "idea of money frequently tends to perplex", so it must be "laid out of the question".[44]

What has come to be known as "Say's Law"[45] is a fundamental assumption or premise of the OCT, which is implicit in Smith and explicit in Ricardo's account. Subsequent economists such as Keynes have summarized Say's Law as the claim that that "supply creates its own demand".[46] Yet, as Marx puts it: "In barter… no one can be a seller without being a buyer or a

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38 Say 1821, 8.
39 Smith 1993, 283, IV.i.
40 Cf. Say 1821, 8.
41 Cf. Say 1821, 18: "Wherever there is exchange, there are two values created and bartered".
42 Cf. Say 1821, 13: "*productions can only be purchased by productions*".
43 Cf. Say 1821, 14-15: "money in these transactions is only a transient agent which, once the exchange is completed, is no farther concerned in it, and flies to effect other exchanges". Cf. Say 1834, 136-44, XV.
44 Mill 1808, 82.
45 Cf. Sowell 1972, Baumol 1977, Baumol 1999.
46 Keynes 1964, 18: "the whole of the costs of production must necessarily be spent in the aggregate, directly or indirectly, on purchasing the product"; "supply creates its own demand in the sense that the aggregate demand

buying without being a seller".[47] And this coincidence of purchase and sale is supposed to guarantee harmonious markets. If one imagines that people directly barter goods for goods or trade labor for labor, then supply and demand always coincide by definition and equilibrium reigns. The production of every good that is supplied to the market entails a demand for the goods that are required to produce it and an equal demand for another good for which it is traded. Once one has accepted this premise, supply can never exceed demand in general or the so-called long run. Any unemployment would simply be a temporary consequence of changes in preferences, the unequal distribution of the capital that capitalists invest in production, temporary labor displacement because of the introduction of new and more productive machinery, or excessively high wages of one portion of the working class vis-à-vis others, which should be cured by cuts.[48] Say writes:

> It is worth while to remark, that **a product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value.** When the producer has put the finishing hand to his product, he is most anxious to sell it immediately, lest its value should diminish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus, the mere circumstance of the creation of one product immediately opens a vent for other products.[49]

And elsewhere he continues: "As each of us can only purchase the productions of others with his own productions – as the value we can buy is equal to the value we can produce, the more men can produce, the more they will purchase".[50] And similarly, Mill writes:

> The production of commodities creates, and is the one and universal cause which creates a market for the commodities produced. […] … a nation can never be naturally overstocked with capital or with commodities; as the very operation of capital makes a **vent for its own produce.**[51]

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price is equal to the aggregate supply price for all levels of output and employment" (21-2); "that the aggregate demand price of output as a whole is equal to its aggregate supply price for all volumes if output, is equivalent to the proposition that there is no instance to full employment" (26). Mitchell, Wray, Watts 2019, 170, 481.

47 Marx and Engels 1989b, 139.

48 Cf. Baumol 1997; Mitchell, Wray, Watts 2019, chapter 11. Cf. Keynes remark that the temporary character of this problem cannot console us, because we live in the short run: "*In the long run* we are all dead" (Keynes 2015, 105).

49 Say 1834, 138-9, I.xv.

50 Say 1834, 3.

51 Mill 1808, 81.

Say imagines that individuals produce products for trade, unlike Marx's picture of industrial wage-labor. When he claims that "the only way of getting rid of money is in the purchase of some product or other", he presumes that the only function of money is to serve as a mere "medium of exchange" of commodities (i.e., C-M-C), rather than a store of value and unit of account that can be accumulated as an end in itself (i.e., M-C-M'). So, his view does not fundamentally distinguish between spending money productively or investing to produce more commodities for sale (i.e., M-C-M') and spending money reproductively or buying means of individual consumption to live (i.e., C-M-C), though the OCT does distinguish between saving or productive expenditure and consumption spending in real terms. Say thinks investment spending simply redistributes the same amount of consumption differently, as Smith believes, and which is the questionable belief which leads them also to believe that markets are balanced and the POU is impossible.[52]

(2) On the basis of the moneyless barter model of exchange (C_a-C_b), the OCT conceives of the accumulation of capital only in real terms (C-C'). And on this basis, it concludes that any overproduction or underconsumption is that of one specific kind of commodity in relation to another and is therefore merely relative, rather than absolute or general. One kind of commodity (e.g., apples) can be overproduced or underconsumed in relation to another kind of commodity (e.g., oranges) which is not presented in the correct quantities for equilibrium to occur. Yet there can be no *general* or absolute POU, so long as people are bartering. In his *Treatise,* he writes:

> … the glut of a **particular** commodity arises from its having outrun the total demand for it in one or two ways; wither because it has been produced in excessive abundance, or because the production of other commodities has fallen short.[53]

And in a letter in which he responds to Malthus and Sismondi, he further elaborates:

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[52] Namely, worker-consumers tend to spend more or all of their income, while capitalist-investors tend to save (i.e., hoard) more of their income as liquidity and spend or invest less (cf. Keynes 1964, 96-7; Hudson 2015, 168).

[53] Say 1834, 135.

> … whenever there is a glut, a superabundance, of several sorts of merchandise, it is **because other articles are not produced in sufficient quantities to be exchanged for the former**; and if those who price the latter could provide more of them, or of other goods, the former would then find the vent which they required: in short, that the superabundance of goods of one description always arises of the deficiency of goods of another description.[54]

It is as though too many German apples on the market were not due to the fact that people do not want any more apples or that they do not have enough money to buy the apples, but rather to the fact that Italians have not produced enough oranges. An excessive supply of one good *would* clear the market, for Say, if others produced and supplied the right kind of other good. Mill too writes:

> … **a nation** may easily have more than enough of any one commodity, though she **can never have more than enough of commodities in general**. The quantity of any one commodity may easily be carried beyond its due proportion; but by that very circumstance is implied that some other commodity is not provided in sufficient proportion. […] Whenever this balance is properly preserved, there can be no superfluity of commodities, none for which a market will not be ready.[55]
> …the whole of the goods will be exchanged, **the one half against the other**; and the market will always be equal to the supply. Thus it appears that **the demand of a nation is always equal to the produce of a nation**.[56]

Consequently, what seems to be a general glut of commodities or saturation of the market (i.e., POU) would just be an exceptional, temporary, passing phenomenon of disequilibrium, which will be corrected by the market in the long run, because trade is fundamentally a coincidence of purchase and sale or supply and demand (i.e., barter). In the first edition of his *Treatise*, he writes:

> … in old nations like those of Europe, in which capital has been accumulated over several centuries, overabundance of the annual product would obstruct trade, if it were not absorbed by proportionate amounts of consumption. I realize that trade can be obstructed by the **overabundance of particular products.** It is an evil that can never be anything but **temporary**, for participation in the production of goods whose outputs exceed the need for them and whose value is debased will rapidly cease and it will instead be devoted to the production of the goods that are sought after. But **I cannot conceive that the products of the labour of an entire nation can ever be overabundant since one good provides the means to purchase the other.** The sum of its outputs composes the total wealth of a nation, and wealth is no more of an embarrassment to nations than it is to individuals.[57]

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54 Say 1821, 5; cf. Say 1821, 8.
55 Mill 1808, 84-5.
56 Mill 1808, 83.
57 Quoted in Baumol 1977.

Mill too claims it is a "fallacy" to believe that excessively rapid investment, production, and accumulation could result in a "surplus" of unsold commodities.[58] Yet, if one does not *assume* the barter-model, if one introduces money, or accepts that disposable income presents the upper limit to what can be bought and sold (i.e., effective demand), that markets can be saturated, then this view falls apart. It does not help to claim that one half of a nations' goods *could* always buy the other half in principle, if in fact the wrong goods have been produced in the wrong proportions.

3.3. Ricardo on the Effects of Accumulation

Ricardo's view of the accumulation of capital develops themes found in Smith (e.g., composition, competition, falling profit) which Marx will later revolutionize, though he also claims that capital cannot give rise to its own limitations, the economic POU is impossible, following Say and Mill.

3.3.1. Technological Innovation and the changing Composition of Capital

Ricardo claims that there is a trend or tendency of the ratio between fixed and circulating capital to change as capital accumulates or the economy develops productively. This is an innovation, which Marx will develop. Capitalists progressively invest relatively more in fixed capital (i.e., more efficient machinery, means of production) and relatively less in circulating capital (i.e., wages). They do so to produce more goods more efficiently in a way that requires less labor, to save on expenses on wages, which are a primary cost of production that limits profits, to increase relative profit margins, and outcompete other capitalists. The degree of demand for labor and therefore employment depends upon on the amount of circulating capital that capitalists invest in production (e.g., wages). So, increased capitalist production will increase the absolute demand for

[58] Mill 1808, 80.

labor, employment, and the population of the working class, but to a lesser degree than the accumulation of fixed capital. And so, the first consequence of accumulation and development of capital is that the demand for labor (i.e., circulating capital) will fall in relative terms in relation to increasing investment in means of production (i.e., fixed capital). The ratio of fixed to circulating rises. Ricardo writes: "The demand for labour will continue to increase with an increase of capital, but not in proportion to its increase; the ratio will necessarily be a diminishing ratio".[59] Capitalists can offer lower subsistence wage to workers, in order to increase their relative profit margin and compete in the short run, by introducing new, highly developed fixed capital, which lowers the cost of living, producing more goods with less labor and hence more cheaply. Workers are constantly displaced by the introduction of new machinery to increase capitalists' relative profit margins during accumulation and development of capital.

The dynamics of capital accumulation just outlined will ultimately determine the employment, population, and well-being of the working class in more or less brutal ways. As Ricardo puts it: "the supply [i.e., population] of labourers will always ultimately be in proportion to the means of supporting them" (i.e., investment in wages).[60] One must appreciate Ricardo's honesty about the detrimental effects novel technology on the working class and its fate. He writes:

> …I am convinced that the substitution of machinery for labour, is often very **injurious** to the interests of the class of labourers.[61] […] the opinion entertained by the labouring class, that the employment of machinery is frequently **detrimental** to their interests, is not founded on prejudice and error, but is conformable to the correct principles of political economy.[62]

In the best-case scenario, the lower relative cost of living (i.e., wages) and hence higher relative profits which novel technology enables *can* have the effect of a higher absolute standard of living

[59] Ricardo 1951a, 396, XXXI.
[60] Ricardo 1951a, 292, XX.
[61] Ricardo 1951a, 388, XXXI.
[62] Ricardo 1951a, 392, XXXI.

for *some* workers. But Ricardo is forthright about the fact that "net produce" (i.e., profit) is the primary interest of capitalists, while the "gross produce" (i.e., wages, individual workers' revenues, costs of production) determines the ultimate wellbeing of the overwhelming majority of human beings, who comprise the working class. And the capitalist class has every motivation to lower costs (gross produce) and therefore reduce the incomes or employment of the working class. If the "gross produce" is cut, in Ricardo's words, "there will necessarily be a diminution in the demand for labor, population will be redundant [i.e., unemployed], and the situation of the laboring classes will be that of distress and poverty".[63] The relevance of Ricardo's view to Hegel's "rabble" is most evident here. Yet his account will not ultimately sync with Hegel's, as it were, because he denies that the accumulation of capital or anything else can cause the economic POU.

3.3.2. The Falling Rate of Profit in Relation to Land and Rent

Another consequence of the accumulation of capital, Ricardo thinks, is that the rate of profit for capitalists in agriculture will tend to decline over the course of economic development. There will be diminishing returns on capital investment. Though it might initially sound similar, Ricardo's view is fundamentally different from Smith's on this point. And here one must distinguish between the absolute mass of profit or the "aggregate amount of profits",[64] on the one hand, and the relative rate of profit, on the other hand, which is a distinction Marx will develop. Ricardo recognizes it is possible for the rate of profit to fall while the absolute mass of profit increases.[65] In a way peculiar to Ricardo, however, he ultimately concludes that even the aggregate mass or absolute sum of

[63] Ricardo 1951a, 390 XXXI.
[64] Ricardo 1951a, 123, VI.
[65] For example, 19% of $200,000 is greater than 20% of $100,000, and 18% of $300,000 is greater than 19% of $200,000. In a series of three consecutive periods of economic activity, 20%, 19%, and 18% might name the respective rates of profit, while $100,000, $200,000, and $300,000 name the absolute mass of profits. However, Ricardo nevertheless conceives of profit in "real" terms, rather than "monetary" terms.

profits will tend to decrease because of the absolute, exogenous limit to capital accumulation which land and rent (i.e., overhead costs) pose for individual capitalists, as I will now address.[66]

The finite and diminishing supply of fertile land and corresponding system of differential ground-rents, according to Ricardo, cause diminishing returns on capital investment, because they usurp capitalists' profits and raise the cost of living (i.e., "corn") or workers' wages, further cutting into profits, and can even lower real wages to the detriment of capitalists and workers alike.[67] As capital accumulates and develops and its composition (i.e., the ratio of fixed capital to circulating capital rises), it will move into less fertile lands, which require more labor and yield less corn. This will increase the cost of corn or the wages that capitalists must pay to workers and therefore decrease the relative profits which they can obtain, as well as the differential rent or premium captured by landlords from capitalists on the more fertile land. Echoing Smith, Ricardo writes:

> **The natural tendency of profits then is to fall**; for, in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour. This tendency, this gravitation as it were of profits, is happily **checked at repeated intervals by the improvements in machinery**, connected with the production of necessaries, as well as by discoveries in the science of agriculture which enable us to relinquish a portion of labour before required, and therefore to lower the price of the prime necessary of the labourer.[68]

The primary exogenous limit to profits, according to Ricardo's microeconomic model, is wages. So, the rising costs of living (i.e., wage-payments) and decreasing returns to capital in relation to land and rent will indirectly impact the amount of profits which can be accumulated. He continues:

> …however abundant capital may become, **there is no other adequate reason for a fall of profit but a rise of wages**, and further it may be added, that the only adequate and permanent **cause for the rise of wages is the increasing difficulty of providing food** and necessaries for the increasing number of workmen.[69]

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[66] Cf. Ricardo 1951a, 120-4, VI.
[67] Cf. Edelberg 1933, Davis 1993, Knight 1935.
[68] Ricardo 1951a, 120, VI.
[69] Ricardo 1951a, 296, XXI

Landlords' rents cause costs of living (i.e., wages) and therefore the costs of production (i.e., rent, circulating capital investment) to rise, and thus cause profitability to fall—at first only relatively regarding the rate of profit, but ultimately absolutely regarding the mass of profit. (Marx will see this differently.) So, the situation of private property of land causes wages to rise to the detriment of capitalist production and profits in general at individual and aggregate-levels. Ricardo writes:

> We should expect that, however the **rate of the profits** of stock might diminish in consequence of the accumulation of capital on the land, and the rise of wages, yet that the aggregate amount of profits would increase. […] …but after capital has accumulated to a large amount, and [individual] profits have fallen, the **further accumulation diminishes the aggregate of profits**.[70]

So, Ricardo thinks the progressive accumulation of capital gives rise to progressive limitations to accumulation of capital. In his view, it is the exogenous factor of land or rent that poses the absolute limit to the accumulation of capital. The tendency of the rate of profit to fall might "happily" be checked from the standpoint of capitalists, if investment in fixed capital and more efficient means of production is increased, rendering production cheaper such that wages could be lowered and relative profit margins could be increased, with potentially dire consequences for the working class. Otherwise, however, a "rapid rise in rent" will mean that landlords will capture more and more of the profit of capitalists,[71] and the cost of labor (i.e., the cost of subsistence wages) will rise until capitalists' profit margin is eliminated and the economy reaches the so-called "stationary state" posited by classical political economists,[72] which means terminal stagnation.[73] This is why Ricardo concludes: "the interest of the landlord is always opposed to that of the consumer and

[70] Ricardo 1951a, 123, VI.
[71] Ricardo 1951a, 126, VI.
[72] Mill 1985, 111-17.
[73] Ricardo 1951a, 122, VI.

manufacturer".[74] "All classes, therefore, except the landlords, will be injured by the increase in the price of corn. […] the interest of the landlord is… opposed to the rest of the community".[75]

3.3.3. The POU is Impossible, and Export is Unnecessary

Having addressed Ricardo's view that the ultimate limit to the accumulation of capital is exogenous (i.e., ground-rent's effect on wages and profits), it is necessary to consider his view of the possibility overaccumulation or the economic POU, which might present endogenous limit to accumulation. The relation between his views on these topics is not a mere unrelated coincidence. Ricardo thinks that the POU is impossible and capital accumulation has no endogenous limits *because* he adopts a micro-real theory according to which all limits to accumulation are exogenous.

Ricardo adopts and builds upon the reflections of Smith, Say, and Mill, which I have addressed above. He accepts Say's Law. And so, supply or production always yields a sufficient and corresponding degree of demand or consumption, according to Ricardo. He thinks of production, exchange, and accumulation of capital as though one trades the goods produced by others with the goods one produces (C_a-C_a), rather than *money* (C-M-C) or *more money* via purchased goods (M-C-M') or the products of purchased goods (M-C…P…C'-M'). So, the accumulation of capital is the accumulation of real productive goods (C-C'), rather than money, as Schumpeter noted.[76] And this is why it is inconceivable to him that there should ever be a general or aggregate overproduction of goods and overaccumulation of capital. For, the overproduction of goods in general is only conceivable in relation to disposable income. He writes:

> **Productions are always bought by productions**, or by services; money is only the medium by which the exchange is effected. **Too much of a particular commodity may be produced, of which there may be such a glut in the market**, as not to repay the capital

[74] Ricardo 1951a, 335, XXIV, cf. 424, XXXII.
[75] Ricardo 1951a, 336, XXIV.
[76] Cf. Schumpeter 1994, 277.

> expended on it**; but this cannot be the case with respect to all commodities**; the demand for corn is limited by the mouths which are to eat it… nothing is required but the means, and nothing can afford the means, but an increase of production. If I had food and necessaries at my disposal, I should not be long in want of workmen who would put me in possession of some of the objects most useful or most desirable to me.[77]
>
> …**there is no limit to demand—no limit to the employment of capital** while it yields any profit, and… however abundant capital may become, there is no other adequate reason for a fall of profit but a rise of wages…[78]

Ricardo clearly echoes Say in several ways. First, he claims production or supply is not limited by demand or consumption, but rather *vice versa*. He does not recognize *effective demand*, which is demand backed by the ability to pay and an *endogenous* factor, because his model assumes this dimension away. Second, the only limit to production is the *absolute* demand of consumers ("mouths") and the technical capacities of production, which are *exogeneous* factors. Ultimately, he thinks that only revenue or profits limit production, and he takes this to be an exogenous limit at both the microeconomic and macroeconomic scales of description. Any surplus or overproduction of commodities is only the *relative* overproduction of some good in relation to a lacking corresponding production of some other good, not a general or absolute overproduction or glut. If there are too many stockings on the market (i.e., not enough buyers), then this is simply because someone is not producing enough corn, not because someone has simply produced too many stockings, or because people do not have sufficient income, as Say also claimed above. Yet if one abandons the barter-model and introduces money, especially an unequal distribution of it, then matters look very differently, as I will argue below. (If the value of the product to be sold for a profit exceeds the amount people's disposable income, then capital ceases to yield expected profit and production decreases or ceases. This would be an endogenous limit to capital accumulation.)

[77] Ricardo 1951a, 291-2, XXI.
[78] Ricardo 1951a, 296, XXI. Ricardo's final qualifier is arguably more important than he seems to recognize.

Ricardo continues to argue that Smith's account of exports of surpluses discussed above is gratuitous.[79] He denies the necessity of export, for reasons pertaining to his own micro-real model of the economy. He adheres more stringently to Say's Law.[80] On Smith's view above, he writes:

> Adam Smith speaks here of a rise of wages [due to competition between capitalists], but it is of a temporary rise, proceeding from increased funds before the population is increased; and he does not appear to see, that at the same time that capital is increased, the work to be effected by capital, is increased in the same proportion. **M. Say has**, however, most satisfactorily **shewn, that there is no amount of capital which may not be employed in a country, because demand is only limited by production.** No man produces, but with a view to consume or sell, and he never sells, but with an intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production. **By producing, then, he necessarily becomes either the consumer of his own goods, or the purchaser and consumer of the goods of some other person.** It is not to be supposed that he should, for any length of time, be ill-informed of the commodities which he can most advantageously produce, to attain the object which he has in view, namely, the possession of other goods; and, therefore, it is not probable that he will continually produce a commodity for which there is no demand.[81]

Ricardo doubles down on the view that the limits to accumulation are exogenous in his claim that only production can limit demand and demand cannot limit production or accumulation. The fundamentally microeconomic character of his view is evident in his claim that general overproduction or overaccumulation cannot persist because individual capitalists will not produce where there is no demand. From the fact that capitalists will invest in production *only if* a profit is to be made, Ricardo infers that capitalists never find themselves in a situation in which investments have already been made and they are already producing too much (i.e., effective demand suddenly drops off). At the very moment in which markets are saturated ("gluts") and supply exceeds demand, capitalists would (be able to) shift investment elsewhere to re-equilibrate markets and resolve any apparent issue (POU).[82] Never mind that this *can* cause unemployment, poverty, and

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[79] Cf. Smith 1993, 89, I.ix.
[80] Cf. Say 1834, 138-9, I.xv. Cf. Keynes 1964, 18, 21-2, 26.
[81] Ricardo 1951a, 289-90, XXI.
[82] Cf. Ricardo 1951a, 122, VI: "I have already said, that long before this state of prices was become permanent, there would be no motive for accumulation; for no one accumulates but with a view to make his accumulation productive,

a lack of effective demand. The only limit Ricardo sees is a lack of motivation for entrepreneurs to invest in production.[83] An increase in wages and consequent decrease in profit which the accumulation of capital and increased competition may cause is only a *temporary* disequilibrium of the market, rather than a permanent trend, as Smith would hold. The only deeper trend leading to a fall in profits, for Ricardo, is the progressively diminishing returns to capital due to ground-rent, which is a completely exogenous variable.

Based on his view just presented, Ricardo rejects even Smith's modest view of the necessity or compulsion that markets can exercise upon capitalists to export any surplus domestic product to foreign markets.[84] On Smith's view, he writes:

> **It is**, however, **always a matter of choice** in what way a capital shall be employed, **and therefore there can never, for any length of time, be a surplus of any commodity**; for if there were, it would fall below its natural price [i.e., its value, determined by the values of its production inputs], and capital would be removed [by capitalists] to some more profitable employment. No writer has more satisfactorily and ably shewn than Dr. Smith, the tendency of capital to move from employments in which the goods produced do not repay by their price the whole expenses, including the ordinary profits, of producing and bringing them to market [to employments in which the goods produced repay by their price the whole expenses].[85] […] When merchants engage their capitals in **foreign trade**, or in the carrying trade, it **is always from choice**, and never from necessity: it is because in that trade their profits will be somewhat greater than in the home trade.[86]

And Mill too similarly writes:

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and it is only when so employed that it operates on profits. Without a motive there could be no accumulation, and consequently such a state of prices never could take place. The farmer and manufacturer can no more live without profit, than the labourer without wages. Their motive for accumulation will diminish with every diminution of profit, and will cease altogether when their profits are so low as not to afford them an adequate compensation for their trouble, and the risk which they must necessarily encounter in employing their capital productively".

83 In a letter, Ricardo writes: "I acknowledge there may not be adequate motives for production, and therefore things will not be produced; but I cannot allow first that with these inadequate motives commodities will be produced, and secondly that, if their production is attended with loss to the producer, it is for any other reason than because too great a proportion is given to the labourers employed. Increase their number and the evil is remedied. Let the employer consume more himself and there will be no diminution of demand for labour; but the pay of the labourer, which was before extravagantly high, will be reduced" (Ricardo 1973, 16).

84 Ricardo 1951a, 223-4, II.v.

85 Ricardo 1951a, 291, XXI.

86 Ricardo 1951a, 293, XXI.

> **Foreign commerce… is in all cases a matter of expediency rather than of necessity.** The intention of it is not to furnish a vent for the produce of the industry of the country, because that **industry always furnishes a vent for itself**.[87]

Today this view might seem quaint to many, after 1873, 1929, 1987, and 2008.[88] Yet it arguably evades Smith's point by changing the topic from a general glut of unsold commodities in a nation at a given point in time, to a long-run view ("for any length of time") in which overproduction and underconsumption would *eventually* even out as capitalists change their investments, not without significant occasional losses or collateral damage. It is simply the way in which Ricardo frames the matter that gives rise to his conclusion that the economic POU is impossible, rather than any empirical foundation. Nevertheless, he also adopts a view of international trade ("comparative advantage") in which real goods would be bartered between nations to mutual advantage.[89]

Ultimately, the limits of Ricardo's fundamentally microeconomic model are illustrated in his claim that *wages* are the initial limit to profits which can be accumulated. For, wages are only as high as the amount of circulating capital which capitalists invest in production. Wages are not an independent variable or exogenous constant.[90] So, the limits to accumulation are elsewhere. Marx will contest Ricardo's framing, argue that the POU is conceivable, and provide an explanation for it. If consumers do not have sufficient disposable income, due e.g., to a lack of employment (i.e., money), then there will not be sufficient demand to buy any proceeds of capitalist production at a rate which yields "any profit" for capitalists to continue at the given rate of production. This will restrict production and cause unemployment in a downward spiral. But capitalists' investments in wages of production ultimately decide the level of effective demand. The claim that in the so-called *long run* everything will even out simply avoids what ought to be

[87] Mill 1808, 86.
[88] Cf. Hudson 2006, Bezemer 2009, Cohan 2019.
[89] Cf. Ricardo 1951a, chapter VII; Shaikh 1979, Shaikh 1980.
[90] Cf. Kalecki 1971; Steindl 1976, chapter XIV; Sherman 1976; Marx and Engels 1989b, 149; Marx 1991, 347.

explained: the cyclical booms and busts that occur in relatively regular intervals of accumulation and development, which subsequent economists call the "business" or "trade cycle".[91]

4. The Heterodox Classical Theory on the Effects of Accumulation and Possibility of the POU

Roughly contemporaneous with Ricardo were several heterodox dissenters: Simonde de Sismondi and Robert Malthus, with whom Hegel's conclusion about the "rabble" is in overall agreement. And considering their views will bring the discussion of this chapter back to the topic with which this dissertation began: the economic POU and the origin of Hegel's "rabble". These heterodox thinkers are still generally at home within the orientation of the OCT, particularly Smith, though they recognize and admit that the economic POU and involuntary unemployment are not only possible, but also occur with relative frequency in modern economies. This disagreement with the OCT is the respect in which they are heterodox. However, they do not and cannot sufficiently explain *why* it occurs, because of their residual orthodox assumptions. They are in a situation analogous to that of Ignaz Semmelweis, as I addressed in chapter two. They try to articulate an account of an empirical fact of the world fact in conceptual terms that are not suited to it or even rule it out *a priori*. The heterodox classical school stands somewhere between the paradigm of the OCT and the post-Keynesian or Marxian one in a way which can at least highlight the theoretical limitations of the OCT—on the threshold of the view that the limit to the accumulation of capital and the effects to which it gives rise (e.g., POU, involuntary unemployment, "rabble") are endogenous to the process of capital investment and accumulation itself, rather than merely exogenous. A theory that could explain the empirical phenomenon of the POU, which the heterodox camp at least recognizes, would thus require that the "fundamental concepts"

[91] Cf. Schumpeter 1927; Kondratieff 1935; Kalecki 1990, 529-54; Kalecki 1971, chapters 1 and 11; Sherman 1991; Medio 2018; Marx 1990, 582.

(*Grundbegriffe*) of classical political economy (i.e., value and capital) undergo a radical revision, as I argued that Marx presents in previous chapters and address below.

4.1. Underconsumptionism

The heterodox classical school is a species of so-called underconsumptionism.[92] Underconsumptionism primarily a criticism of the OCT and a rejection of Say's Law. It consists in the view that capitalist economies, left to themselves, do not automatically tend to harmonious equilibrium between production and consumption or supply and demand, to increasing accumulation or general prosperity, as the advocates of the OCT contend. So, it has always been controversial. It adopts and radicalizes Smith's notion of "effectual demand" (i.e., effective demand) discussed above. It was born in an environment of conventional theory and dire economic circumstances, in which the ideas of the former were unable to explain the latter (i.e., the post-Napoleonic Depression). And its main proponents in the 20th century were W.T. Foster, Waddill Catchings, and J.A. Hobson,[93] though it did not receive any major recognition in mainstream of economic thought until Keynes published his *General Theory* (1936) in the middle of the Great Depression. There Keynes stresses the problems that can arise in relation to "under-consumption",[94] a "gap between income and consumption",[95] and the way which "an insufficiency of effective demand" can present "a drag on prosperity".[96] Yet long before Marx or Keynes, though in a way which is analogous to their situation, underconsumptionists found themselves in a "crisis in traditional economics" in which their "fellow economists, by their unthinking acceptance of

[92] Cf. Bleaney 1976, Blaug 1985, 166-8; Sherman 1991, chapter 9.
[93] Foster and Catchings 1926. Cf. Foster 1922; Hobson 1988, 199f.; Hobson and Durbin 1933; Hayek 1931.
[94] Keynes 1964, 342.
[95] Keynes 1964, 97. Cf. Keynes 1964, 61-5, 166-8ff. on what he calls the "propensity to consume" or "save" and the "liquidity preference". Cf. Schumpeter 1954, 740, fn. 4; 750.
[96] Keynes 1964, 33.

Say's law, were in effect asserting the impossibility of what was actually happening",[97] which is to say the economic POU.

The hallmark of underconsumptionism is the claim that "*consumption regulates production*".[98] The limits of the ability of people to buy and consume the products of labor set the limits to profitability, accumulation, production, employment, and the normal functioning of the economy. And there are two essential features of underconsumptionism and its view of the POU, which must be closely considered. Michael Bleaney characterizes the first as

> 1) the idea that **a state of depression** is not just a phase of the industrial cycle or the result of a temporary conjunction of circumstances but **is the state towards which the economy naturally tends** in the absence of offsetting factors;[99]
> …one of the general features of underconsumption theories: their tendency to imply that ultimately **capitalism cannot guarantee continuous full employment** and rising living standards and is liable sooner or later to slip down into prolonged stagnation.[100]

So, the heterodoxy of underconsumptionism consists in part in the claim that the normal state of capitalist economies, even left to themselves in "perfect liberty",[101] to borrow Smith's phrase, is one of stagnation and unemployment (e.g., "rabble") in the absence of any offsetting factors.

Underconsumptionism also focuses exclusively on the production and consumption of final consumer goods, which Marx calls the products of department II of capital (i.e., means of consumption), and it neglects the production and consumption of productive capital goods, which Marx calls department I of capital (i.e., means of production), as I discussed in the previous chapters, and will return to below. Bleaney characterizes the second essential feature as

> 2) the idea that **this [**tendency towards stagnation and unemployment] **is the result of a persistent tendency towards insufficiency of demand for *consumption goods***.

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[97] Sweezy 1953, 258. He makes this comment about Keynes, but it arguably equally applies to underconsumptionists.
[98] Foster and Catchings 1926, 540. Cf. Hobson 1988, 158: "The power of production far outstripped the actual rate of consumption, and, contrary to the older economic theory, was unable to force a corresponding increase of consumption by lowering prices".
[99] Bleaney 1976, 11.
[100] Bleaney 1976, 9.
[101] Smith 1993, 54, 61, I.vii; 388, IV.ix.

Both elements [i.e., 1) and 2)] are necessary.[102]

…the vital thing [is] the focus on the demand for **consumption goods**.[103]

Underconsumptionism is ultimately one of two kinds of theories which make consumption or *effective demand* into the determining aspect of the economy, unlike the OCT, which focuses on production and supply.[104] First, there are those demand-theories which focus upon the effective demand of *workers* for consumer goods and the way in which any lack of effective demand on their part can cause economic problems (e.g., falling profitability and wages, unemployment, poverty, stagnation, depressions, or crises). And underconsumptionism is this kind of demand-theory. As Foster and Catchings put it: "The reason we [i.e., capitalists] cannot sell the products… is because they [i.e., the consumers, workers] lack the money; it is not because they refuse to buy" or do not need the goods in question.[105] Second, there are those demand-theories which focus upon the effective demand of *capitalists* who purchase and consume the means of production and labor, which means investment into production and employment (i.e., workers' wages, disposable income), and the way in which a lack of effective demand on their part can cripple the economy generally. And the post-Keynesian and Marxian views are this kind of demand-theory, as I will argue.[106] Clearly, the second kind of theory grasps the workings of the capitalist economy at a more fundamental level, because the investment of the capitalist class into production and employment already determines the effective demand of workers for consumption goods in the same stroke. From the latter perspective, the only cure for a faltering economy is an increase in capitalists' aggregate investment and rising expectations of profitability;[107] and the weakness of

[102] Bleaney 1976, 11.
[103] Bleaney 1976, 13.
[104] Cf. Keynes's "Poverty in Plenty: Is the Economic System Self-Adjusting?" (Keynes 1973, 485-93).
[105] Foster and Catchings 1926, 536.
[106] Cf. Sherman 1979, 3-4: "Investment is the motor force of expansion" (cf. Keynes 1964, 96-7).
[107] Cf. Keynes's "An Economic Analysis of Unemployment" (Keynes 1973, 343-367). Cf. Keynes 2015, 341-2.

underconsumptionism from the latter perspective will be that it only focuses on the consumption or effective demand of workers and neglects the consumption or effective demand of capitalists,[108] specifically regarding their investment expenditure of capital foods, from Marx's perspective.

Foster illustrates this approach with his claim that the production and sale of means of production (i.e., department I) depends upon the production and sale of means of consumption (i.e., department II), and he calls this dependency-relation the "vertical integration of industry".[109] Production in general is supposed to ultimately depend upon the continued production, sale and purchase of final consumer goods by consumers who have sufficient disposable income to do so. If consumers can no longer purchase enough final consumer goods (i.e., department II), then they will not be able to be sold, inventories will back up, their production will be significantly curtailed or cease, and demand for the productive capital goods (i.e., department I) with which final consumer goods are produced will also be significantly reduced or cease, further impacting the economy negatively. Workers employed in the production of capital goods (i.e., department I) will be laid off and thus effective demand for final consumer goods (i.e., department II) will also be further damaged, sending out further ripple effects in a downward spiral that can bring the entire economy to a grinding halt. Now, the production of final consumer goods (i.e., department II) does require the means of production, and hence it involves the purchase and consumption of capital goods or means of production (i.e., department I). However, the underconsumptionist thesis of the primacy of final consumer goods (i.e., department II) and the dependency of capital goods (i.e., department I) upon them is based upon the questionable common-sense assumption that capitalist

[108] Cf. Bleaney 1976, 209: "…all of these underconsumption theories have suffered from major theoretical defects. They consistently underestimate the role of investment expenditure, and although this is what lends them their specifically underconsumptionist quality, it is also a fundamental mistake. Their difficulty is that they are trying to prove the existence of a deficiency of effective demand while retaining the classical assumption that all savings are at all times automatically invested, which of course removes any possibility of such a deficiency". Cf. Sherman 1979, 11: "Early underconsumptionists paid almost no attention to investment demand".

[109] Foster 1922, 471. Cf. Hobson 1988, 119-21ff.

economies are *all about consumption*. And it is important to note that Keynes and Marx's elaboration of underconsumptionist themes will *not* accept this view of "vertical integration" or rigid dependence upon consumer goods or department II.

Ultimately, however, it is important to note that underconsumptionism does not present a fully worked out explanation of the economic POU which it addresses, as Marx will note and I address later.[110] Because of the weaknesses which I have already mentioned, contemporary commentators who are otherwise sympathetic, even speak of a "fallacy of crude underconsumptionism".[111] The underconsumptionists only present rough but suggestive intuitions of the business or "industrial cycle", which stands at the center of Marx's explanation.[112] And what is ultimately unsatisfying about underconsumptionism will be that it does not conceive of the economic POU as an immanent outgrowth or expression of an endogenous limit which the accumulation of capital poses for itself, because it ultimately neglects to sufficiently consider the investment of capital into means of production (i.e., department I) and accumulation by capitalists.

4.2. Sismondi on Maldistribution and Overproduction or Underconsumption

There are basically two different types of underconsumptionism, which approach the economic POU from two different angles or aspects of the problem, as it were. One is exemplified by Sismondi, who was the first major proponent of underconsumptionism in classical political economy. His view consists in the thesis that the distribution of wealth in capitalist economies tends to become sufficiently unequal that final consumers (i.e., workers) do not have enough

[110] Cf. Bleaney 1976, 208: "Underconsumptionism does not constitute a theoretical system. …it might rather be described as a thesis about the nature of a capitalist economy, its long term tendencies and the role of consumption within it. Its validity as a subject of investigation lies in its being a particular theory of this aspect of capitalism".
[111] Cf. Sweezy et al 2013.
[112] Cf. Marx 1990, 582. Sowell 1996 suggests that Sismondi does present a rough aggregate growth model which tries to account for disequilibria. Cf. also Schumpeter 1954, 740-1.

disposable income (i.e., wages) to buy all the products on offer at a rate which is sufficiently profitable for capitalists to continue to accumulate further new wealth. The economy would cease to function normally, and the would POU appear.[113] Though he understood himself as a follower of Smith,[114] he rejects the OCT's claim that there will always fundamentally be an equilibrium of supply and demand or production and consumption.[115]

Sismondi sketches a rough theory of growth cycles (i.e., booms and busts).[116] He claims that profitability is a condition for production and employment in capitalist economies.[117] Yet a radically excessive disproportion in the distribution of wealth (i.e., inequality), which appears at relatively regular intervals in capitalist economies, can prohibit worker-consumers from purchasing all the products on the market at a rate which is sufficiently profitable for capitalists. This prohibits production and employment from continuing normally, it creates the general "gluts" of unsold commodities on the market (i.e., POU), which thinks are phenomena that appear with the advent of capitalism,[118] and which can cause a portion of the population to be unemployed.

Sismondi's early essay, *Political Economy* (1815), starts from a Smithian basis. He proceeds in a way which is very similar to Hegel's view of the POU, developing his view in terms of the social division of labor, etc. And he concludes with the germ of the view he later develops into the antithesis of the OCT of Smith, Say and Ricardo, which Hegel also expresses. He writes:

> As the division of labour incessantly augments its productive powers, and the increase of capitals daily obliges the merchant to seek new employment for industry, and try new manufactures, the producer feels no interest more pressing than that of extending his

[113] Cf. Bleaney 1976, 211: "The Sismondian type, which is superficially more primitive, is actually more enduring. The essence of this type is the idea (a) that a very unequal distribution of income is inherent in capitalist production and (b) that capitalists cannot find ways to consume or invest all of their share and are 'forced' to save it". Cf. Schumpeter 1954, 740 fn. 4.
[114] For general accounts of Sismondi's view, cf. Besrtucci 1975, Bleaney 1976 (chapter 3), Sismondi 1982, Stewart 1984, Sowell 1972 (chapter 2), Sowell 2006b, Grossman 2017 (chapter 1).
[115] Cf. Sismondi 2019, 278.
[116] Cf. Schumpeter 1954, 740-1; Sherman 1991, 193; Sowell 1972 (chapter 2), Sowell 2006b; Medio 2018.
[117] Sismondi 2019, 520.
[118] Sismondi 2019, 630, 647.

> market. If he cannot find new places of sale, it will neither suit him to enlarge his manufactory, when his capital has been increased by saving, nor to improve his fabrication by performing more work with the same machinery, or the same number of hands. **The whole progress of his fortune depends on the progress of his sale. […] if the general consumption is not increased, the production is not so either.**[119]

Unlike the OCT, then, Sismondi holds that production does not just limit consumption, but rather consumption can also limit production. Capitalists can accumulate profits *only if* they can expand production, but they can expand production *only if* consumption and markets are equally expanded. Slightly later, he continues to state that the process of modern economic production depends on a "proper rate of consumption", which is to say that it requires that wealth is distributed in a proportion which enables consumers (i.e., workers) to purchase in a sufficient degree the consumer goods which labor produces. In a manner which is reminiscent of Hegel again, he writes:

> By a circular concatenation, in which **every effect becomes a cause in its turn, production gives revenue, revenue furnishes and regulates a consumable fund, which fund again causes production and measures it.** The national wealth continues to augment, and the state to prosper, so long as these three quantities, which are **proportional** to each other, continue to augment in a gradual manner, but whenever the **proportion** among them is broken, the state decays. […]
>
> **The new produce thus obtained must, at last, find a consumer**; and though it may be generally affirmed, that to increase the labour is to increase the wealth, and with it in a similar proportion the revenue and the consumption; still it is any thing but proved, that by too rapid an increase of its labour a nation may not altogether deviate from the **proper rate of consumption**, and thus ruin itself by economy as well as prodigality.[120]

If production grows too rapidly and consumption does not keep up, then the distribution of wealth can become sufficiently unequal or disproportional, such that the process of production and development will be painfully limited by capacities of worker-consumers to purchase the products.

In his later text, the *New Principles of Political Economy* (1819), Sismondi expresses the same view much more clearly and directly. He specifically takes issue with Say and Ricardo's

[119] Sismondi 1815 § 4.
[120] Sismondi 1815 § 4.

view that production limits income yet income does not limit production because producers "could only count on those consumers who are disposed of an income".[121] And he claims that the "entire annual income" which will fund every individual's "consumption" also "causes a demand". "If the annual income did not buy the total annual product", he continues, then "a part of that product would remain unsold, it would glut the warehouses of the producers, immobilize their capital, and production [i.e., employment as well] would stop".[122] In this work he explicitly names the unequal "distributions of income" as a cause that can lead to this lack of demand and the economic POU.[123] And he refers to the introduction of "machines" in the productive process as an additional factor as well as and the possibility of "crises".[124] On the one hand, the introduction of new machinery massively increases physical productivity, while on the other it simultaneously displaces workers and can therefore decrease the level of effective demand. Here he begins to break with the OCT's "false principle" that capitalists' saved or invested capital is automatically equally offset by an equal amount of other consumption elsewhere, merely distributing the same amount of consumption differently (e.g., Say's Law, Smith's "invisible hand").[125] If capitalists invest their stock as circulating capital in workers' wages, they can be confident that those wages will be spent on the consumer goods which some capitalists are in the business of producing. However, if capitalists shift their investment from circulating capital (i.e., wages) into fixed capital (i.e., means of production), to produce more efficiently with less labor, the production and consumption of

[121] Cf. Sismondi 2019, 12: "Messrs. Say and Ricardo have come to the conclusion that consumption was an unlimited power, or at least having no other limits than those of production, whereas it is in fact limited by income. They have declared that whatever wealth is produced, it would always find consumers, and they have encouraged the producers to cause that glut in the markets which today occasions the distress in the civilized works; whereas they should have warned the producers that they could count only on those consumers who disposed of an income".
[122] Sismondi 2019, 92.
[123] Sismondi 2019, 274-5.
[124] Sismondi 2019, 9, 13, 280. Cf. Sowell 1972 (chapter 2) and Sowell 2006b.
[125] Cf. Sismondi 2019, 278: "The error in which they have fallen stems entirely from the false principle that makes the annual output, in their eyes, the same as the income. […] With this principle it becomes entirely impossible to understand the best demonstrated fact in the whole history of commerce: the satiation of markets".

fixed capital will increase, but there is no guarantee *a priori* that the consumer goods they produce can find a consumer immediately at a profitable rate.[126]

Disproportionate productivity and income might require that goods are sold at or *beneath* the cost of their production. This means that increased productivity can result in widespread losses (i.e., unprofitability, bankruptcy, liquidation) which cause entrepreneurs to scale back production and thus decrease employment (i.e., wages), increasing unemployment, further limiting effective demand (i.e., disposable income) in a way that further inhibits economic production and increases poverty, exacerbating the problem in a downward spiral or vicious circle. Sismondi writes:

> [The] superabundance of **production which exceeds consumption**… in amounts which so **greatly exceed demand** that the merchants, in order to recoup a part of their capital, were obliged to give the goods away with a quarter or a third **loss, instead of a profit**. […] From one end to the other of this vast and prosperous continent, there is not a town, a small village, where **the goods offered for sale are** not **infinitely above the means of they buyers**, while the merchants strain to seduce them by overlong credits and arrangements of all kinds for payment on terms, and interest rates. No other fact appears to us in more places, under more disguises, than the **disproportion** between the means for consumption and those of production; the inability of producers to leave one industry when it declines, and the certainty that their ranks will be thinned only by bankruptcies. How is it that the **philosophers do not want to see what everywhere springs to the eyes of the common man**?[127]

In the in the final sentence of his statement, Sismondi pleas for the renovation of economic theory. His perhaps somewhat optimistic hope was that the economic "crisis" in which he was writing would "force the recognition that consumption is not at all the necessary result of production" and that markets can be "satiated".[128] But waiting for the OCT to reform itself is like waiting for Godot.

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[126] Sismondi 2019, 503.

[127] Sismondi 2019, 277. At least Hegel recognizes the phenomenon Sismondi points to, I argue.

[128] Sismondi 2019, 280: "The crisis has thus returned stronger than ever; no orders for industry, no sales, insufficient wages offered to the workers, of whom a great number cannot even find work; the capital of the manufacturers entirely tied up in their finished goods which fill their warehouses; these are the signs of actual distress, and a growing disproportion between production and consumption. […] Only an experience so dearly bought will finally extend enlightenment: it must force the recognition that consumption is not at all the necessary result of production; the satiation of markets is on the contrary the inevitable result of a system to which everyone rushes".

The foundational assumptions of the OCT cast by Say and Ricardo prevent the OCT from recognizing Sismondi's problem short of total revision of the theory.

Finally, it is important to note Sismondi's proximity to Smith and Hegel's more political interpretation of the latter. Unconsumed, surplus products, modern economies force economies to engage with foreign markets. And he even uses language of "commercial warfare".[129] He writes:

> It is thus, by the concentration of wealth among a small number of owners, that the domestic markets grow even smaller, and industry is forced ever more to **seek its outlets in foreign markets**, where even greater changed threaten it.
> All nations whose **production exceeds their conception**, turn their attention equally to foreign markets, and since its limits are unknown, its extent appears unlimited.[130]

Ultimately, Sismondi's view is not entirely clear in itself. For example, at times he seems to think that money is crucially important,[131] while at other times he expresses a more classical view.[132] Similarly, it is not entirely clear whether Sismondi adopts a rigorous distinction between micro- and macroeconomic scales of description—which would distinguish him from Smith, Say, and Ricardo.[133] At best, his account is an *approximation* to a theory in which the limits to investment and accumulation of capital which cause the POU and unemployment are endogenous.

4.3. Malthus on Overaccumulation and Overproduction or Underconsumption

The other kind of underconsumptionism is exemplified by Malthus, who was a contemporary of Sismondi who also understood himself as working in the tradition of Smith, though the way in which tries to break from the OCT is different from Sismondi's attempt.[134] His view consists in

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[129] Sismondi 2019, 276.
[130] Sismondi 2019, 276. Cf. Sismondi 1815 § 4.
[131] Cf. Sismondi 2019, 102-3, 353, 636.
[132] Cf. Sismondi 2019, 359, 413, 500.
[133] Cf. Sismondi 2019, 262, 264, 267, 304, 363, 557.
[134] Cf. Bleaney 1976, 42-59. For general accounts or Malthus's view in historical or theoretical context or his relation to Ricardo, cf. Patten 1889, O'Leary 1943, Hollander 1969, Cottrell 1997, Maclachlan 1999, Öhman 2013. Cf. Keynes 1964, 32, 362-4, 369, 371; Keynes 2015, 499-50: "Ricardo is investigating the theory of the *distribution* of the product in conditions of equilibrium and Malthus is concerned with what determines the *volume* of the output

the thesis that capitalists tend to *over-save* or *overinvest* in production generally, without a corresponding effective demand for products, and therefore *over-accumulate* capital, such that there is insufficient disposable income on the side of final consumer demand to purchase all the products in the market at a profitable rate, and thus the POU appears.[135]

It is noteworthy that Malthus takes issue with the way in which the OCT explicitly and systematically neglects money (i.e., real analysis). He claims that the advocates of the OCT "have perhaps been too apt to throw [money] out of their consideration in their reasoning", that a "circulating medium is absolutely necessary to any considerable saving", and that conceiving of investment, production, and exchange in without *any* attention to money "cannot fail to lead us wrong".[136] So, he at least questions the barter-model (i.e., C_a-C_b). Similarly, he also picks up Smith's notion of *effective demand* and stresses its importance far more emphatically, in a way which contradicts the views of Say or Ricardo. Though he does not explicitly link it to money (i.e., nominal wages) in a fully formed theory, the connection could be made, and his recognition arguably marks progress. For instance, in his *Principles of Political Economy*, he writes:

> By ***effectual*** **consumption** is meant, a consumption by those who are able and willing to pay such a price for produce, as will *effect* the continuation of its supply without a fall of profits not required by the state of the land.[137]

Accordingly, Malthus claims that "the labouring classes should be paid well…",[138] so that there is sufficient effective demand for capitalist production to take place and continue normally.

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day by day in the real world. Malthus is dealing with the monetary economy in which we happen to live; Ricardo with the abstraction of a neutral money economy. […] the almost total obliteration of Malthus's line of approach and the complete domination of Ricardo's for a period of a hundred years has been a disaster to the progress of economics".

[135] Cf. Bleaney 1976, 211: "The essence of the Malthusian type is the idea of over-accumulation: too much is saved and also invested. This strand of underconsumptionism was bound to be killed off by the more sophisticated understanding of the relations of saving and investment heralded by 'the Keynesian revolution'". Cf. Schumpeter 1954, 740 fn. 4

[136] Malthus 1836, 324, fn.

[137] Malthus 1836, 411, fn.

[138] Malthus 1836, 405.

Production will be limited by the capacities of consumers to purchase those products, if they cannot pay the price of products to capitalists at a rate which is profitable. There would be what he calls "a general want of demand"[139] or a "stagnation of effectual demand".[140] And this is the situation which gives rise to a "general glut".[141] Anticipating Keynes, Malthus understands that a "stimulus to demand" or "effectual demand" might be necessary.[142] And unlike Smith and Ricardo, he even considers the possibility that capitalist production may have "glutted… foreign markets", in which case the export of surplus products to foreign countries could provide no solution.[143]

Malthus's reflections on effective demand motivate his groundbreaking recognition that the consumption of the working class by itself can *never* suffice to present a sufficient degree of effective demand, in a way which brings him closer to Keynes and Marx. The total amount that workers can spend on the products of capitalist production equals the total amount that is spent productively by capitalists as investments in those worker's wages. So, even if workers spend their entire wage on the products that they produce for capitalists, their expenditure will not be sufficient to provide the effective demand which could realize the aggregate profit, upon which the continuation of capitalist production depends. Workers' effective demand must be supplemented by the consumption of capitalists, the latter's individual expenditure of revenue, as well as the consumption of members of unproductive classes (e.g., landlords and *rentiers*). He writes:

> … the consumption and demand occasioned by the workmen employed in productive labor can never *alone* furnish a motive to the accumulation and employment of capital…[144]
> The demand created by the productive laborer himself can never be an *adequate* demand, because it does not go to the full extent of what he produces. If it did, **there would be no profit**, consequently no motive to employ him. The very existence of a profit upon any commodity presupposes a demand *exterior* to that of the labour which has produced it.[145]

[139] Malthus 1836, 326.
[140] Malthus 1836, 416.
[141] Malthus 1836, 315.
[142] Malthus 1836, 311.
[143] Malthus 1836, 416.
[144] Malthus 1836, 315.
[145] Malthus 1836, 405.

There must be a proper "proportion" between the investment and expenditure of productive and unproductive activities and consumption, as well as a proper distribution of effective demand, in order for capitalist production to function.[146] Otherwise there will be stagnation, unemployment or crises.[147] While Smith and Ricardo place all of the emphasis on productive labor (i.e., circulating capital), Malthus argues for the importance of "unproductive" consumption (i.e., revenue) or segments of society (e.g., landlords, aristocrats, rentiers) such that there can be a proper proportion between production or supply and consumption or demand in overly productive economies.

Malthus specifically points to central assumption of the OCT (i.e., Say's Law) as it applies to the productive investment expenditure (i.e., saving, Smith's "invisible hand") and accumulation of capital by capitalists. He claims that, while the OCT's view of saving *usually* holds, its advocates treat it as though it were a *universal* law that were valid *a priori*. And he denies that a given degree of production or supply automatically calls forth a corresponding and equivalent degree of consumption or demand, or that investment simply redistributes consumption. He writes:

> A… very serious **error**… consists in supposing that accumulation ensures demand; or that the **consumption of the laborers** employed by those whose object is to save [i.e., capitalists], **will create such an effectual demand** for commodities as to encourage a continued increase of produce.[148]
> … an inordinate passion for accumulation must inevitably lead to a supply of commodities beyond what the structure and habits of such a society will permit to be **profitably consumed**.[149]

Capitalists' saving or productive investment expenditure does not necessarily guarantee a sufficient effective demand for economies to continue normally, and so the latter is a variable which must be supplied otherwise. Clearly, this hints at an endogenous limit to capital.

[146] Malthus 1836, 413, 417, 425, 429.
[147] Malthus 1836, 398, 407, 409-10, 412.
[148] Malthus 1836, 322.
[149] Malthus 1836, 325.

An essential point to consider here appears in his discussion of "national" and "individual saving",[150] which is reminiscent of the "paradox of thrift"[151] and suggests a distinction between macroeconomic and microeconomic scales of description. He is on the threshold of the claim that *endogenous* factors can present limits to continued, successful accumulation of capital. He writes:

> National saving, considered as the means of increased production, is confined within much narrower limits than individual saving. While some individuals continue to spend, other individuals may continue to save to a very great extent; but the **national saving**, in reference to the whole mass of producers and consumers, must necessarily be **limited by the amount which can be advantageously employed** in supplying the demand for produce; and to create this demand, **there must be an adequate and effective consumption** either among the producers themselves, or other classes of consumers.[152]
> …no nation can *possibly* grow rich by a permanent diminution of consumption [i.e., saving]; because such accumulation being beyond what is wanted in order to supply the **effectual demand** for produce, a part of it would very soon lose both its use and its value, and cease to possess the character of wealth.[153]

Because the finite number of profitable investment opportunities will "limit" the degree of possible accumulation of capital, Malthus cannot completely agree with Smith's claim that the accumulation of capital is simply a matter of capitalists' "parsimony", or individual saving of revenue or profits, or reinvestment in production.[154] Saving is a necessary but insufficient for the formation or accumulation of capital. Yet over-saving or surplus liquidity is also a potential danger. It is possible, he contends, that saving can present a limit to the accumulation of capital, if it is unaccompanied by an equivalent effective demand, which offsets the former, as it were.[155]

In any given situation there is a determinate degree, whether known or unknown, beyond which capital cannot be profitably accumulated in the hands of capitalists, because it will undermine and come out of proportion with the effective demand of workers upon which

[150] Malthus 1836, 401.
[151] Cf. Foster and Catchings 1926; Hayek 1931; Keynes 1964, 84-5, 210-11; De Marchi 2008; Mitchell, Wray, Watts 2019, 20-22, 418, 481-483, 490.
[152] Malthus 1836, 401.
[153] Malthus 1836, 327.
[154] Cf. Smith 1993, 199, II.iii.
[155] Malthus 1836, 6-7.

successful accumulation depends and so too the "motive to production". Excessive saving destroys the proper proportion with individual consumption expenditure of workers and places a *limit* upon on profitable capitalist production, giving rise to unemployment or a relatively 'redundant' population (i.e., "rabble"). He writes:

> …if **the conversion of revenue into capital beyond a certain point must, by diminishing the effectual demand for produce, throw the laboring classes out of employment**, it is obvious that the adoption of parsimonious habits beyond a certain point may be accompanied by the most distressing effects at first, and by a marked depression of wealth and population afterwards.[156]
> …the employment of capital may, and in fact often does, find a **limit**, long before there is any real difficulty in procuring the means of subsistence; and that both capital and population may be at the same time, and for a period of considerable length, redundant, compared with the effectual demand for produce.[157]

Malthus's second statement gives him a significant position in the development of classical political economy. The OCT would argue that the "means of subsistence" and individual capitalists' revenues are exogenous limits to capital accumulation, and they are the only limits. Yet, upstream of those exogenous limits, as it were, it is possible the accumulation of capital itself can endogenously inhibit the further accumulation of capital, if a proportion between investment expenditure and consumption expenditure is not preserved within certain definite margins. The harmonious equilibrium which the OCT *assumes* is a matter of chance.

The final aspect of extreme importance here is the counterexample and falsification of Ricardo's view which Malthus presents to him in the following clear and compelling thought experiment. Malthus asks: what would happen if every human being in an economy reduced his or her individual consumption expenditure to an absolute minimum to save all revenue or invest it productively in capital expenditure? Clearly, there would be no one to work, hence no one to buy, and hence an excess of products and a lack of effective demand (i.e., POU), which the OCT claims

[156] Malthus 1836, 326; cf. Malthus 1836, 328, 330, 421.
[157] Malthus 1836, 402.

is *impossible in principle*. This hypothetical consideration is meant to refute Ricardo on the level of abstract theoretical principle, rather than mere fact, though Malthus also clearly thinks that the POU occurs. What is therefore so baffling about Ricardo's response, is that Ricardo admits that it would present a situation in which there is a "universal glut", and yet he also claims that this "admission does not impugn the general principle".[158] Malthus replies: "It appears to me most completely to impugn the general principle".[159] He writes:

> …this is precisely the case in which **Mr. Ricardo allows that there might be a universal glut**; for there would undoubtedly be more necessaries produced than would be sufficient for the existing demand. This state of things could not, however, continue; since, owing to the fall which would take place, cultivation would be checked, and **accumulation be arrested in its progress**.[160]

In sum, it is at least theoretically conceivable that the accumulation of capital can impede or frustrate its own accumulation. An abstract refutation of the claim that overproduction is impossible at the methodological level of principles is all that is required to challenge the OCT, because that claim by the latter is indeed simply based on such abstract matters of principle (e.g., Say's Law). Empirical facts are an entirely separate issue. Though Malthus does not present any sort of sufficiently developed, positive theory, the foregoing considerations indicate that he and Sismondi sufficiently illustrate significant shortcomings of the OCT, which Keynes, Marx, and others develop.

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[158] Ricardo 1951a, 293, XXI.

[159] Malthus 1836, 318-19: "Mr. Ricardo, though he maintains as a general position that capital cannot be redundant, is obliged to make the following concession. He says, "There is only one case, and that will be temporary, in which the accumulation of capital with a low price of food maybe be attended with a fall of profits; and that is, when the funds for the maintenance of labour increase much more rapidly than population; —waged will then be high and profits low. If every man were to forego the use of luxuries and to be intent only on accumulation, a quantity of necessaries might be produced for which there could not be any immediate consumption. Of commodities so limited in number there might undoubtedly be an universal glut; and consequently there might neither be demand for an additional quantity of such commodities, nor profits on the employment of capital. If men ceased to consume, they would cease to produce." Mr. Ricardo then adds, "this admission does not impugn the general principle." In this last remark I can by no means agree. It appears to me most completely to impugn the general principle".

[160] Malthus 1836, 323.

4.4. Hegel's view of the POU and the "Rabble" Revisited

Despite his seeming declaration of allegiance to the OCT ("Smith, Say, and Ricardo"), Hegel's view of the economic POU and the "rabble" express a heterodox view which is incredibly similar to Sismondi and Malthus, whom he nevertheless does not mention. It must be understood in this context. Hegel commentators in tune with the history of economic thought have suggested that his account is close to Keynes's theory, which also addresses "involuntary unemployment" and "poverty in the midst of plenty".[161] Close consideration will show, however, that this is not quite right. While Hegel adopts some of the "fundamental concepts" (*Grundbegriffe*) of the OCT, his substantive conclusions about the economic problems of the modern world place him in the underconsumptionist camp with Sismondi and Malthus, which explains the limitations of his view.

Hegel clearly thinks that modern economies exhibit the features that an underconsumptionist would focus upon. Like the underconsumptionists, Hegel expresses the view that (1) a certain degree of economic depression or stagnation (i.e., the POU, systemic poverty, involuntary unemployment, the "rabble") normally occurs in modern economies; and (2) he focuses on insufficient effective demand for goods in general, which seems to suggest the means of individual consumption (i.e., department II of capital), which productive workers produce and consume themselves. Yet he does not focus solely either on over-saving and overaccumulation (Malthus) or the disproportion of production and consumption which the unequal distribution of wealth cause (Sismondi). Rather, both aspects can be found mixed together in Hegel's reflections.

First, in order to support this claim, recall the central, crucial statement which Hegel makes in his published work. In his *Elements of the Philosophy of Right*, he writes:

> **…it is precisely in overproduction and the lack of a proportionate number of consumers who are themselves productive that the evil** [*Übel*—i.e., problem] **consists**

[161] Keynes 1964, 32. Cf. Avineri 1972, 99-100, 151-2. It is a strange feature of the account of Mann 2015 and 2019 that it does not go into any specific theoretical detail about underconsumption and the "rabble".

> [*besteht*]… This shows that, despite an excess of wealth, civil society is not wealthy enough – i.e. its own distinct resources are not sufficient – to prevent an excess of poverty and the formation of a rabble [*Pöbel*].[162]

Hegel clearly expresses a commitment to the claim that that economic POU or a lack of effective demand gives rise to the problem of involuntary unemployment and the "rabble". No advocate of the OCT could agree with this claim, as I have already argued. But it is also important to note how Hegel does not distinguish between the production of means of production (i.e., department I of capital), the production of means of consumption (i.e., department II of capital), or investment in public infrastructure (i.e., state work-programs). In light of the economic theories which I have discussed since chapter one, the following wrinkle appears in Hegel's view, though his general claim may still stand. First, his argument that giving unemployed workers (potentially "rabble") "the opportunity to work" "would increase the volume of production" and only exacerbate the problem (*Übel*) is confused, because those workers would present an effective demand for products (i.e., means of consumption) exactly equal to the wages they receive; even if this would not *help* the POU, it would not necessarily make it worse. And second, it is not impossible that unemployed workers could produce other goods, such as means of production (i.e., department I), which underconsumptionism always overlooks, yet which could also stimulate effective demand, or they could produce unproductive infrastructure, which nevertheless benefits the public and private spheres and absorbs some of the surplus.

Second, in his lectures Hegel similarly identifies a lack of effective consumer demand, which is obviously bound up with involuntary unemployment, overproduction or underconsumption and. In his lectures, he distinguishes the conditions of scarcity in nature and the artificial or modern poverty in society. He states:

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[162] Hegel 1991a, 267 § 245.

> Nature is fruitful, but limited, very limited, [while] the means of humans, by contrast are infinitely "more" fruitful, the wealth that can be produced by work [*Arbeit*] can increase infinitely. There is never a lack of such means that can be produced, though **there can indeed be a lack of consumers, of needs**.[163]

On other words, Hegel is claiming that there is a lack of demand (i.e., a lack of a lack), which is inconceivable within the framework of the OCT.

Third, Hegel argues that the accumulation of capital and wealth is the same process which gives rise to the appearance of an impoverished, unemployed, and unhappy class of individuals, which he calls the "rabble". Whether through lax adherence to the principles of the OCT or to his own groundbreaking recognition of economic problems, in any case he can and does recognize that the same economic process which gives rise to the accumulation of wealth also gives rise to poverty and involuntary unemployment. And so, he definitely thinks that the dynamic of accumulation gives rise to the POU which impedes the economy, rather than some merely exogenous factor. In his lectures, he states:

> The relation of the process in itself, on which wealth is based, produces the extremes of the rich and the poor, i.e. of those who can easily satisfy their needs and those who cannot satisfy them.[164]

> Poverty, namely, is the general effect of bourgeois society in general.[165]

While he does not go so far as to explicitly claim that the accumulation of capital endogenously gives rise its own limit which the POU and the "rabble" express, he is very close, and no advocate of the OCT accepts this view, which is clearly closer to Sismondi or Malthus.

And finally, Hegel recognizes both sides of the same coin, as it were, which Sismondi and Malthus variously emphasize in their accounts of the economic POU. On the one hand, he

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[163] Hegel 1974, 507. My translation.
[164] Hegel 1974, 605. My Translation. Cf. Hegel 1995, 210-11: "The complexity of civil society itself also leads to poverty, since the means of satisfying needs are too difficult [to obtain]".
[165] Hegel 2000, 144. My Translation.

expresses his recognition of it on the side of unsold products which must be sold as consumer goods, which Sismondi emphasizes. He explicitly claims that modern economic circumstances (i.e., capitalism) cause excessive production in relation to a deficient consumption, overproduction causes involuntary unemployment, and involuntary unemployment causes peculiar kind poverty which causes the "rabble" to appear (i.e., not simply poverty as such). In his lectures, he states:

> It is **lack of employment** which is, as mentioned, **the main cause of poverty**. There always appears, under prosperous conditions of culture, an overpopulation. When the poor are given opportunities for work, all that happens is that the amount of commodities is increased. But **it is precisely the surplus of commodities which has caused unemployment. If [on the other hand,] the commodities are sold cheaper, production is ruined.** [Furthermore,] if the rich give direct assistance to the poor, they can spend less on their own needs, and thus another class suffers again because of this.[166]
>
> …poverty is the ground of the rabble-mentality…[167]

And on the other hand, he expresses his recognition of the POU on the side of accumulated capital which is meant to be used in production and which Malthus emphasizes. The overaccumulation of capital occurs at the root of the problem, which is inconceivable for the OCT. He states:

> On the one hand, civil society is too poor to be able to maintain its own poor people. On the other hand, this means that civil society is too rich. For it is the case that **the poverty of the workers (*Arbeitenden*) consists in the fact that what they produce does not find a buyer. There is too much capital (*Kapital*), and more is being produced than the nation can consume.** Because of this surplus civil society must seek to extend its commerce [i.e., further investment]. In this way the poor return to work and can achieve their subsistence.[168]

To conclude, I take these considerations at least to show that Hegel's view of the economic POU and "rabble" is an instance of underconsumptionism with all the advantages over the OCT and defects that come with any underconsumptionist view, which Marx develops and critiques. However, I also take them to show that Hegel's view is more *suggestive* here than solidly

[166] Quoted in Avineri 1985, 207.
[167] Hegel 1991a, 454.
[168] Quoted in Avineri 1985, 208.

conclusive. Hegel seems to argue that the POU causes involuntary unemployment, which causes the "rabble" to appear, as I also argued in chapters one and two, though he gives no account of the emergence of the POU. As I will now argue concerning Marx's view, the POU and hence involuntarily unemployment are the relatively regular consequences of a lack of investment by capitalists. So, the "rabble" is not simply a consequence of the POU. (For example, involuntary unemployment might rise in the bust and sink in the boom of the economic cycle, as it were.)

5. Marx on the Effects of Accumulation and Possibility of the POU

Marx presents his account of the process of the accumulation of aggregate profit or surplus-value as capital and the social effects to which its accumulation gives rise principally throughout *Capital*.[169] It combines many of the aspects that the OCT or heterodox theories have emphasized, though it assembles them in a way which is ultimately very different and draws very different conclusions. In short, Marx thinks that the way in which composition of capital investment on means of production and wages changes over the course of accumulation endogenously limits further investment, production, and accumulation. These are not *exogenous* limits. And they give rise to negative, unintended effects such as the POU or involuntary unemployment (i.e., "rabble"). So, the POU and consequent involuntary unemployment are possible *and* can be explained.

Marx strikes a third way between the OCT and underconsumptionism. The former focuses on production or supply, claims that the limits to accumulation of capital are exogenous, and the POU is impossible, while the latter focuses on consumption or demand, is not entirely clear about the limits to accumulation, and claims that the POU is possible, though its account leaves plenty to be desired. Marx agrees with underconsumptionists the POU occurs, yet he is not ultimately an

[169] Cf. Marx 1990, chapter 15 and part 7; Marx 1992, chapter 21; Marx 1991, part 3.

underconsumptionist because he thinks that capitalists' aggregate expenditure on consumption and investment in production is the independent variable which determines the level of employment and profitability,[170] like Keynes. Marx arguably goes further, however, by presenting his view of investment within the framework of a turbulent "industrial cycle" (e.g., booms and busts).[171] He focuses upon the ratio or proportion between capitalists' investment in constant capital (i.e., means of production, products of department I) and variable capital (i.e., wages for labor-power, which are spent on products of department II), which is the "organic composition of capital".[172] As capitalists accumulate and reinvest (i.e., save) the surplus-value that they obtain as profits and productive capital grows, and the ratio between capital investment into means of production (i.e., constant capital) and wages or labor (i.e., variable capital) increases. And the way in which it does so is what can cause involuntary unemployment, *in addition to* the respect in which capitalist investment generally determines employment (i.e., Keynes). Namely, capitalists invest relatively more value in means of production and relatively less in wages in a way which potentially generates a disproportion between the supply and demand for the products of department I (i.e., means of production) and department II (i.e., consumer goods) and employment between them. Ultimately, this means that the physical productivity of capital in real terms can *increase*, while demand for labor or employment can *decrease* and the effective demand for the products of capitalist production can *decrease* with employment. That is, involuntary unemployment may *increase* with accumulation, and Marx calls it a "relative surplus population or industrial reserve army".[173] This just what Hegel recognizes as the economic POU and the "rabble", though he

[170] Cf. Keynes 1964, chapters 18 and 22. Cf. Marx 1990, 770-1.
[171] Marx 1990, 582. Cf. Marx 1990, 581, Marx 1991, 363.
[172] Marx 1990, 761.
[173] Marx 1990, 781. Cf. Robinson 1966.

cannot properly explain it, because he lacks the proper model. Yet Marx explains these disparate phenomena as aspects of one single process of accumulation of capital.

The ultimate payoff of Marx's view of the accumulation of capital in the broader context of my argument vis-à-vis the OCT will be that it can present a single causal explanation of seemingly unrelated or opposed outcomes which are impossible on the model of the OCT or LTV (i.e., the economic POU and the rabble). The apparently disparate phenomena of increasing production, decreasing effective demand, and decreasing employment or increasing unemployment are essentially related aspects of the same process, according to Marx. "This plethora of capital arises from **the same causes** that produce a relative surplus population and is therefore a phenomenon that complements this latter, **even though the two things stand at opposite poles** – unoccupied capital on the one hand and an unemployed working population on the other".[174]

5.1. Marx on Underconsumptionism

Marx's assessment of underconsumptionism, those aspects of his theory which seem to overlap with it, and his criticisms are very useful for recognizing what is unique about his explanation of the economic causes of the POU and involuntary unemployment (i.e., the "rabble"). Marx arguably *preserves* those aspects of underconsumptionism which mark progress over the OCT while also transcending them in his own more developed theory, which I argue is closer to post-Keynesian macroeconomics than the OCT.

First, in *Theories of Surplus Value*, Marx specifically singles out the usual suspects of the OCT in a remark in which he claims that they believe that the economic POU ("general glut") is

[174] Marx 1991, 359.

impossible in principle *because* they also assume the barter-model as their foundation for their further aggregate level reflections on the economy, as I have suggested in above. In the terminology that I use, their micro-real perspective leads them to believe that the economic POU is impossible, though it is clearly possible from a macro-monetary perspective. He writes:

> The conception (which really belongs to [James] Mill), adopted by Ricardo from the tedious Say (and to which we shall return when we discuss that miserable individual), that ***overproduction*** **is not possible or at least that no** ***general glut of the market*** **is possible, is based on the proposition that** ***products*** **are exchanged** ***against products*** [i.e., direct barter: C-C], or as Mill put it, on the "metaphysical equilibrium of sellers and buyers", and this led to [the conclusion] **that demand is determined only by production, or also that demand and supply are identical** [i.e., demand cannot limit production]. The same proposition exists also in the form, which Ricardo liked particularly, **that any amount of capital can be employed productively in any country**.[175]

Marx clearly objects to the claims that there are no limits to production of goods or the accumulation of capital, though he will not hold that it only has external limits like the OCT does. The way in which the OCT construes capitalist production and exchange of commodities as a direct barter of goods for goods or productions for productions (C_a-C_b) *assumes* that markets are in equilibrium *a priori* (i.e., Say's Law). Then the OCT claims that the POU is impossible. But clearly, this begs the questions—it is just saying the same thing twice over.

Second, the underconsumptionists recognition that a lack of effective demand can limit the accumulation of capital is something for which Marx praises both Sismondi and even Malthus, whom he otherwise despised. Regarding Sismondi, Marx writes that he "emphasized the barriers of consumption… the limited nature of production based on capital… its particular restrictedness".[176] And regarding Malthus too, Marx writes that "Malthus and Sismondi have likewise correctly remarked that the workers' consumption is in no way itself a *sufficient* condition

[175] Marx and Engels 1989b, 124. Cf. Marx 1990, 208.
[176] Marx 1993, 410.

for the capitalist".[177] Marx will agree that worker-consumers can only spend as much income on products as they receive in wages (e.g., M), which is never enough to realize the aggregate profit or surplus-value (M' or ΔM) upon which continued capitalist production depends. Yet those profits are realized all the time. And so, this is what motivates him to move beyond underconsumptionism, as I have already hinted at in the previous chapter. The individual consumption expenditure *and* saving or productive investment expenditure of capitalists, specifically on means of production (i.e., department I of capital), is necessary to realize the surplus-value of products of labor.

Third, Marx adopts and develops the notion of "effective demand" in a way which anticipates Keynes's major 20th century innovation.[178] In volume III, he characterizes it as "social need", which is not only a demand for the satisfaction of brute needs, but which is also able to satisfy its needs because it possesses the money required to obtain the necessary commodities on the market. It is "the quantity for which the society is able to pay the market value",[179] or "the **need which has money to back it up**".[180] Similarly in *Theories of Surplus Value*, Marx speaks of "demand that is back by the ability to pay".[181] So, a lack of effective demand can occasionally prevent all the goods that are produced in modern economies from being exchanged at a rate that is sufficiently profitable for entrepreneurs, such that accumulation in all sectors or departments of capital, further employment, and markets could continue to function normally, though workers are not the only group whose effective demand is important, for Marx.

[177] Marx 1993, 413. For perhaps extraneous reasons, Marx does not take Malthus seriously and accuses him of plagiarizing Sismondi (Marx and Engels 1989a, 245, 248), though it has been argued that this is not the case (cf. Schumpeter 1954, 480; Sowell 1972, 89-90). Malthus makes advances, which Keynes highlights (cf. Keynes 2015, 499-50).
[178] Marx 1992, 486. Cf. Marx 1990, 567; Marx and Engels 1989b, 137. Cf. Robinson 1966; Keynes 1964, chapter 3; Mitchell, Wray, Watts, 212-13, 178, 436.
[179] Marx 1991, 281.
[180] Marx 1991, 282.
[181] Marx and Engels 1989b, 133.

Marx also makes several statements which sound like underconsumptionist claims. His early references to "overproduction" and "crises" in the *Manifesto*, one might easily lead one to conclude that Marx is an underconsumptionist.[182] Or, for example, in volume III, Marx writes:

> **The ultimate reason for all real crises always remains the poverty and restricted consumption of the masses**, in the case of the drive of capitalist production to develop the productive forces as if only the absolute consumption capacity [i.e., human needs as such, not effective demand] of society set a limit to them.[183]

And similarly, in a footnote in volume II of *Capital*, Marx dashes off the following remark:

> Contradiction in the capitalist mode of production. The workers are important for the market as buyers of commodities. But as sellers of their commodity – labour-power – capitalist society has the tendency to restrict them to their minimum price. Further contradiction: the periods in which capitalist production exerts all its forces regularly show themselves to be periods of **over-production; because the limit to the application of the productive powers is not simply the production of value, but also its realization** [in market exchange]. However **the sale of commodities, the realization of commodity capital, and thus of surplus-value as well, is restricted** not by the consumer needs of society in general, but **by the consumer needs of a society in which the great majority are always poor and must always remain poor** [i.e. low wages, insufficient effective demand].[184]

Marx also formulates "effective demand" in terms of a "separation" between the conditions of immediate "exploitation" of labor or real production of commodities and the conditions of the "realization" of commodities' values and capitalists' shares of surplus-value (i.e., profits) on the market. For, the products of labor result in surplus-value *only if* they can be sold ("realized") to consumers who have sufficient disposable income (i.e., wages) to present an effective demand.[185]

However, one must be very careful with statements such as these. The claim that a lack of effective demand of the "majority" or "masses" is the wrench in the gears of capital accumulation or the "ultimate" cause of crises receives significant qualification in Marx's theory, as I have

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[182] Marx and Engels 1978, 478.
[183] Marx 1991, 615. Bleaney 1976 (112-113) argues against understanding this as evidence of Marx's underconsumptionism.
[184] Marx 1992, 391, fn. 1. Cf. Elster 1986, 37-8.
[185] Cf. Marx 1991, 352.

already suggested in the previous chapter and above, because the disposable income of all workers is just a dependent variable or function of the aggregate expenditure of capitalists, to whom those workers return their wages on the commodity market. Specifically with regard to crises, a lack of effective demand can trigger a general economic crisis *only if* there is a complicated credit system is in place such that changes in spending can break or interrupt the layered chain of financial payment obligations, creating a chain reaction of bankruptcies, turning illiquidity into insolvency, bringing the economy to a halt.[186] This goes far beyond Sismondi or Malthus's simpler views.

Fourth, it is essential to consider the respects in which Marx thinks that underconsumptionism is a deficient mode of explanation, because this points towards the deeper explanation which he thinks that economic theory must provide for the POU and involuntary unemployment. Moreover, these considerations will also equally apply to Hegel's view of the POU and the "rabble" as well as demonstrate the ultimate inadequacy of the latter's account, because it is an instance of underconsumptionism. Marx does not think that the underconsumptionist view of the POU is just plainly false or incoherent. Rather, he thinks the claim that the POU is a primitive cause of involuntary unemployment is problematic, because the POU is not actually a primitive cause of anything. It too is an effect of economic causes—namely, of the changing structure of capital investments, as I will address shortly. In volume II of *Capital*, Marx raises the following, fatal criticism of underconsumptionist accounts in his discussion social reproduction. He writes:

> **It is a pure tautology to say that crises are provoked by a lack of effective demand or effective consumption.** The capitalist system does not recognize any forms of consumer other than those who can pay [i.e., effective demand], if we exclude the consumption of paupers and swindlers. The fact that commodities are unsaleable means no more than that

[186] Cf. Marx and Engels 1989b, 142, 144, 152. Cf. Marx 1991, 363: "The chain of payment obligations at specific dates is broken in a hundred places…" For example, the 2008 global financial crisis was triggered when people stopped buying escalating real estate on credit, which led to the tapering-off of the bubble of debt-fueled asset price inflation, leaving creditors with bogus financial assets that could never be paid, resulting in a chain-reaction of defaults that brought the entire banking system and global economy to its knees (cf. Magdoff and Foster 2009; Foster and McChesney 2012).

> no effective buyers have been found for them, i.e. no consumers (no matter whether the commodities are ultimately sold to meet the needs of productive or individual consumption).[187]

What Marx means when he says that the underconsumptionist view rests on a "pure tautology" is that "crises" and a significant "lack of effective demand" are just two ways of saying the same thing. So, the causal term ("lack of effective demand") with which underconsumptionists would do their explaining (*explanans*) is not sufficiently independent from the effect ("crisis") they set out to explain (*explanandum*) to be a genuine cause. A crisis *is just* a generalized lack of effective demand. So, what seems to the underconsumptionist to be the cause is just a part of the problem or effect described under a different name. The underconsumptionist simply mistakes a part of the problem or effect that he or she wants to explain for an independent cause of the problem or effect, though what is taken to be the cause is neither genuinely independent from the effect nor the deeper cause. Similarly, when an underconsumptionist like Hegel might claim that *the POU causes the "rabble"*, he is effectively saying something like *the heaviness of the stone causes it to fall*, or *it falls because its heavy*, which is not a genuine causal explanation, because these are just two equivalent descriptions of the same thing. Marx wants to ask, if a lack of effective demand or underconsumption is supposed to cause economic problems (e.g., unemployment, stagnation, crises), what causes a lack of effective demand?[188] Underconsumptionists have no answer here. They recognize a genuine, empirical problem, but they do not ultimately provide the deeper explanation it requires. The notion of "effective demand" is superior to what one finds in Say or

[187] Marx 1992, 486.

[188] It is worth noting here that Schumpeter too remarks that the economic POU does not present a genuine causal explanation. Cf. Schumpeter 1954, 739: "…however large the phenomenon of overproduction may loom in the picture of historical crises, no causal explanation can be derived from it: there is no sense in saying that there is a crisis *because* 'too much' has been produced all around". Also, Marx's criticism of underconsumptionism repeats the criticism that Hegel makes of deficient modes of explanation which explain causes in terms "tautological reasons" (cf. Hegel 1977, 95; 190§ 121. Addition; Hegel 1969, 458; Hegel 1969, 459; Nietzsche 1989, 45 § 13).

Ricardo, but there is no other kind of demand that counts in capitalist economies beside that which can pay in money. So, we need a better explanation than that.

Finally, on a similar note, it is important to consider another point which Marx makes about the deficiency of the underconsumptionists accounts. As I have claimed throughout this dissertation, Hegel recognizes *that* the POU occurs and that its connected to involuntary unemployment or the "rabble", but he cannot explain *why* it occurs or *how* it really works, much as Semmelweis recognizes *that* there is a problem of higher mortality in his hospital which is related to decaying organic matter, though he cannot explain *why* the latter does what it does or *how* it works. This is just the point which Marx himself makes about underconsumptionism. In the following statement on Sismondi, he credits the latter with recognizing *that* the dynamics of capitalism give rise to problems (i.e., POU), though he cannot explain *why* they do so or *how* it all ultimately works.[189] Marx writes:

> ***Sismondi* is profoundly conscious of the contradictions in capitalist production**; he is aware that, on the one hand, its forms—its production relations—stimulate unrestrained development of the productive forces and of wealth; and that, on the other hand, these relations are conditional, that their contradictions of use-value and exchange-value, commodity and money, purchase and sale, production and consumption, capital and wage-labour, etc., assume ever greater dimensions as productive power develops. **He is particularly aware of the fundamental contradiction: on the one hand, unrestricted development of the productive forces and increase of wealth which, at the same time, consists of commodities and must be turned into cash; on the other hand, the system is based on the fact that the mass of producers is restricted to the necessaries.** Hence, according to Sismondi, crises are not accidental, as Ricardo maintains, but essential outbreaks—occurring on a large scale and at definite periods—of the immanent contradictions. He wavers constantly… **He forcefully *criticises* the contradictions of bourgeois production but does not *understand* them**, and consequently does not understand the process whereby they can be resolved.[190]

[189] In the *Grundrisse* and *Theories of Surplus Value* Marx frequently indicates that he intends to engage with Sismondi's view, though he never ultimately gets around to doing so. He often rejects Sismondi as a petit bourgeois romantic (cf. Marx and Engels 1978, 493), though he is arguably more influenced by Sismondi than he admits.

[190] Marx and Engels 1989b, 247-8.

> *Sismondi* was epoch-making in political economy because he had an inkling of this contradiction.[191]

Marx clearly thinks that Sismondi's underconsumptionism marks major progress in the history of political economy. After all, at least he can recognize that the POU happens (pace the OCT). But there are two problems here. First, he cannot explain *why* it happens or *how* it works. And so, Marx is also suggesting, Sismondi cannot provide any practical guidance about how we can *solve* or *cure* that problem in practice. For example, though physiology or anatomy and medicine are two different enterprises, the first theoretical and the second practical, the doctor can give a diagnosis, prognosis, prescription, and hopefully a cure *only if* he or she understands the human body. Similarly, a sailor must know astronomy to navigate the seas, even though these are distinct activities. The point might be to "change" the world, not only to "interpret it", as the young Marx claimed, but the mature Marx is claiming that we can act effectively in the world only if we have the right theoretical knowledge.[192] Second, Sismondi recognizes—rightly, Marx thinks—that there is something *wrong* with capitalism. But the critic cannot quite say just what it is because he does not completely understand it. One might understandably argue that a person really knows what capitalism is *only if* he or she understands what is wrong with it. But here Marx seems to suggest inversely that one knows what is wrong with capitalism *only if* one really knows how it works.

5.2. Competition and the changing Composition of Capital

Marx places the economic POU into a larger theoretical context of the way in which the structure of capital investment expenditure changes over the course of accumulation of aggregate profit (i.e.,

[191] Marx and Engels 1989b, 393.

[192] As an aside, I would also remark that this more mature reflection is a corrective to Marx's juvenile thesis that "philosophers have only *interpreted* the world, in various ways; the point, however, is to *change* it" (Marx and Engels 1978, 145), because one can effectively change the world *only if* one understands the way in which it actually works.

surplus-value) as capital. The way in which capital accumulation functions, according to Marx, is not a matter of "simple reproduction", the model or "schema" of which I discussed in chapter 3.[193] Rather, it is a process of what Marx calls "expanded reproduction",[194] which I discussed in the previous chapter, the difference between them being that capitalists reinvest the surplus-value that they obtain from production and exchange to accumulate yet more surplus-value. What I did not discuss in the previous chapter is the way in which accumulation hangs together with competition and the changing composition of capital, which can give rise to the POU and unemployment.

First, the accumulation of surplus-value as capital cannot be understood without reference to increased competition between capitalist entrepreneurs or firms, which in turn gives rise to the changing composition of capital. There is a kind of feedback loop, as it were, between accumulation and competition, in which each fosters the other. As capitalists accumulate capital, they face what Marx calls the "coercive law of competition" , which is to say that the market not only presents them with so-called incentives or opportunities, but also compels them to adopt the most profitable, efficient, and novel techniques of production and exchange on pain of being driven out of business into bankruptcy.[195] As Marx puts it in volume III, "the immanent laws of capitalist production present themselves within competition".[196] *Whether* capitalists reinvest the surplus-value they obtain from the production and monetary exchange of the products of labor as commodities most advantageously is not the question, for they must, but only *how* to do so.

Capitalists use newer and more efficient techniques which "enable" them to temporarily obtain a relatively more advantageous profit margin or a larger market-share over competitors such that they can obtain a larger share of absolute or aggregate profits (i.e., surplus-value). Marx also

[193] Cf. Marx 1990, chapter 23, Marx 1990, chapter 20.
[194] Cf. Marx 1990, chapters 24 and 25, Marx 1990, chapter 21.
[195] Marx 1990, 436, 739. Cf. Marx 1976c, 43-8, IX.
[196] Marx 1991, 332.

calls the process of competition "coercive" because those techniques which "enable" capitalists to obtain a temporary competitive advantage also eventually "compel" them and every other capitalist to adopt those methods, because every other capitalist will quickly clamor to adopt the same methods in the pursuit of profit until they become generally adopted as standard procedure by all.[197] And so the "*privilege* of our capitalist is not of long duration", as Marx puts it.[198] Once a technique which was previously advantageous becomes standard procedure, it is no longer optional or even particularly profitable, but rather compulsory and normal. And so, the progress of capitalist development and innovation is motivated by short-term profit-seeking, though it undermines individual profits in the long-run when relatively advantageous techniques or methods are adopted generally by all capitalists and profit margins are thereby competed away.[199] This is the "tragedy of investment", to borrow Kalecki's phrase.[200] Only perpetual aggregate growth and the production and reinvestment of absolute or aggregate profit (surplus-value) by the employment or exploitation of labor can sustain capitalist production. The entire mode of capitalist production ultimately depends upon industrial capital to produce absolute or aggregate profit (i.e., surplus-value), which is variously distributed to other sectors of the economy (e.g., commercial profit, interest, and rent), by the employment or exploitation of labor in production of commodities on an expanding scale.

The most prevalent way in which industrial capitalists reinvest the surplus-value they obtain most advantageously in the course of competition, according to Marx, is by shifting an ever-increasing portion of the net revenue that they receive, from investments into wages (i.e., variable capital), into investments into newer, better, and more efficient means of production (i.e., constant

[197] Marx 1976c, 41, VII.
[198] Marx 1976c, 42, VII.
[199] Cf. Schumpeter 2008, 31-2; Elliot 1980.
[200] Cf. Kalecki 1990, 554: "investment is not only produced but also producing… and right from its birth it competes with the older generation of equipment. The tragedy of investment is that it calls forth the crisis because it is useful. But it is not the theory which is paradoxical but its subject—the capitalist economy".

capital). Marx calls this the pursuit of "relative surplus-value", in contrast to "absolute surplus-value", which would be obtained by increasing the absolute amount of exploitation in production.[201] This constant shift of the flows of reinvestment from wages (i.e., variable capital) to means of production (i.e., constant capital) will also entail shifting demand and further effects on the varying returns which can be accumulated by the respective departments of capital which produce the means of production (I) and means of consumption (II), but also the amount of employment in those departments, obviously, as I address in the following subsection. For now, one must simply note that competition and accumulation will give rise to what Marx calls the "law of the progressive growth of the constant part of capital in comparison with the variable part",[202] or the changing "organic composition of capital".[203] In volume I, he writes:

> … a constantly increasing quantity of means of production may be set in motion by a progressively diminishing expenditure of human power, thanks to the advance in the productivity of social labour…[204]
>
> …**every increase in the use of machinery entails an increase in the constant component** of capital, that part which consists of machinery, raw material, etc., **and a decrease in its variable component, the part laid out in labour-power**.[205]
> An ever increasing part of the capital is turned into means of production, an every decreasing part into labour-power.[206]

So, while dynamics of accumulation give rise to competition between capitalists, competition gives rise to changing compositions or proportions of "constant" and "variable" capital.[207] This, in turn, gives rise to changes in income, revenue, profits of various sectors—above all employment.

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[201] Marx 1990, 432.
[202] Marx 1990, 773
[203] Marx 1990, 762.
[204] Marx 1990, 798.
[205] Marx 1990, 578.
[206] Marx 1990, 778, fn.
[207] Cf. Marx 1990, 774: "…diminution in the variable part of capital as compared with the constant part, or, in other words, this change in the composition of capital…" Cf. Marx 1990, 762, 571.

5.3. Employment, Effective Demand, and the Falling Rate of Profit

The way in which competition between capitalists motivates them to relatively increase their productive investment expenditure on the means of production (i.e., constant capital) and relatively decrease their productive expenditure on labor-power or wages (i.e., variable capital) results in an aggregate change in the organic composition of capital. To every flow of expenditure, however, corresponds an equal flow of income or revenue. When capitalists invest relatively less in wages (i.e., variable capital), someone is getting relatively less in wages, can spend less, there is less effective demand, and potentially less profit. If that decrease in wages is not offset elsewhere, then there may be further negative effects or problems down the line.

Like Keynes, Marx holds that the aggregate expenditure of capitalists on consumption and investment determines the total quantity of production, employment, wages, effective demand, and the amount of income of workers and revenue and profits which individual capitalists can receive, not *vice versa*.[208] It might seem like a negative cost from a microeconomic perspective, but from a macroeconomic perspective it presents the positive sum of disposable income that consumers of products of labor have and can spend on those products and "realize" their value (i.e., effective demand). For example, capitalists' investments in the means of production (i.e., constant capital, department I) also employs workers who in that part of the economy who now have disposable income which supports effective demand for means of consumption (i.e., products of department II). So, the aggregate expenditure of the entire class of capitalists can constrain the revenues or profits of individual capitalists (i.e., endogenous limitation), which capitalists are able to accumulate, in a way in which the latter cannot constrain the former. Unlike the OCT, then, Marx will think that individual capitalists' revenues or profits or costs like wages are not a fundamental

[208] Marx 1990, 770-1. Cf. Keynes 1964, chapter 3; Kalecki 1971 78-9; Steindl 1976, 231, 234, 237, 243, 245.

limit upon capital accumulation, though that may appear to be the case from a microeconomic scale of description (e.g., an individual firm). Rather, the aggregate-level capital investment endogenously constrains revenue, profits and wages. Unlike underconsumptionists, then, Marx holds that effective demand is not a primitive limit of capital accumulation. Rather, it is a function of aggregate-level capital investment (e.g., wages, capitalists' consumption), and capitalists' aggregate investment in the means of production (i.e., department I) plays a leading role, which underconsumptionists do not appreciate.[209]

The way in which Marx arguably goes beyond even Keynes is the more specific account which he gives of the changing composition of capital or over the course of what he calls the "industrial cycle" and its effects.[210] Again, as capitalists accumulate capital, competition causes them to invest relatively more value as constant capital (i.e., means of production) and relatively less value as variable capital (i.e., wages) over a period of economic activity (i.e., changing organic composition of capital), and this change in investments will cause variations in effective demand for both consumer goods (i.e., department II) *and* capital goods (i.e., department I). This is the more specific process in which, Marx thinks, limits to capital accumulation can materialize endogenously. And it appears in the chaotic process of the cycle, which Marx calls a process of "feverish production, a consequent glut on the market, which causes production [and employment] to be crippled. The life of industry becomes a series of periods of moderate activity, prosperity, over-production, crisis, and stagnation".[211] And here one finds the explanation of "a relative surplus population… of workers who are not employed".[212] In volume III, Marx specifies:

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[209] Cf. Bleaney 1976, 11-13, 230, 237-8, 241-2. Cf. Sweezy et. al. 2013.
[210] Cf. Marx 1990, 582. Cf. Keynes 1964, 97, 250, 313-32.
[211] Marx 1990, 581. Cf. Kalecki 1971, chapters 1 and 11; Sherman 1967; Sherman 1979; Sherman 1991, chapter 9; Steindl 1976, chapter XIV; Medio 2018.
[212] Marx 1991, 364.

> Overproduction of capital never means anything other than overproduction of means of production… that can function as capital… […] capital's purpose is not the satisfaction of needs but the production of profit…[213]

> Crises are never more than momentary, violent solutions for the existing contradictions [i.e., disproportions], violent eruptions that re-establish the disturbed balance for the time being.[214]

> The stagnation in production that has intervened prepares the ground for a later expansion of production — within capitalist limits.[215]

Marx's view of the industrial cycle, the changing composition of capital, employment of workers, and effective demand must all be understood together. In course of competition and the cycle, capitalists are constantly shifting their capital investment from wages (i.e., variable capital), which will ultimately be spent on means of consumption, to better means of production (i.e., constant capital), which will be used to expand production. This shift of capitalists' investment also means a corresponding constant displacement of workers either from one job to another or from employment to unemployment. That shift of capitalists' investment will therefore also mean there will be a corresponding constant shift in the amount of effective demand for capitalists' products which workers present on the market. High wages are an essential condition sufficient effective demand.[216] So, when new, more efficient machinery is introduced (i.e., increasing constant capital investment into department I), labor can be displaced or wages cut, and physical productivity can increase while effective demand (disposable income) of workers can decrease, which is the Urform of the POU. In volume I, Marx writes:

> The circumstance that they [i.e., workers] were 'set free' by the machinery [i.e., laid off] from the means of purchase changed them from buyers into non-buyers. Hence a lessened demand for those commodities. *Voilà tout.* **If this diminution of demand** [which occurs

[213] Marx 1991, 364-5.
[214] Marx 1991, 357.
[215] Marx 1991, 364.
[216] Cf. Marx 1991, 281: "In actual fact, a general nominal increase of this kind in the profit rate, and hence in average profit, over and above the level given by the proportion of the actual surplus-value to the total capital advanced, is not possible unless it brings with it an increase in wages and similarly an increase in the price of those commodities which form the constant capital".

> when workers are paid less or laid off due to the introduction of machinery] **is not compensated by an increase in demand from another direction the market price of the commodities falls.** If this state of things lasts for some time, and increases in extent, there follows the displacement of the workers employed in the production of those commodities.[217]

And in *Theories of Surplus Value*, Marx similarly writes:

> … *discharged* workers have ceased to be consumers, i.e., DEMANDERS, of [the capitalist's] own articles, though they were so before. More of these commodities will now be present on the market, although for the workers THROW ON THE STREET, they have ceased to exist or have ceased to exist in their previous quantity.[218]

Potentially dire outcomes are possible. One of the following three possible scenarios can result:

Either (1) the workers that the introduction of new machinery displaces from both means of production and means of consumption producing sectors (i.e., departments I and II) will be reemployed by other new enterprises which appear in either sector such that the same or greater aggregate level of employment and effective demand and therefore profitability can be sustained ("diminution of demand… compensated"), which is the condition for the capitalist economy to continue to function normally. Note, however, this possibility presumes that markets are competitive, not monopolized.

Or (2) the increasing demand for means of production and spending on them (i.e., constant capital, products of department I) can mean relatively more income or profit for that sector. This might sufficiently expand production in that sector to a degree that can reemploy the workers displaced by machinery elsewhere and thereby offset that decreasing employment of workers elsewhere ("diminution of demand… compensated"). So, this balance could support sufficient effective demand for the products of the consumer-goods producing sector of the economy (i.e., department II) to sustain the latter. But this equilibrium is hardly guaranteed.[219]

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[217] Marx 1990, 567.
[218] Marx and Engels 1989b, 188. Cf. Marx and Engels 1989b, 152.
[219] Cf. Marx 1992, 571: "this balance is itself an accident".

Or (3), finally, if the workers displaced by the introduction of new means of production (i.e., constant capital) are not reemployed elsewhere ("diminution of demand is not compensated"), then the changing composition of capital will simply mean less employment or relatively less income for workers. This means unemployment for workers and less effective demand for capitalists who produce means of consumption (i.e., products of department II). Clearly, this can harm the revenue and profits of means of consumption producing sector of the economy (i.e., department II), because workers spend all their income on consumer-goods. And this can potentially even further harm the revenue and profits of the capital-goods producing sector of the economy (i.e., department I), if lack of effective demand is extreme enough to restrict production or the demand for means of production. And so, a downward spiral in the industrial cycle can be triggered.[220]

Marx thinks that there is no *a priori* guarantee that this last case (3) will not happen, unlike the OCT. That is, he thinks that it is an inherent possibility of capitalist economies which is, moreover, very likely to occur throughout industrial cycles and which does seem to occur regularly. In volume III he relates capital investment to effective demand in terms of consumers "realization" of capitalists' profits, upon which the normal functioning of the economy rests. The conditions of production of surplus-value ("exploitation") and "realization" of surplus-value on the market are "separated in time", are "not identical". The "productive forces" and physical production are always increasing, while "consumption of the vast majority of society [is reduced]

[220] Cf. Marx 1990, 770-1: "To put it mathematically: the rate of accumulation is the independent, not the dependent variable; the rate of wages is the dependent, not the independent variable. […] [But] If the quantity of unpaid labor supplied by the working class and accumulated by the capitalist class increases so rapidly that its transformation into capital requires an extraordinary addition of paid labor, then wages rise and all other circumstances remaining equal, the unpaid labor diminishes in proportion. But as soon as this diminution touches the point at which the surplus labor that nourishes capital is no longer supplied in normal quantity, a reaction sets in: a smaller part of revenue is capitalized, accumulation slows down, and the rising movement of wages comes up against an obstacle". Cf. Marx and Engels 1989b, 152.

to a minimum level".[221] So, there is therefore a "constant tension" or "conflict" between constantly expanding production and the "restricted dimensions of consumption", which is to say wages, disposable income, effective demand.[222] Capitalists require a progressively larger market or greater effective demand for their products in order to continue to accumulate capital, but that market expansion is potentially frustrated by the fact that consumers often have less income than is required to satisfy needs and profits,[223] not least in part because the amount of money capitalists pay to workers as wages does not keep up with production and expected profits.

The problem here is ultimately one of a possible "disproportion" between capitalists' constant capital investments investment into means of production (i.e., department I) and variable capital investments into wages that will be spent on means of individual consumption (i.e., department II).[224] The accumulation of surplus-value as capital can give rise to a disequilibrium between the supply and demand for the products of department I (i.e., means of production) and department II (i.e., means of consumption), which can have negative consequences for capitalists and workers. Yet even a proper proportion between constant capital investments in means of production and variable capital investments in wages will not guarantee full employment. Unlike the underconsumptionists, then, the problem of effective demand and profitability is not simply due to workers not buying enough consumer goods, but due to capitalists' constant capital investment into constantly improved machinery, perpetually destabilizing the balance not only

[221] Marx 1991, 352. Cf. Marx 1991, 357-8; Marx 1991, 365.

[222] Cf. Marx 1991, 365: "Since capital's purpose is not the satisfaction of needs but the production of profit… there must be a constant tension between the restricted dimensions of consumption on the capitalist basis, and a production that is constantly striving to overcome these immanent barriers. Moreover, capital consists of commodities, and hence overproduction of capital involves overproduction of commodities". Cf. Marx 1991, 353: "…the more productivity develops, the more it come comes into conflict with the narrow basis on which the relations of consumption rest. …the contradiction between the conditions in which this surplus-value was produced and the conditions in which it was realized".

[223] Marx and Engels 1989b, 148.

[224] Marx and Engels 1989b, 146. Cf. Bleaney 1976, 11-13, 230, 237-8, 241-2; cf. Sowell 1967; Sowell 1972; Sowell 2006.

between supply and demand in general, but specifically between labor (i.e., employment, effective demand) and products and between departments I and II of capital.

The proportion between kinds of new investment or the organic composition of capital throughout the cycle will be the systemic factor which decides which of the three outcomes I enumerated above with respect to employing labor will be the case. Further capital investment in wages (i.e., variable capital) in either the department of capital which produces the means of production (I) or the department which produces the means of individual consumption (II) can immediately stem decreasing employment, or an increasing pool of unemployed people. Capital investment which purchases means of production (i.e., products of department I of capital) creates effective demand for means of production which can lead to increased production and employ workers there and hence some effective demand for means of consumption (i.e., products of department II) in a more roundabout way. But the state of the composition of capital and its needs for profit ("valorization requirements") at any given point in its cycle will determine how matters will have to proceed if they are to proceed smoothly. As capital accumulates and its composition changes or the ratio between constant capital (i.e., means of production) and variable capital (i.e., wages) rises, there will eventually be a relative overaccumulation of all kinds of commodities in relation to the effective demand or buying power of all kinds of consumers. A disproportion will emerge between the supply and effective demand of capital goods (i.e., means of production, products of department I) and consumer goods (i.e., means of consumption, products of department II). Thus begins the downswing which reduces employment and investment, leading to stagnation and austerity or further unemployment. (The falling rate of profit, according to Marx, is a consequence of accumulation and plays a far less central role than Smith or Ricardo thinks.)

Most importantly for my argument about involuntary unemployment and Hegel's "rabble", these reflections simply mean that employment can decrease further, or unemployment might increase in the normal course of accumulation. There is simply no guarantee that capital investment will automatically employ all workers (i.e., full employment) at a rate which enables consumers to buy all the products on the market at a rate which is sufficiently profitable for capitalist production to continue normally. The accumulation of capital can give rise to disequilibria between products to be sold or profits to be realized and the effective demand and workers, or their ability to buy the products at a rate which realizes sufficient profit for the industrial cycle to continue its upward movement. So, the process of accumulation can pose its own limits endogenously. The development and accumulation of capital is the constant attempt to transcend every limit it encounters, though it ultimately ends up encountering obstructions that it throws up for itself, according to Marx (e.g., effective demand).[225] "The *true barrier* to capitalist production is *capital itself*".[226] Ultimately, Marx's point is not that the POU or involuntary unemployment is necessarily inevitable. Various countervailing factors may offset the general trend that Marx identifies in the accumulation of capital. Rather, in a capitalist economy, it is nevertheless an inherent possibility which capital accumulation perpetually presents, if not a high probability. Involuntary or less-than-full employment is entirely compatible with normal capitalist production. There will ultimately be a tension within capitalist economies, between real production and the conditions of realization and accumulation of surplus value as capital, which can endogenously limit the latter and cause

[225] Cf. Marx 1993, 334: "…as the representative of the general form of wealth – money – capital is the endless and limitless drive to go beyond its limiting barrier. […] Else it would cease to be capital – money as self-reproductive".

[226] Cf. Marx 1991, 358-9: "Capitalist production constantly strives to overcome these immanent barriers [e.g., effective demand], but it overcomes them only by means that set up the barriers afresh and on a more powerful scale. [/] The *true barrier* to capitalist production is *capital itself*. It is that capital and its self-valorization appear as the starting and finishing point, as the motive and purpose of production; production is production only for *capital*, and not the reverse, i.e. the means of production are not simply means for a steadily expanding pattern of life for the *society* of the producers. […] The means – the unrestricted development of the forces of social production – comes into persistent conflict with the restricted end, the valorization of the existing capital".

problems. Capital is neither only on the production or supply side nor only on the consumption or demand side. "It is not a case of two independent forces working on each other. *Les dés sont pipés* [i.e., the dice are loaded]. Capital acts on both sides at once".[227]

*

Finally, it is important to register an important difference between the OCT and Marx's theory on the topic of the rate of profit and its purported tendency to fall over the course of the process of accumulation and development of capital, which Smith and Ricardo understand very differently. As I will address momentarily, many interpreters of Marx have also understood this topic very differently.

Marx formulates the general rate of profit (r) as the sum-total of aggregate profit (S) produced in a period of economic activity divided by the sum total of constant capital (C) and variable capital (V) investments.[228] Over the course of the development of capital, investment in constant capital will increase faster than investment in variable capital and it will accumulate in the hands of capitalists to a far greater sum. Using arbitrary values (e.g., millions, billion, etc. of dollars), one can represent the process of accumulation of capital through three consecutive points (T^1, T^2, and T^3) and the consequent changes by figure 5.1 as follows:

T^1	T^2	T^3
$\%20 = \frac{2}{8+2}$	$\%19.23 = \frac{2.5}{10+3}$	$\%18.75 = \frac{3}{12+4}$

(Figure 5.1. The Rising Organic Composition of Capital)

What is clear here is that the average rate of profit (r) falls—from %20 to %19.23 to %18.75—while the absolute mass of surplus-value (S) increases—from 2 to 2.5 to 3. Indeed, over this course

[227] Marx 1990, 793.

[228] I.e., $r = \frac{S}{C+V}$. Cf. Marx 1990, 323-4, 442, 660, 978; Marx 1991, chapter two and part three. What Marx calls the "rate of exploitation" is simply the surplus value divided by variable capital investment (Marx 1990, 320f.).

of economic activity, the rate of profit (r) can continually fall *and* the absolute mass of aggregate profits or surplus-value (S) can simultaneously rise, which is fact that many Marxists overlook.[229] (Momentarily I return to this point.) Though there are and have been many ways of understanding Marx's picture here, I propose that one understand the rate of profit to fall over the course of this process simply because the denominator constantly increases (i.e., the accumulation of constant capital increasing variable capital investment). This is a "tautology", Marx states, which is not particularly informative.[230] It clearly does not fall because there is absolutely less aggregate profit (S) to go around for capitalists. The changing rate of profit (r) has simply to do with the way in which the ratio of investment of capital into means of production (C) in relation to wages (V) increases over the course of the cycle as the class of capitalists invest progressively more and more capital into means of production or constant capital (C) and less into wages or variable capital (V), which produces surplus-value (S).

Some features of Smith and Ricardo's views overlap with Marx's, though they are fundamentally different. For example, competition does indeed motivate capitalists to invest more in more efficient machinery (C) to save on wages (V) while producing more, for Marx. Or, increasing overhead costs such as rent can clearly cut into capitalists' profits. However, Marx understands these terms in a fundamentally different way. It must also constantly be borne in mind that the average rate of profit which to capitalist firms is a *microeconomic* consideration regarding their competitive relations with one another. Individual capitalists' profits are shares in aggregate

[229] Cf. Baran and Sweezy 1966, chapter XV; Harvey 2021. Cf. Marx 1991, 347: "The tendential fall in the rate of profit is linked with a tendential rise in the rate of surplus-value, i.e. in the level of exploitation of labour. Nothing is more absurd, then, to explain the fall in the rate of profit in terms of a rise of wages…" Marx 1991, 349: "higher composition of capital… there is an acceleration as far as its mass is concerned, even though the rate of this accumulation falls together with the rate of profit" (Cf. 356-7). Cf. Marx 1991, 350: "…it promotes overproduction, speculation and crises, and leads to the existence of excess capital alongside a surplus population". Cf. Marx 1990, chapter 11; Marx 1991, chapter 13.

[230] Marx 1991, 571.

profit or surplus-value distributed according to prices (e.g., competition, oligopoly, monopoly, etc.). Yet the absolute mass of aggregate profit (S) is the essential, macroeconomic consideration. Marx's deeper explanation requires that one recall his reproduction schemas and his distinction between the two departments of capital (I and II).[231] On the one hand, the sum total of all capitalists' individual consumption spending and their variable capital investment on workers' wages constitutes the *entire* effective demand for final consumer goods or means of consumption, which are the products of department II; that flow of expenditure *equals* the flow of income of capitalists of department II (i.e., their costs of production plus profits). On the other hand, the sum total of capitalists' constant capital investment constitutes the *entire* effective demand for producer goods or means of production, which are the product of department I; that flow of expenditure *equals* the flow of income of capitalists of department I (i.e., their costs of production plus profits).

Individual capitalists tend to regard employment and the wages they must pay to workers (V) as an overhead cost of production or exogenous limit to their relative profit margins. In the short run and from an individual-level or microeconomic scale of description, this makes sense, though the opposite is the case in the longer-run and from an aggregate-level or macroeconomic scale of description.[232] As discussed in the previous chapter, Marx will disagree with the OCT in his view that wages cannot limit profits, because they are a dependent variable of capitalists' investments, which also determine aggregate profits.[233] Individual capitalists seem to be constrained by their revenue and costs, yet they are constrained by aggregate investment expenditure of the entire capitalist class, because one capitalists' cost is another capitalists'

[231] Cf. Marx 1992, chapters 20 and 21.
[232] Cf. Steindl 1976, 231-2, 234.
[233] Cf. Marx 1990, 770-1. Cf. Steindl 1976, 237. Cf. Marx 1991, 347: "The tendential fall in the rate of profit is linked with a tendential rise in the rate of surplus-value, i.e. in the level of exploitation of labour. Nothing is more absurd, then, to explain the fall in the rate of profit in terms of a rise of wages…"

income. Capitalists' aggregate expenditure (i.e., consumption and investment) is not only a negative cost, but also present the positive sum of disposable income that consumers of products of labor have and can spend on those products and "realize" their value (i.e., effective demand). Capitalists' investments in the means of production (i.e., constant capital, department I) also employs workers who therefore present an effective demand for consumer goods (i.e., products of department II). And so, the total amount of variable capital which capitalists invest in wages will constitute the upper limit to the amount of money that worker-consumers can spend or exchange for consumer goods (i.e., products of department II) and which capitalists who produce consumer goods (i.e., department II) can receive from workers. The remaining portion of total expenditure-income or effective demand for final consumer goods, meanwhile, comes from the capitalist class itself (i.e., both departments I and II). So, decreases in capitalist investment expenditure decrease effective demand and aggregate profit.

In this history of Marx's reception, orthodox interpreters have often placed very heavy emphasis on the so-called "law of the tendency of the rate of profit to fall"[234] and have often tended to interpret as a theory of a long-term developmental trend or even the ultimate collapse or breakdown of capitalism,[235] rather than, say, an aspect of Marx's view of the industrial cycle. And the interpreters in his lineage tend not only to deny that Marx is an underconsumptionist, but also that there are any features in common between underconsumptionism and Marx's theory. On the other hand, some Marxists have advanced underconsumptionist views (e.g., Engels, Kautsky, and arguably Rosa Luxemburg)[236] or emphasized underconsumptionist themes in Marx's theory (e.g.,

[234] Cf. Grossman 1992, Mattick 1969. Cf. Shaihk 1978; Bleaney 1976, 112-113.

[235] For a discussion of the theories of imminent or eventual "collapse" of capitalism in traditional Marxism, cf. Sweezy's discussion of the "breakdown controversy" (Sweezy 1970, chapter XI).

[236] Cf. Marx and Engels 1975, 418-443; Kautsky 1910k, III.8; Luxemburg 1951, Luxemburg and Bukharin 1972; Clarke 2012. Bleaney 1976 argues that Luxemburg is not an underconsumptionist, though her view that capital cannot guarantee sufficient domestic demand comes very close, I would argue.

Sweezy),[237] and have been heavily criticized for this.[238] In my view, this is an excessively contentious topic which is largely moot and both sides of which are excessively one-sided. On the one hand, it is arguably misguided to expect capitalism to collapse due to falling profitability. One ought not to expect the falling rate of profit to give rise to a collapse of capitalism, because the absolute mass of aggregate profit or surplus-value, which is far more important, can rise even as the rate of profit falls.[239] Crises are not the *end* of capitalism, but normal features which reestablishes its proper functioning.[240] And Marx's treatment of the topic of the "falling rate of profit", which he inherits from the OCT, is just fundamentally different from Smith or Ricardo. The sense in which increasing accumulation of capital in relation to relatively falling profitability is relevant is something which never occurred to Smith or Ricardo: unused technical capacity which can distort markets, efficiency, employment, profitability, and further development and accumulation.[241] On the other hand, meanwhile, underconsumptionist aspects (i.e., a lack of effective demand) are arguably just "one aspect" of the process of accumulation in which the rate of profit falls.[242] And I would argue that the more balanced view is that Marx integrates aspects of underconsumptionism into his own larger theoretical context which can explain the economic POU in terms of the changing composition of aggregate capital investment.[243] The changing rate of profit is a piece of the picture of the industrial cycle, which is a regular part of capitalist economies.

[237] Sweezy 1970, chapters X.2 and XII; Sweezy 1953, 352-62; Sweezy 1981, 33-6.
[238] Bleaney 1976, Shaikh 1978.
[239] Harvey 2021. Cf. Baran and Sweezy 1966.
[240] Cf. Marx 1991, 357: "Crises are never more than momentary, violent solutions for the existing contradictions, violent eruptions that re-establish the disturbed balance for the time being".
[241] This point was intuited early on by Veblen 1978 and elaborated by Kalecki and his successors (cf. Kalecki 1971, Steindl 1976, Baran and Sweezy 1966).
[242] Sweezy 1970, 186.
[243] Cf. Sweezy 1970 (X.2, XII), Devine 1982, Sherman 1983, Ramirez 1990, Clarke 1990/1991, Sherman 1991, Basu 2016. Cf. Sweezy 1970, 181.

5.4. Involuntary Unemployment, "Relative Surplus Population or Industrial Reserve Army", "Rabble"

The further possible effect of accumulation of capital already hinted at above is the creation of what Marx calls a "relative surplus population or industry reserve army",[244] which more modern macroeconomists call "involuntary unemployment".[245] This aspect of Marx's theory is clearly the most important for the purposes of my argument regarding Hegel's "rabble", which I think it captures. And the point of going so deeply into Marx's theory of value, capital, and accumulation is that it seems to present a straightforward explanation of the phenomenon that Hegel recognizes as the POU and the "rabble". To be clear, however, I do not mean to suggest anywhere in this dissertation that Marx presents *the* theoretical explanation. That would be an *empirical* question the truth or falsity of which would lie well beyond the scope of this dissertation's argument about the *interpretation* of Marx's work. My point is simply that Marx presents *one possible* theory according to which the POU and involuntary unemployment is conceivable and recognizable (*pace* the OCT) and can be explained (*pace* the underconsumptionists and Hegel), if one accepts Marx's substitution of revised premises for economic theory (i.e., value and capital).

Involuntary unemployment is one possible consequence of the changing organic composition of capital investment and accumulation which is inherent to the latter. "With each improvement in the machinery, [capital] will employ fewer people", Marx writes.[246] So, a pool of recently unemployed people can emerge. It may consist either of a constantly rotating group of persons who come into and out of employment as production changes or as workers are laid off and reskilled, such that no one remains perpetually unemployed. This kind of short-term

[244] Marx 1990, 781.
[245] Cf. Keynes 1964, 15; Mitchell, Wray, Watts 2019, 181-2, 186-7, 211-13.
[246] Marx 1990, 565.

unemployment is directly related to the process of "competitive struggle" between capitalists.[247] Or, if there is no demand for any more workers or workers with the particular skills which people happen to possess, or if they cannot be reskilled, then long-term unemployment will result. The segment of the population in question will consist of individuals who remain unemployed for extended periods of time and can become permanently unemployable.[248] Their consumption will only occur as a deduction from other workers' incomes, thereby further depressing wages and effective demand.[249] Thus, in volume I, Marx claims that pauperism is effectively an *overhead cost* (*faux frais*) *of production* that is a drag on the economy generally, on working people in particular, and destroys lives.[250] The connection to Hegel's "rabble" here is obvious.

Comparison with Marx's nearest relative in modern macroeconomic theory, which it arguably anticipates, is helpful here. In his *General Theory*, J.M. Keynes distinguishes between "frictional", "voluntary" and "involuntary" unemployment.[251] While the meaning of "voluntary unemployment" might be obvious, frictional unemployment is due, for instance, to changes in the technology of production in relations to certain skills of the workforce which displace workers, and it is essentially temporary. Involuntary unemployment, however, is far more complicated. Keynes argues that the entire amount of capital which capitalists are willing to invest in production does not necessarily coincide with the full employment of the population, but it does determine

[247] Cf. Marx 1991, 363: "The fall in prices and the competitive struggle… impel [capitalists] to raise the productivity of a given quantity of labour [e.g., by introducing more efficient machinery, investing in more constant capital], to reduce the proportion of variable capital to constant and thereby to dismiss workers, in short to create an artificial surplus population".
[248] For a contemporary discussion of this point, cf. Mitchell, Wray, Watts, 79-80, 286.
[249] Cf. Marx 1991, 366: "What is produced is firstly too great a section of the population which is in fact incapable of work, which owing to its situation is dependent on the exploitation of the labour of others or on kinds of work that can only count as such within a miserable mode of production". For a contemporary discussion of the various kinds of unemployment, cf. Mitchel, Wray, Watts 2019, 72-3, 213.
[250] Marx 1990, 797.
[251] Keynes 1964, 6.

aggregate employment and hence a portion of effective demand.[252] Neither does it equal the full utilization of the capacities of capital automatically. According to Keynes, capitalists only invest as much money into production and employment (i.e., costs, wages, effective demand) as they expect to generate the profit they will receive. So, there is simply no *a priori* guarantee that the number of workers which capitalists are willing and able to employ is the same as the absolute number of people who exist, as the OCT imagines. There is no *a priori* guarantee for full employment. And so, involuntary unemployment arises because there is a lack of effective demand *on the production-side* for labor by of capitalists, though capitalists' lack of effective demand for labor (i.e., investment in wages) can cause the further lack of effective demand by workers for products (i.e., disposable income), which can present further negative feedback for the economy.[253] Thus there can arise what Keynes calls the "the paradox of poverty in the midst of plenty",[254] which Hegel already arguably recognizes.

Comparison with the mainstream or orthodox view, which both Keynes and Marx reject, is also interesting. On that view, individual capitalists are only willing to invest as much of their capital stock into production as will make the real benefit that accrues to them due to their last unit of investment break even, as it were, with the real cost (i.e., "marginal return").[255] The point at which cost and benefit break even, as it were, determines the amount that a capitalist will invest

[252] Cf. Robinson 1966, 237, 240.

[253] For a contemporary discussion of the relation between unemployment and effective demand, cf. Mitchell, Wray, and Watts 2019, 182.

[254] Keynes 1964, 20.

[255] Cf. Cochrane, 1970, 28-9: "This theory can best be explained if it is assumed that the entire existing agricultural work force has been attained by adding each and every [individual] worker to the total work force, starting from zero, one at a time. The number of the last worker added (called the 'marginal man')—say, the 60,000th man—is the size of the current work force—say, 60,000 men. [/] Of course, this is artificial—the current work force is an undifferentiable mass of men all put to work at the same time. But, given this one-at-a-time fiction, it is possible to isolate each of the intramarginal worker's contribution to the total output when each himself was the 'marginal man.' These individual contributions could be called the intra-marginal productivities of labor. The sum of all of these individual contributions plus the contribution of the actual currently marginal man, say the 60,000th man, is total output". This is not the same as Keynes's notion of "marginal efficiency of capital" (i.e., profitability).

on wages of labor. This view then assumes that its claim, which adopts a microeconomic scale of description of individual capitalists, also holds at a macroeconomic scale of description for aggregate employment by all capitalists (fallacy of composition). So, full employment would simply mean dividing the sum of wages that all, individual capitalists are willing to pay to workers among the total number of workers who want to work. And so voluntary unemployment would occur because workers and capitalists simply do not offer what each other wants at the suitable rate. And involuntary unemployment would occur when workers' supply of labor has exceeded capitalists' demand for labor *at the given wage-rate*. The total amount of labor that capitalists are willing to employ at the given wage rate is less than the number of workers who would like to work at that wage rate; the total amount that capitalists are willing to pay at that rate (i.e., wage-fund) is less than the amount that they would have to pay to employ each worker who wants to work at that wage-rate. So, involuntary unemployment would be due to the fact that *some* workers are paid too much in wages (perhaps due to union interference with the market), leaving nothing of the sum that capitalists are willing to spend on labor left over for other workers. And so, the mainstream solution to unemployment or the way to achieve full employment would simply mean dividing the same total sum of wages (i.e., wage-fund) among more workers evenly, giving some the to the formerly unemployed and less to the currently employed; reduce the wages of the employed sufficiently enough that a sum remains which can employ the others. Some would get less, though all would at least get something.[256] More recently, mainstream economists similarly

[256] Cf. Leftwich, Sharp, Miree 1980, 274: "The economic aspect of unemployment originates from a situation in which the quantity of labor demanded [by capitalists] is less than the quantity [of labor] supplies [by workers] at the market wage rate. This results in involuntary unemployment". "The general solution to involuntary unemployment is a reduction in real wage rates until the amount of labor demanded equals the amount supplied. In a competitive market, the reduction in real wage rates would take place automatically" (Leftiwich, Sharp, Miree 1980, 287). For a contemporary discussion of this view from a macroeconomic perspective, cf. Mitchell, Wray, Watts 2019, 169-70 and chapters 11-14.

accept a trade-off between full employment and inflation;[257] a degree of unemployment is a necessary sacrifice for low prices and high real asset values (i.e., the "natural rate of inflation").[258] Clearly, underconsumptionists, Keynes, and Marx would find this theory very unsatisfactory.

First, if one assumes that the aggregate fund which capitalists will invest in wages is fixed, and if employed workers' wages are cut to employ the previously unemployed with the same fund, then there may not be enough disposable income in the hands of consumers (i.e., effective demand) for those consumers to buy all the commodities on offer at a profitable rate. There will be a problem of overproduction and underconsumption (POU) which causes capitalists to scale back production, lay off workers, and we will be right back where we started.[259] Second, the fund which capitalists will invest in wages is neither fixed nor a simple aggregate of individual capitalists' investment decisions in relation to "marginal" benefit of investment (i.e., fallacy of composition). It is flexible (e.g., credit) and it is formed in relation to expected pecuniary returns or profits in the form of *money*.[260] As Marx put it, capitalists' investment in wages is the "independent variable", while "wages" are the "dependent variable".[261] So, the problem is arguably that the orthodox view ignores money, treats supply and demand for labor and goods as though they were naturally in equilibrium, and as though they were fixed or constant terms that were independent of one another and independent of the aggregate investment of capital.

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[257] Cf. Mitchell, Wray, and Watts 2019, 254-67, 268, 270, 284.

[258] Cf. Mitchell, Wray, and Watts 2019, 269, 274, 296. The mainstream definition of inflation is "too much money chasing too few goods" (Barth and Bennett 1975). Full employment or full capacity is therefore the threshold of inflation, which would mean that a permanent degree of unemployment guarantees a defense against inflation.

[259] Cf. Sherman 1984, 93-4; Sherman 1991, chapter 9.

[260] Cf. Veblen 1901, Veblen 1978, 20; Cf. Keynes 1979, 89: "The [capitalist] firm is dealing throughout in terms of sums of money. It has no object in the world except to end up with more money [M'] than it started with [M]. That is the essential characteristic of an entrepreneur [i.e. capitalist] economy".

[261] Marx 1990, 770. Cf. Sardoni 1997. This is just Marx's theory *in nuce*, if one understands it in a way which is liberated from Ricardo's LTV. It also distinguishes Marx from "vulgar underconsumptionism" (cf. Sweezy et. al. 2013).

Marx too thinks that capitalists' actual demand for labor is not always automatically sufficient to employ every worker. According to Marx, the state of the economy at any given point in time, which is to say the technical and organic composition of capital, will determine the degree of demand for labor, employment or unemployment, and hence effective demand and profitability as well. This is what Marx calls the "valorization requirements" of capital, which determine the specific degree of investment in labor-power which capitalists must make to obtain the profits they need to obtain and reinvest or accumulate to remain viable. Workers are "attracted" and "repelled" from employment[262] in relation to capitalists' varying needs for profit or demand for labor, or "capital's changing valorization requirements" or organic composition[263] over the course of "industrial cycle".[264] And as I have already suggested, Marx's view on that topic is the way in which he provides his own unique perspective which goes somewhat beyond the Keynesian view.

In the following statement from volume III, Marx expresses the view which I have just tried to reconstruct in a way which highlights specifically capitalists' constant capital investment in means of production (i.e., products of department I) and its overaccumulation vis-à-vis falling effective demand by final consumers (i.e., wages, variable capital to be spent upon products of department II) in relation to an increasing population of unemployed people. And this feature highlights the unique dimension of his theory of what Hegel calls the "rabble". He writes:

> Overproduction of capital never means anything other than overproduction of means of production – means of labour and means of subsistence – that can function as capital, i.e. can be applied to exploiting labour at a given level of exploitation; a given level, because a fall in the level of exploitation below a certain point produces disruption and stagnation in the capitalist production process, crisis, and the destruction of capital. **It is no contradiction that this overproduction of capital is accompanied by a greater or smaller relative surplus population. The same causes that have raised the productivity of labour, increased the mass of commodity products, extended markets, accelerated the accumulation of capital, in terms of both mass and value, and lowered the rate of**

[262] Marx 1990, 777.
[263] Marx 1990, 784, cf. 448.
[264] Marx 1990, 582. Cf. Marx 1990, 581, Marx 1991, 363.

> **profit, these same causes have produced, and continue constantly to produce, a relative surplus population**, a surplus population of workers who are not employed by this excess capital on account of the low level of exploitation of labour at which they would have to be employed, or at least on account of the low rate of profit they would yield at the given rate of exploitation.[265]

Recalling Hegel's formulation or Keynes's "paradox of poverty in the midst of plenty", by "contradiction" Marx means that the changing composition of capital throughout the course of its development and accumulation can explain the otherwise opposite and paradoxical problem that periodically appears: unemployed and hungry people who can present no effective demand for capitalists' products and realize their profits alongside products which remain unsold or are sold at or below their cost of production at a loss to capitalists and low profitability.[266]

This view must be placed within the context of Marx's view of the general trend of investment, accumulation, and the changing organic composition of capital throughout its cycles. On the one hand, in the upswing of the cycle of accumulation, demand for labor and employment might increase absolutely, though it will decrease relative to total capital investment Marx writes:

> Since the demand for **labour** is determined not by the extent of the total capital but by its variable constituent alone [i.e., wages], that **demand falls progressively with the total growth of capital** [i.e., variable + constant capital], instead of rising in proportion to it…[267]
> …in proportion as the productivity of labour increases [i.e., increased constant capital investment, more efficient means of production], capital increases its supply of labour more quickly than its demand for workers.[268]

The inverse of this claim about the relative decline in variable capital or wages, obviously, is that unemployment will increase.[269] Yet if the variable capital investment into labor or wages does not

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[265] Marx 1991, 364. Cf. Marx 1991, 353: "But the more productivity develops, the more it comes into conflict with the narrow basis on which the relations of consumption rest. It is in no way a contradiction, on this contradictory basis, that excess capital coexists with a growing surplus population…"

[266] Cf. Keynes 1964, 322: "We reach a condition where there is shortage of houses, but there nevertheless no one can afford to live in the houses that there are".

[267] Marx 1990, 781. Cf. Mitchell, Wray, Watts 2019, 177.

[268] Marx 1990, 789.

[269] Cf. Marx 1991, 358: "The relative [i.e., not absolute] decline in the variable capital as against the constant, which goes hand in hand with the development of the productive forces, gives a spur to the growth of the working population, while it continuously creates an artificial surplus population as well. The accumulation of capital, from

keep up in proportion to total capital investment, there may be insufficient effective demand for all of the commodities for sale to clear the market, which triggers the downswing of the cycle. And so, on the other hand, in the slump or "stagnation" yet another portion of the working population is thrown into the surplus population of the unemployed.[270] Over and above the intermittent bouts of unemployment which the movements of investment can cause throughout the cycle, however, Marx also thinks that the latter will also give rise to a relatively permanent pool of "redundant" people. And this is the group which best describes Hegel's "rabble".[271] Marx highlights the endogenous character of the problem here. The unemployed portion of the population is not *absolutely* redundant. There is plenty of work that could be done, if the economy were structured according to the satisfaction of human needs. Rather, the unemployed are always only relatively redundant, in relation to capitalists' demand for labor-power ("valorization requirements").

To be clear, Marx is not arguing that unemployment is a deliberate, conspiratorial project for control of the economy, though some of his formulations may give impressions to that effect.[272] The political import of Marx's view easily overshadows his economic theory. For example, he calls the mass of unemployed workers "a new and terrible weapon" that capitalists can use against the working class by threatening to fire and replace workers (which is not possible in a state of full employment), if they do not accept the conditions of employment or try to improve them through

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the point of view of value, is slowed down by the falling rate of profit [vis-à-vis the interest rate], which then serves yet again to accelerate the accumulation of use-value, while this in turn accelerates the course of accumulation in terms of value".

[270] Cf. Marx 1991, 363: "Stagnation in production makes part of the working class idle and hence places the employed workers in conditions where they have to accept a fall in wages, even beneath the average; an operation that has exactly the same effect for capital as if relative or absolute surplus-value had been increased while wages remained at the average".

[271] Cf. Marx 1990, 782: "it is capitalist production itself that constantly produces, and indeed produces indeed in direct relation with its own energy and extent, a relatively redundant working population, i.e., a population which is superfluous to capital's average requirements for its own valorization, and is therefore a surplus population".

[272] Marx 1990, 789-90, 935.

political activity or organizing unions.[273] But the surplus population of unemployed workers is an uncoordinated, systemic consequence of the dynamic of the development and accumulation of capital that functions to the advantage of capitalists. On the other hand, one might object that Marx's account is too systemic, deterministic, or even mechanical. Indeed, he speaks of the "absolute general law of capitalist accumulation" here,[274] and he claims that: "Accumulation of wealth at one pole is, therefore, at the same time accumulation of misery… at the opposite pole, i.e. on the side of the [working] class that produces its own product as capital".[275] However, *any* scientific theory will explain phenomena with reference to something like laws and a distinction between reality or essence and appearance.[276] He certainly does not simply mean that the absolute standard of living will simply nosedive in the history of capitalism necessarily until life becomes so unbearable that workers spontaneously revolt, though the *Manifesto* can give this impression.[277] He is aware that countervailing tendencies offset the general trend that he identifies within the process of accumulation.[278] And he accepts that workers' *real* standard of living can generally increase throughout the history of capitalism, even while their *relative* wages vis-à-vis capitalists and social position decline.[279] He recognizes that the capitalist mode of production marks progress over every previous one and is more productive than any other era of human history.[280]

[273] Marx 1990, 798. Cf. Kalecki 1971, chapter 12.
[274] Marx 1990, 798.
[275] Marx 1990, 799.
[276] Cf. Marx 1990, 92, 100, 421, 710; Marx 1991, 134, 139, 956; Marx 1976a, 37. I would argue that Marx adopts something like the distinction of the so-called "manifest" and "scientific" image from Sellars 1961.
[277] Marx and Engels 1978, 482-3.
[278] Cf. Marx 1990, 798: "Like all other laws, it is modified in its working by many circumstances…"
[279] Cf. Marx 1976c, 36-9; Marx 1976a, 61. Cf. Steindl 1976, 230.
[280] Marx and Engels 1978, 448f.

6. Conclusion

Much of the content just presented is simply the culmination of the entire account which has preceded it in this dissertation and comes to bear on the explanation of Hegel's topic. In this chapter I returned to the problem with which dissertation began, the economic problem of overproduction or underconsumption and the impoverished, involuntarily unemployed "rabble" about which Hegel writes in his *Philosophy of Right*. The purpose of doing so was to present Marx's theory in *Capital* as providing a possible explanation of it where Hegel arguably comes up short, as it were, and to contrast the former with the orthodox classical theory of political economy, which does not present a possible explanation of it, but rather denies its very possibility. This admittedly suggests a certain advantage of the former over the latter, for which I cannot further argue here.

Hegel seems to argue that the POU gives rise to involuntary unemployment or modern poverty, involuntary unemployment or modern poverty give rise to the "rabble", and hence the POU gives rise to the "rabble". Yet from Marx's perspective these phenomena are all rather on a par and none are more causally fundamental than other. They are descriptions rather than explanations, as it were. Specifically, Marx's account of the changing structure of investment of capital, however, can present a causal explanation of the phenomenon to which Hegel refers, I have argued. The POU and involuntary unemployment would be effects of the endogenous limits of the accumulation of capital in capitalist economies, which the orthodox theory can neither make room for it nor make sense of, because it can only conceive of the limits to capital as exogenous. Less than full employment and the tendency to generate a "redundant" or "surplus" portion of the population are normal features of a modern, capitalist economy, according to Marx, while for the orthodox school they are just contingent accidents or perhaps results of wasteful inefficiency. Over the course of investment, competition, and the industrial cycle, Marx argues, an ever-increasing

portion of value is accumulated in productive capital, while a relatively declining portion of it is invested into the employment of labor and wages, which also constitutes the effective demand for products upon which people's livelihoods depend, upon which capitalists' profits also depend, upon which the economy at large depends in turn in capitalism. Real productivity increases, while employment and effective demand relatively decrease in the same stroke, which is the regular phenomenon I take Hegel to recognize as overproduction or underconsumption. This disproportion would give rise to increasing volatility, a perpetual pool of temporarily unemployed persons, and potentially a portion of the population which is permanently unemployed, which, I have argued, is just what Hegel means be the "rabble", the collateral damage of modern economy and society.

Conclusion

In conclusion, in this dissertation I have argued that one must substitute the heterodox theoretical premises which Marx provides in his theory in *Capital*—his concepts of value and capital—to save the phenomenon which Hegel recognizes in his account of the "rabble". That is, what I have called the economic "problem of overproduction or underconsumption" (POU), which is a fiercely debated topic from the history of political economy, is conceivable and explicable from a properly economic perspective *only if* one ultimately abandons the fundamental premises or assumptions of orthodox, classical political economy (e.g., Smith, Say, and Ricardo). One would have to move in the direction which Marx indicates in *Capital* and which post-Keynesian macroeconomists elaborated in the 20th century. So, if one remains with the orthodox theory, then Hegel would simply be confused and his phenomenon of the "rabble" would be a confusion, a merely temporary anomaly which will just go away and might require moral exhortation or public policy but no theory or scientific explanation, which is clearly not Hegel's view. If one accepts the heterodox "fundamental concepts" (*Grundbegriffe*) of value and capital from Marx's theory, however, then the phenomenon to which Hegel refers as the "rabble" would follow as a normal "a matter of course" in modern, capitalist economies.[1] Clearly, one's preference here will be decided by which view one believes better fits the facts on the ground of the capitalist economy and society, which is an empirical question beyond the scope of this dissertation at any rate. Yet the fact that Marx's theory makes more sense of Hegel's view than the OCT clearly suggests that Hegel at least would have to accept a good measure of Marx's view in order to retain anything of his own on this point.

The extent to which Hegel remains steeped in the orthodox, classical theory of political economy (OCT) is, I have argued, the reason for the weakness or shortcomings of his view of the

[1] Peirce 1955, 151. Cf. Harman 1965.

POU, involuntary unemployment, and the "rabble". The differences between the views of the orthodox school of classical political economy (OCT), Hegel, and Marx, have to do with the assumptions of classical political economy. Regarding the OCT, they obscure or rule out the possibility of the phenomenon to which Hegel refers *a priori*. Regarding Hegel, the unsatisfactory kind of explanation he presents (i.e., underconsumptionism) is not simply due to an individual failing on his part. On the contrary, much like Semmelweis, it is remarkable that he so much as recognizes in rough outline the character of the problem at all, even if he cannot ultimately explain it. And the reason why he cannot ultimately explain it on any fundamental level is the extent of his residual orthodoxy, not his nascent heterodoxy. (Again, to be clear, by this I have not meant to suggest that Hegel somehow fails to solve any practical-political problem, which at any case is not the objective of philosophy and hence his own work, so he can hardly fail there.) Though his view cannot validly follow from the classical premises which he seems to adopt or even be coherently reconciled with them, I have taken this inconsistency to be an *advantage* of Hegel's account to the extent it is an interesting, liminal waypoint, as it were, which illustrates the threshold between two theoretical paradigms. His account shows precisely which premises of the classical theory would have to be abandoned or modified for his conclusions to follow. And I have argued that Marx can provide what is needed: the revised concepts of value and capital.

In characterizing the difference between the standpoints of the OCT and Marx's value-theory, as it were, I have called the former a "micro-real" theory and contrasted it with the "macro-monetary" theory found in contemporary post-Keynesian macroeconomics, with which I have argued Marx fundamentally agrees.[2] The orthodox classical theory takes for granted (1) a fundamentally microeconomic understanding of the national economy; (2) an understanding of

[2] The latter expression and argument that Marx presents a "macro-monetary" theory come from Moseley 2016.

economic value and exchange of commodities on which it is a direct barter of goods for goods, abstracting from money completely (i.e., real analysis, Say's law); and (3) an understanding of capital on which it consists simply of real physical goods which are used to produce more real physical goods, abstracting again from money completely. On these assumptions, I have argued, neither Hegel's view follows, nor does it or Marx's theory make much sense, nor does one seem to have a particularly apt description of modern capitalist economies. (As a matter of sound interpretation, however, that ought to signal to Hegel and Marx's reader that they simply cannot be read through the lens of those assumptions; an interpretation which *makes* a theory fail is a bad interpretation.) Marx, meanwhile, adopts (1) a fundamentally macroeconomic understanding of the national economy; (2) an understanding of economic value and exchange of commodities on which they are essentially mediated by money (i.e., monetary analysis) and embedded in a context of social relations; and (3) an understanding of capital on which it is a process of *accumulation* of aggregate profit ("surplus-value").

Substituting Marx's novel, alternative concepts of value and capital into the picture that Hegel presents would require that one abandon the OCT's assumptions, above all the barter-model of exchange (i.e., Say's Law), the view of investment on which it merely redistributes the same amount of consumption differently (i.e., Smith's "invisible hand"), which guarantees harmonious markets, the fundamentally microeconomic model, and its physical conception of value and capital (i.e., real analysis). Once Marx's substitutions are in place, or rather once one has accepted a macro-monetary theory such as Marx's, an explanation of Hegel's problem is already well underway, and I take Marx's account of the "surplus population" of the unemployed to be the culmination of the theory which completes the beginnings made by Hegel.

An additional payoff of the labor of this dissertation, I propose, is the philosophical analysis of the OCT and the interpretation of Marx which it has presented. The way in which this dissertation distinguishes the classical theory of political economy and Marx's theory has also presented an account of the limits of former and an interpretation of the latter according to which it does *not* comfortably belong to the classical school of political economy. That is, I have also argued that Marx's economic theory is not a caricature of the classical "labor theory of value" sketched by Smith and completed by Ricardo, or a theory that is at home in relative price-theory. And if one cannot interpret Marx in that manner, then one cannot reject him as a "minor post-Ricardian". The place which his groundbreaking theory of value and capital occupies in the history of the science of political economy, I have argued, would arguably be much closer to the 20th century post-Keynesian school of macroeconomics which followed him than to his predecessors.

Bibliography

Theodor Adorno 2006, *Minima Moralia*. New York: Verso.

S. S. Alexander 1940, "Mr. Keynes and Mr. Marx". In: *Review of Economic Studies*. Vol. 7, No. 2, 123-135.

Aristotle 1941, *The Basic Works of Aristotle*. Ed. Richard McKeon. New York: Random House.

Tony Aspromourgos 2009, *The Science of Wealth: Adam Smith and the framing of political economy.* London: Routledge.

----- 2013, "Adam Smith on Labour and Capital". In: The Oxford Handbook of Adam Smith. Eds. Christopher J. Berry, Maria Pia Paganelli, and Craig Smith. Oxford: Oxford University Press. 267-289.

----- 2020, "Invisible Hand". In: *The New Palgrave Dictionary of Economics*. Eds. M. Vernengo, E.P. Caldentey, B.J. Rosser Jr. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_3108-1

Jacob Assa 2017, *The Financialization of GDP*. New York: Routledge.

Jacob Assa and Ingrid Harvold Kvangraven 2021, "Imputing Away the Ladder: Implications of Changes in GDP Measurement for Convergence Debates and the Political Economy of Development". In: *New Political Economy*. Vol. 26, No. 6, 985-1014.

Schlomo Avineri 1972, *Hegel's Theory of the Modern State*. Cambridge: Cambridge University

----- 1975, "The Dialectics of Civil Society in Hegel's Thought" In: Hegel-Jahrbuch, 78–82.

----- 1985, "Feature Book Review: The Discovery of Hegel's Early Lectures on the Philosophy of Right". In: *The Owl of Minerva*. Vol. 16, No. 2. 199-208.

Paul A. Baran and Paul M. Sweezy 1966, *Monopoly Capital*. New York: Monthly Review.

Baumol 1977, "Say's (at Least) Eight Laws, or What Say and James Mill May Really Have Meant". In: *Economica*, May, Vol. 44, No. 174, 145-161.

----- 1999, "Retrospectives: Say's Law". In: *The Journal of Economic Perspectives*. Winter, Vol. 13, No. 1, 195-204.

Jay B. Barney and Teppo Felin 2013, "What Are Microfoundations?" In: *Academy of Management Perspectives*. April, Vol. 27, No. 2, 138-155.

Piero Barucci 1975, "Sismondi Revisted". In: *Reivista Internationale di Scienze Economiche e Commerciali*. Vol. 22, No. 10, 977-992.

D. Basu 2016, “Underconsumption, Capitalist Investment and Crisis: A Reply to Sardoni”. In: *Review of Keynesian Economics*. Vol. 4, 208-218.

Frederick Beiser, *Hegel*. New York: Routledge.

Ricardo Bellofiore 1985, “Marx After Schumpeter”. In: *Capital & Class*. Vol. 8, No. 3, 60-74.

Rolf Behrens 1991, “What Keynes Knew About Marx”. In: *John Maynard Keynes (1883-1946)*. Ed. Mark Blaug. Brookfield: Edward Elgar, 14-26.

Ben Bernanke 2000, *Essays on the Great Depression*. Princeton: Princeton University Press.

Antoin Lavoisier Nicholas W. Best 2015 (tr.), “Lavoisier’s ‘Reflections on phlogiston’ I: against phlogiston theory”. In: *Found Chem.* Vol. 17, 137-51.

----- 2016, “Lavoisier’s ‘Reflections on phlogiston’ I: on the nature of heat”. In: *Found Chem.* Vol. 18, 3-13.

Dirk Bezemer 2009, “Why some economists could see the crisis coming”. In: *Financial Times*. September 7. https://www.ft.com/content/452dc484-9bdc-11de-b214-00144feabdc0

John D. Bishop 1995, “Adam Smith’s invisible hand argument”. In: *Journal of Business Ethics*. Vol. 14, No. 3, 165-80.

Mark Blaug 1982, “Another Look at the Labour Reduction Problem in Marx”. In: *Classical and Marxian Political Economy.* Eds. I. Bradley and M. Howard. London: Palgrave Macmillan, 188-202.

----- 1985, *Economic Theory in Retrospect*. 4th Edition. Cambridge: Cambridge University Press.

Michael Bleany 1976, *Underconsumption Theories: A History and Critical Analysis*. London: Lawrence and Wishart.

Johann Friedrich Blumenbach 1789, *Über den Bildungstrieb*. Göttingen: Johann Christian Dieterich.

Franz Böhm 1979, “Left-Wing and Right-Wing Approaches to the Market Economy”. In: *Zeitschrift für die gesamte Staatswissenschaft / Journal*. September, Bd. 135, H. 3, 442-8.

Eugen von Böhm-Bawerk 1890. *Capital and Interest, a critical history of economical theory.* London and New York: Macmillan and Co.

----- 1949, *Karl Marx and the Close of his System*. Ed. Paul Sweezy. New York: Augustus M. Kelley.

Helmut Böhme 1978, *An Introduction to the Social and Economic History of Germany: Politics and Economic Change in the Nineteenth and Twentieth Century.* New York: St. Martin's Press.

Deborah Boucoyannis 2013, "The Equalizing Hand: Why Adam Smith Thought the Market Should Produce Wealth Without Steep Inequality". In: *Perspectives on Politics.* December, Vol. 11, No. 4, 1051-1070.

Brady Bowman 2013, *Hegel and the Metaphysics of Absolute Negativity*. Cambridge: Cambridge University Press.

C.D. Broad 1925, *The Mind and its Place in Nature*. London: Keagan Paul.

Robert Brandom 2002, *Tales of the Mighty Dead: Historical Essays in the Metaphysics of Intentionality*. Cambridge: Cambridge University Press.

----- 2008, "Georg Hegel's *Phenomenology of Spirit*". In: *Topoi*. Vol. 27, 161–164.

Thom Brooks 2015, "Hegel and the Problem of Poverty". In: *Cilicia Journal of Philosophy*. Vol. 1, No. 1, 1-9.

Anthony Brueckner 1999, "Transcendental Argument". In: *The Cambridge Dictionary of Philosophy*, 2nd ed. Cambridge: Cambridge University Press, 925-6.

Gerd Buchdahl 1993, "Hegel on the Interaction Between Science and Philosophy". In: *Hegel and Newtonianism.* Ed. M.J. Petry. Archives Internationales D'Histoire Des Idées / International Archives of the History of Ideas, vol 136. Dortrecht: Springer.

Martha Campbell 1997, "Marx and Keynes on Money". In: *International Journal of Political Economy*. Fall, Vol. 27, No. 3, 65-91.

Rudolf Carnap 1950, "Empiricism, Semantics, and Ontology". In: Revue Internationale de Philosophie. January, Vol. 4, No. 11, 20-40.

William Cohan 2019, "Only the Fed Can Save Us Now". In: *The New York Times*. August 31. https://www.nytimes.com/2019/08/31/opinion/sunday/trump-fed-recession.html

Bret Christophers 2011, "Making Finance Productive". In: *Economy and Society*. Vol. 40, No. 1, 112-140.

----- 2019, "The Problem of Rent". In: *Critical Historical Studies*. Fall, 303-23.

----- 2021, "Class Assets and Work in Rentier Capitalism". In: *Historical Materialism*. Vol. 29, No. 2, 3-28.

Joseph Choonara 2018, "Complex Labor, Value and the Reduction Problem". In: *Science &*

Society. April, Vol. 82, No. 2, 234-47.

Simon Clarke 1990/1991, "The Marxist Theory of Overaccumulation and Crisis". In: *Science & Society*. Winter, Vol. 54, No. 4, 442-467.

----- 2013, "Crisis Theory". In: *The Elgar companion to marxist economics.* Eds. B. Fine & A. Saad-Filho, A. Cheltenham: Edward Elgar, 90-5.

James L. Cochrane 1970, *Macroeconomics Before Keynes*. Glenview: Scott, Foresman and Co.

G.A. Cohen 1981, "The Labour Theory of Value and the Concept of Exploitation". In: *The Value Controversy*. London: Verso, 1981.

----- 2000, *Karl Marx's Theory of History: A Defence.* Princeton: Princeton University Press.

Allin Cottrell 1997, "Keynes, Ricardo, Malthus and Say's Law". https://users.wfu.edu/cottrell/says_law.pdf

John B. Davis 1989, "Smith's Invisible Hand and Hegel's Cunning of Reason". In: *International Journal of Social Economics*. Vol. 16, No. 6, 50-66.

John B. Davis 1993, "Ricardo's Theory of Profit and the Third Edition of the Principles". In: *Journal of the History of Economic Thought*. Spring, Vol. 15, 90-106.

Timothy Davis 2001, "Ricardo's Use of Say's Law: The case of the post-Napoleonic war depression". In: *Reflections on the Classical Cannon in Economics.* Eds. Evelyn L. Forget and Sandra Peart. New York: Routledge, 318-30.

M. De Marchi 2008, "Paradoxes and Anomalies". In: *The New Palgrave Dictionary of Economics*. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_1885-2

Andy Denis 2016, "Microfoundations". In: Review of Political Economy. Vol. 28, No. 1, 134-152.

Meghnad Desai 1988, "The Transformation Problem". In: *Journal of Economic Surveys*. Vol. 2, No. 4, 295-333.

----- 1989, "Endogenous and Exogenous Money" In: *Money. The New Palgrave.* Eds. J. Eatwell, M. Milgate, P. Newman. London: Palgrave Macmillan, 148-50.

----- 1990, "Value and Price" In: *Marxian Economics. The New Palgrave.* Eds. J. Eatwell, M. Milgate, P. Newman. London: Palgrave Macmillan, 365–372.

----- 2002, *Marx's Revenge: The Resurgence of Capitalism and the Death of Statist Socialism*. London: Verso.

----- 2008, “Profit and Profit Theory”. In: *The New Palgrave Dictionary of Economics.* Eds. Steven N. Durlauf and Lawrence E. Blume. DOI 10.1057/978-1-349-95121-5_1319-2

James N. Devine 1983, “Underconsumption, Over-Investment and the Origins of the Great Depression”. In: *Review of Radical Political Economics*. Vol, 15, No. 2, 1-27.

Dudley Dillard 1984, “Keynes and Marx: A Centennial Appraisal”. In: *Journal of Post Keynesian Economics.* Spring, Vol. 6, No. 3, 421-432.

Robert W. Dimand 2008, “Macroeconomics, Origins and History of”. In: *The New Palgrave Dictionary of Economics*. 2nd edition. Eds Steven N. Durlauf and Lawrence E. Blume. DOI 10.1057/978-1-349-95121-5_2333-1

Dumenil and Lévy 2011, *The Crisis of Neoliberalism*. Cambridge: Harvard University Press.

John Eatwell 1987, “Cost of Production”. In: *The New Palgrave Dictionary of Economics.* London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_321-1

----- 2008, “Absolute and Exchangeable Value”. In: *The New Palgrave Dictionary of Economics.* Eds. S.N. Durlauf and L.E. Blume. London: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-58802-2_2

Victor Edelberg 1933, “The Ricardian Theory of Profits”. In: *Economica*. February, No. 39, 51-74.

John E. Elliott 1980, “Marx and Schumpeter on Capitalism’s Creative Destruction: A Comparative Restatement”. In: The Quarterly Journal of Economics. August, Vol. 95, No. 1, 45-68.

Jon Elster 1986, *Making Sense of Marx*. Cambridge: Cambridge University Press.

P. Erdős 1975, “A Contribution to the Criticsm of Keynes and Keynesianism”. In: *Acta Oeconomica.* Vol. 15, No. 2, 157-185.

Ludwig Erhard 1955, “Auf dem Weg zum Wohlfahrts- und Versorgungsstaat? Auszüge aus einer Rede”. In: *Arbeit und Sozialpolitik*. July, Vol. 9, No. 7, 201-2.

----- 1956, “Widerstände auf dem Wege zur sozialen Marktwirtschaft”. In: *Zeitschrift für Nationalökonomie / Journal of Economics*, Bd. 16, H. 1/2, 19-36.

----- 1958a, “Aspects of Economic Development”. In: *India Quarterly*. October-December, Vol. 14, No. 4, 389-395.

----- 1958c, “Germany’s Economic Goals”. In: *Foreign Affairs*. July, Vol. 36, No. 4, 611-7.

----- 1958c, “The Free Market Economy Works”. In: *Challenge*. May, Vol. 6, No. 8, 40-5.

----- 1959, “Labor and German Prosperity”. In: *Current History.* August, Vol. 37, No. 216, 65-7.

Fan-Hung 1939, “Keynes and Marx on the Theory of Capital Accumulation, Money and Interest”. In: *Review of Economic Studies*. Vol. 7, No. 1, 28-41.

Greg Farrel 2009, “Goldman chief defends employees pay”. In: *Financial Times*. New York: November 10 2009. https://www.ft.com/content/52917628-ce33-11de-a1ea-00144feabdc0

Robert Fatton Jr. 1986, “Hegel and the riddle of poverty: the limits of bourgeois political economy”. In: *History of Political Economy*. Vol. 18, No. 4, 579-600.

Adam Ferguson 1767, *Essay on the History of Civil Society*. London: Strand.

Paul Feyerabend 1981, *Realism, Rationalism & Scientific Method: Philosophical Papers Volume I.* Cambridge Cambridge University Press.

----- 1975, *Against Method*. London: Verso.

Duncan Foley 1982, “The Value of Money, the Value of Labor Power and the Marxian Transformation Problem”. In: *Review of Radical Political Economics*. Vol. 14, No. 2, 37-47.

----- 1985, “Say’s law in Marx and Keynes”. In: *Cahiers d'économie politique*. No. 10-11, 183-194.

Henry Ford 1922, *My Life and Work*. In collaboration with Samuel Crowther. Garden City: Garden City Publishing.

Eckart Förster 2012, *The Twenty Five Years of Philosophy*. Cambridge: Harvard University Press.

F.Y. Edgeworth 2018, “Barter and Exchange”. In: The New Palgrave Dictionary of Economics. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95189-5_107

Ben Fine & Alfredo Saad-Filho 2016, *Marx’s* Capital. 6th edition. London: Pluto.

Irving Fisher 1896, “What is Capital?” In: *The Economic Journal*, December, Vol. 6, No. 24, 509-534.

----- 1933, “The Debt-Deflation Theory of Great Depressions”. In: *Econometrica.* October, Vol. 1, No. 4, 337-357.

Michael Forster 2019, “The Origin and Character of Hegel’s Concept of Geist”. In: *Hegel’s Philosophy of Spirit: A Critical Guide*. Ed. Marina F. Bykova. Cambridge: Cambridge University Press, 29-54.

William T. Foster 1922, “The Circuit Flow of Money”. In: *The American Economic Review*. September, Vol. 12, No. 3, 460-473.

Foster and Catchings 1926, “The Dilemma of Thrift”. Newton: Pollak Foundation for Economic Research.

John Bellamy Foster and Robert W. McChesney 2013, *The Endless Crisis: How Monopoly-Finance Capital Produces Stagnation and Upheaval from the USA to China*. New York: Monthly Review.

Ian Fraser 1996, “Speculations on poverty in Hegel’s *Philosophy of Right”*. In: *The European Legacy*. Vol. 1, No. 7, 2055-2068.

Stephen French and James Ladyman 2011, “In Defence of Ontic Structural Realism”. In: *Scientific Structuralism*. Eds. P. Bokulich and A. Bukulich. Dortrecht: Springer.

Jonathan Friedman 1974, “Marxism, Structuralism and Vulgar Materialism”. In: *Man*. Vol. 9, No. 3, 444-469.

Geoffrey Gilbert 1997, “Adam Smith on the Nature and Causes of Poverty”. In: *Review of Social Economy.* Fall, Vol. 55, No. 3, 273-291.

Ian Gough 1972, “Marx’s Theory of Productive and Unproductive Labour”. In: *New Left Review*. No. 76, 47-72.

Henryk Grossman 1992, *Law of Accumulation and Breakdown of the Capitalist System*. London: Pluto.

----- 2017, *Capitalism’s Contradictions: Studies in economic theory before and after Marx.* Chicago: Haymarket.

Donald Gillies 2005, “Hempelian and Kuhnian approaches in the philosophy of medicine: the Semmelweis case”. In: *Stud Hist Philos Biol Biomed Sci.* March, Vol. 36, No. 1, 159-81.

Donald F. Gordon 1959, “What Was the Labor Theory of Value?” In: *The American Economic Review*. May, Vol. 49, No. 2, 462-472.

Wendell Gordon 1951, “Simple Underconsumption”. In: *The Southwestern Social Science Quarterly*. March, Vol. 31, No. 4, 243- 257.

Maurice Godelier 1972, *Rationality and Irrationality in Economics*. London: NLB.

William D. Gramp 2000, “What Did Smith Mean by the Invisible Hand?”. In: Journal of Political Economy. Vol. 108, No. 3, 441-465.

Roy Green 2008, “Money, Classical Theory of”. In: *Money. The New Palgrave.* Eds. J. Eatwell

M. Milgate, P. Newman. London: Palgrave Macmillan, 4329-4333.

Matthias Haase and Wolfram Gobsch 2021, "Philosophie des Pöbels". In: *Orientierung durch Kritik*. Eds. Wolfram Gobsch and Jonas Held. Frankfurt: Meiner, 225-246.

Robin Hahnel 2014, *The ABC's of Political Economy: A Modern Approach*. London: Pluto.

Joseph Halevi 2016, "Marxism and Post-Keynesian Economics". In: *Post-Keynesian Essays from Down Under Volume IV: Essays on Theory.* London: Palgrave Macmillan, 461-75.

Joseph Halevi and Peter Kriesler 1991, "Kalecki, classical economics and the surplus approach". In: *Review of Political Economy*. Vol. 3, No. 1, 79-92.

----- 2020, "Kalecki and Marx Reconnected". In: *Review of Political Economy*. Vol. 32, No. 4, 604-614

Gilbert H. Harman 1965, "The Inference to the Best Explanation". In: *The Philosophical Review*. January, Vol. 74, No. 1, 88-95.

David Harvey 2005, *A Brief History of Neoliberalism*. Oxford: Oxford University Press.

----- 2018a, *A Companion to Marx's* Capital*: The Complete Edition*. London: Verso.

----- 2018b, *The Limits to Capital*. London: Verso.

----- 2018c, *Marx, Capital, and the Madness of Economic Reason*. Oxford: Oxford University Press.

----- 2018d, *Marx's* "Refusal of the Labor Theory of Value". http://davidharvey.org/wp-content/uploads/2018/03/MARX%E2%80%99S_REFUSAL_OF_THE_LTV.pdf

----- 2020, "Value in Motion". In: *New Left Review*. November-December, Vol. 126.

----- 2021, "Rate and Mass". In: *New Left Review*. July-August, Vol. 130.

Philip Harvey 1985, "The Value-Creating Capacity of Skilled Labor in Marxian Economics". In: *Review of Radical Political Economics*. Vol. 17, No. 1-2, 83-102.

Friedrich A. Hayek 1931, "The 'Paradox' of Saving". In: *Economica*. May, No. 32, 125-16.

----- 1967, "Results of Human Action but not of Human Design". In: *Studies in Philosophy: Politics and Economics*. London: Routledge and Kegan Paul, 96-105.

G.W.F. Hegel 1896, *Lectures on the History of Philosophy*. Volume 3. London: Keagan Paul, Trench, Trübner & Co.

----- 1969, *Hegel's Science of Logic*. London: George Allen & Unwin.

----- 1970, *Hegel's Philosophy of Nature*. Ed. A.V. Miller. Oxford: Clarendon Press.

----- 1974, *Vorlesungen über die Rechtsphilosophie: 1818-1831*. Volume 4. Ed. Karl-Heinz Itling. Stuttgart-Bad Cannstatt: frommann-holzboog.

----- 1977, *The Phenomenology of Spirit*. Oxford: Oxford University Press.

----- 1983a, *Hegel and the Human Spirit: A Translation of the Jena Lectures of the Philosophy of Spirit (1805-6) with Commentary*. Ed. Leo Rauch. Detroit: Wayne State University Press.

----- 1983b, *Philosophie des Rechts: Die Vorlesungen von 1818/20.* Ed. Dieter Henrich. Frankfurt: Suhrkamp Verlag.

----- 1988a, *Hegel's System of Ethical Life and First Philosophy of Spirit*. Albany: SUNY Press.

----- 1988b, *Introduction to the Philosophy of History*. Ed. Leo Rauch. Indianapolis: Hackett.

----- 1991a, *Elements of the Philosophy of Right*. Cambridge: Cambridge University Press.

----- 1991b, *The Encyclopaedia Logic (with the Zusätze): Part I of the Encyclopaedia of the Philosophical Sciences.* Indianapolis: Hackett.

----- 1995, *Lectures on Natural Right and Political Science: The First Philosophy of Right: Heidelberg 1817-1818 with Additions from the Lectures of 1818-19.* Berkley: University of California Press.

----- 2000, *Vorlesungen über die Philosophie des Rechts: Berlin 1819/1820.* Eds. Amil Angehrn, Martin Bondeli, Hoo Nam Seelmann. Frankfurt: Felix Meiner Verlag.

----- 2007, *The Philosophy of Mind*. Oxford: Clarendon Press.

----- 2017a, "Katalog der Bibliothek Georg Wilhelm Friedrich Hegels". Abteilungen I-III. Ed. Manuela Köppe. In: Gesammelte Werke. Vol. 31,1. Ed. Walter Jaeschke. Hamburg: Felix Meiner Verlag.

----- 2017b, "Katalog der Bibliothek Georg Wilhelm Friedrich Hegels". Abteilungen IV-IX. Ed. Manuela Köppe. In: Gesammelte Werke. Vol. 31,2. Ed. Walter Jaeschke. Hamburg: Felix Meiner Verlag.

Robert Heilbronner 1983, "The Problem of Value in the Constitution of Economic Thought". In: *Social Research*. Summer, Vol. 50, No. 2, 253-277.

----- 1986, *The Worldly Philosophers*. New York: Simon & Schuster.

Eckhard Hein 1997, *Geld, effektive Nachfrage und Kapitalakkumulation: Eine Betrachtung aus Marxscher, Keynesscher und post-keynesianischer Perspektive*. Berlin: Duncker & Humblot.

----- 2019, "Karl Marx: an early post-Keynesian? A comparison of Marx's economics with the contributions by Sraffa, Keynes, Kalecki and Minsky". In: *European Journal of Economics and Economic Policies: Intervention.* Vol. 16, 238-259.

Michael Heinrich 1989, "Capital in general and the structure of Marx's Capital". In: *Capital & Class*. Vol. 13, No. 2, 63-79.

----- 2006, *Die Wissenschaft vom Wert*: *Die Marxsche Kritik der politischen Ökonomie zwischen wissenschaftlicher Revolution und klassischer Tradition*. Münster: Westfälisches Dampfboot.

----- 2012, *An Introduction to the Three Volumes of Karl Marx's* Capital. New York: Monthly Review Press.

----- 2021, *How To Read Marx's Capital: Commentary on the Beginning Chapters.* New York: Monthly Review.

Thimo Heisenberg 2017, "Hegel on the value of the market economy". In: *European Journal of Philosophy*. Vol. 26, 1283-1296.

----- 2021, "Hegel and the Problem of Affluence". In: *Journal of the American Philosophical Association*. 224-237.

Carl Hempel 1966, *Philosophy of Natural Science*. Upper Saddle River: Prentice-Hall.

James P. Henderson and John B. Davis 1991, "Adam Smith's Influence on Hegel's Philosophical Writings". In: *Journal of the History of Economic Thought*. Vol. 13, 184-204.

Herzog 2013, *Inventing the Market: Smith, Hegel, and Political Theory*. Oxford: Oxford University Press.

----- 2015, "Two Ways of Taming the Market". In: *Proceedings of the Hegel Society of America*. Vol. 22, 147-162.

Susan Himmelweit and Simon Mohun 1981, "Real Abstractions and Anomalous Assumptions". In: *The Value Controversy*. London: Verso.

Hirschman 1976, "On Hegel, Imperialism, and Structural Stagnation". In: *Journal of Development Economics*. Vol. 3, 1-8.

J.A. Hobson 1988, *A Reader*. Ed. Michael Frieden. London: Unwin Hyman.

J. A. Hobson and E. F. M. Durbin 1933, "Underconsumption. An Exposition and a Reply". In: *Economica*. No. 42, 402-427.

Jacob H. Hollander 1904, "The Development of Ricardo's Theory of Value". In: *The Quarterly Journal of Economics*. August, Vol. 18, No. 4, 455-491.

----- 1911, "The Work and Influence of Ricardo". In: *The American Economic Review.* April, Vol. 1, No. 2, 71-84.

S. Hollander 1969, "Malthus and the Post-Napoleonic Depression". In: *History of Political Economy*. Vol. 1, No. 2, 306–335.

Oliver Wendel Holmes (1843), "The Contagiousness of Puerperal Fever". In: *Literature and Science in the 19th Century: An Anthology.* Ed. Laura Otis. Oxford: Oxford University Press, 177-81.

Rolf-Peter Horstmann 2006, "Hegel's phenomenology of spirit as an argument for a monistic ontology". In *Inquiry: An Interdisciplinary Journal of Philosophy*. Vol. 49, No. 1, 103-18.

----- 2017, "Hegel on Objects as Subjects". In: *Hegel on Philosophy in History.* Eds. Rachel Zuckert and James Kreines. Cambridge: Cambridge University Press.

Stephen Houlgate 2005, *An Introduction to Hegel: Freedom, Truth and History.* Oxford: Blackwell.

----- 2005b, *The Opening of Hegel's Logic: From Being to Infinity.* West Lafayette: Purdue University Press.

Michael Charles Howard and John Edward King 2015, "Keynes and Marx". In: *A History of Marxian Economics*, *Volume II: 1929-1990.* Princeton: Princeton University Press, 91-108.

Peter Howitt 1989, "Money Illusion". In: *Money. The New Palgrave.* Eds. J. Eatwell, M. Milgate, P. Newman. London: Palgrave Macmillan, 244-7.

----- 1987, *Macroeconomics: Relations with Microeconomics.* In: *The New Palgrave Dictionary of Economics.* 2nd edition. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_691-1

Michael Hudson 2006, "The new road to serfdom". In: *Harpers*. May, 39-46. https://harpers.org/archive/2006/05/the-new-road-to-serfdom/

-----, *Killing the Host*. Dresden: ISLET.

Stephen Hudson 2014, "The Problem of Poverty and the Rabble: Against the Neo-Marxist Critique

of Hegel. In: *Hegel-Jahrbuch*, 227-30.

Glenn Hueckel 2000, "The Labor 'Embodied' in Smith's Labor Command Measure: A 'Rationally Reconstructed' Legend". In: *Journal of the History of Economic Thought*. Vol. 22, No. 4, 461-85.

Makoto Itoh 1987, "Skilled Labour in Value Theory". In: *Capital*. Vol. 11, No. 1, 39-58.

M.C.W. Janssen 2008, "Microfoundations". In: *The New Palgrave Dictionary of Economics.* Eds. S.N. Durlauf and L.E. Blume. London: Palgrave Macmillan. https://doi.org/10.1007/978-1-349-58802-2_1093

Steven Johnson 2001, *Emergence*. New York: Scribner.

Michał Kalecki 1968, "The Marxian equations of reproduction and modern economics". In: *Social Science*. January, Vol. 7, No. 6, 73-9.

----- 1971, *Selected Essays on the Dynamic of the Capitalist Economy: 1933-1971.* Cambridge: Cambridge University Press.

----- 1990, *Collected Works of Michał Kalecki*. Volume I. Ed. Jerzy Osiatyński. Oxford: Clarendon Press.

-----1991, *Collected Works of Michał Kalecki*. Volume II. Ed. Jerzy Osiatyński. Oxford: Clarendon Press.

Phillip Kain 2014, "Hegel and the Failure of Civil Society". In: *The Owl of Minerva*. Vol. 46, No 1-2, 43-65.

Immanuel Kant 1993, *Grounding for the Metaphysics of Morals*. Indianapolis: Hackett.

----- 1996, *Critique of Pure Reason*. Indianapolis: Hackett.

----- 2002, *Critique of Practical Reason*. Indianapolis: Hackett.

Alexander Kaufman 1997, "Community and Indigence: A Hegelian Perspective on the Poor". In: *The Journal of Political Philosophy*". Vol. 5, Number 1, 69-92.

Karl Kautsky 2010, *The Class Struggle* [*Ehrfurt Program*]. Chicago: Charles Kerr & Co.

John Maynard Keynes 1964, *The General Theory of Employment, Interest, and Money*. New York: Harcourt.

----- 1973, *The Collected Writings of John Maynard Keynes. Volume XIII.* The General Theory and After, Part I, Preparation. Cambridge: Cambridge University Press, 485-492.

----- 1979, *The Collected Writings of John Maynard Keynes. Volume XXIX. The General Theory and After.* Ed. Donald Moggridge. Cambridge: Cambridge University Press.

----- 2015, *The Essential Keynes.* Ed. Robert Skidelsky. London: Penguin.

Peter Kenway 1980, "Marx, Keynes and the possibility". In: *Cambridge Journal of Economics*. March, Vol. 4, No. 1, 23-36.

Martin Luther King Jr. 1963, "Letter from Birmingham Jail". In: *The Best American Essays of the Century*. Eds. Joyce Carol Oates and Robert Atwan. Boston: Houghton Mifflin, 2000, 263-79.

Andrew Kliman 2007, *Reclaiming Marx's "Capital": A Refutation of the Claim of Inconsistency.* Lanham: Lexingon.

Lawrence R. Klein 1947, "Theories of Effective Demand and Employment". In: *Journal of Political Economy*. April, Vol. 55, No. 2, 108- 131.

Dudley Knowles 2002, *Hegel and the* Philosophy of Right. London: Routledge.

Frank H. Knight 1935a, "The Ricardian Theory of Production and Distribution". In: *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique*. February, Vol. 1, No. 1, 3-25.

----- 1935b, "The Ricardian Theory of Production and Distribution". In: *The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique*. May, Vol. 1, No. 2, 171-196.

Jürgen Kocka 2016, *Capitalism: A Short History.* Princeton: Princeton University Press.

Alexandre Kojève 1969, *Introduction to the Reading of Hegel*. Ithaca: Cornel University Press.

Thomas Kuhn 1996, *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

James Ladyman 1998, "What is Structural Realism?" In: *Stud. Hist. Phil. Sci.* Vol. 29, No. 3, 409–424.

----- 2001, "Science, Metaphysics and Structural Realism". In: *Philosophica*. Vol. 67, 57-76.

----- 2002, *Understanding Philosophy of Science*. London: Routledge.

----- 2011, "Structural realism versus standard scientific realism: the case of phlogiston and dephlogisticated air". In: *Synthese*. May, Vol. 180, No. 2, 87- 101.

----- 2012, "Science, metaphysics and method". In: *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*. Vol. 160, No. 1, 31-51.

James Ladyman and Don Ross 2007, *Every Thing Must Go*. Oxford: Oxford University Press.

James Ladyman and Karoline Wiesner 2020, *What Is a Complex System?* New Haven: Yale University Press.

Imre Lakatos 1970, "History of Science and Its Rational Reconstructions". In: *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association*. Vol. (1970) 91-136.

Antoine Lavoisier 1777, "Memoire on Combustion in General". https://web.lemoyne.edu/~giunta/lavoisier1.html

----- 1778, "Memoire on the Principle which Combines with Metals during their Calcination which Increases their Weight". https://web.lemoyne.edu/~giunta/lavoisier.html

Richard H. Leftwich and Ansel Miree Sharp 1980, *Economics of Social Issues*. Dallas: Business Publications.

G.W. Leibniz and Samuel Clarke 2000, *Correspondence*. Ed. Roger Ariew. Indianapolis: Hackett.

Lexico, "absolute value". In: Lexico Online English Dictionary. Last accessed July 27, 2022. https://www.lexico.com/en/definition/absolute_value

Wassily W. Leontief 1951, "Input-Output Economics". In: *Scientific American*. October, Vol. 185, No. 4, 15-21.

Brian J. Loasby 1996, "The Division of Labour". In: *History of Economic Ideas.* Vol. 4, No. 1/2 299-323.

Georg Lukács 1971, *History and Class Consciousness: Studies in Marxist Dialectics*. London: Merlin Press.

Rosa Luxemburg 1951, *The Accumulation of Capital*. London: Routledge and Kegen Paul.

----- 2004, *The Rosa Luxemburg Reader*. Eds. Peter Hudis and Kevin B. Anderson. New York: Monthly Review Press.

Rosa Luxemburg and Nicolai Bukharin 1972, *Imperialism and the Accumulation of Capital*. Allen Lane: Penguin.

Fiona C. Maclachlan 1999, "The Ricardo-Malthus Debate on Underconsumption: A Case Study in Economic Conversation". In: *History of Political Economy.* Fall, Vol. 31, No. 3, Fall, 563-574.

Fred Magdoff and John Bellamy Foster 2009, *The Great Financial Crisis: Causes and Consequences*. New York: Monthly Review.

T.R. Malthus 1836, *Principles of Political Economy Considered with a View to their Practical Application.* London: William Pickering.

Ernest Mandel 1968, *Marxist Economic Theory*. Vol. 1. New York: Monthly Review.

----- 1971, *Formation of the Economic Thought of Karl Marx: 1844 to* Capital. New York: Monthly Review.

----- 1973, *Introduction to Marxist Econonomic Theory*. New York: Pathfinder.

----- 1990, "Karl Marx". In: *Marxian Economics*. The New Palgrave. Eds. John Eatwell, Murray Milgate & Peter Newman. London: McMillan, 1–38.

N. Gregory Mankiw 2021, *Principles of Economics.* 9th Edition. Boston: Cengage.

Geoff Mann 2015, "Poverty in the Midst of Plenty: Unemployment, Liquidity, and Keynes's Scarcity Theory of Capital". In: *Critical Historical Studies*. Spring, 45-83.

----- 2017a, *In the Long Run We Are All Dead: Keynesianism, Political Economy, and Revolution.* London: Verso.

----- 2017b, *The General Theory of Employment, Interest and Money: A Reader's Companion*. London: Verso.

Karl Marx 1963, *The Poverty of Philosophy*. New York: International Publishers.

----- 1965, *Oeuvres de Karl Marx. Economie I.* Éditions Gallimard. Bibliothèque de la Pléiade.

----- 1970, *A Contribution to the Critique of Political Economy*. New York: International Publishers.

----- 1976a, *Value, Price and Profit*. In: *Wage-Labour and Capital / Value, Price and Profit.* New York: International Publishers.

----- 1976b, *Value: Studies by Karl Marx*. Ed. Albert Dragstedt. London: New Park Publications.

----- 1976b, *Wage-Labour and Capital*. In: *Wage-Labour and Capital / Value, Price and Profit.* New York: International Publishers.

----- 1987, "Das Kapital. Kritik der Politischen Ökonomie. Erster Band, Hamburg". In: *Marx-Engels-Gesamtausgabe* (MEGA). Abteilung II, Bd. 6. Berlin: Dietz.

----- 1990, *Capital: A Critique of Political Economy. Volume One.* New York: Penguin.

----- 1991, *Capital: A Critique of Political Economy. Volume Three.* New York: Penguin.

----- 1992, *Capital: A Critique of Political Economy. Volume Two.* New York: Penguin.

----- 1993, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*. New York: Penguin.

Karl Marx and Frederick Engels 1942, *The Correspondence of Marx and Engels*. New York: International Publishers.

----- 1962, *Marx-Engels Werke*. Band 16. Berlin: Dietz Verlag.

----- 1975, *Collected Works.* Volume 3. New York: International Publishers.

----- 1978, *The Marx-Engels Reader*. *2nd Edition.* Ed. Robert C. Tucker. New York: W.W. Norton.

----- 1988, *Collected Works.* Volume 30. New York: International Publishers.

----- 1989a, *Collected Works.* Volume 31. New York: International Publishers.

----- 1989b, *Collected Works.* Volume 32. New York: International Publishers.

----- 1991, *Collected Works.* Volume 33. New York: International Publishers.

----- 1994, *Collected Works.* Volume 34. New York: International Publishers.

A. Mátyás 1983, "Similarities between the Economic Theories of Marx and Keynes". In: *Acta Oeconomica*. Vol. 31, No. 3/4, 155-173.

Mariana Mazzucato 2020, *The Value of Everything: Making and Taking in the Global Economy*. New York: Public Affairs.

Scott Meikle 1991, "History of philosophy: The metaphysics of substance in Marx". In: *The Cambridge Companion to Marx*". Cambridge: Cambridge University Press, 296-319.

John McCumber 1986, "Contradiction and Resolution in the State: Hegel's Covert View". In: *Clio: A Journal of Literature, History, and the Philosophy of History*. Vol 15, No. 4, 379-390.

A. Medio 2018, "Trade Cycle". In: *The New Palgrave Dictionary of Economics.* London: Palgrave Macmillan https://doi.org/10.1057/978-1-349-95189-5_1666

Ronald L. Meek 1956, *Studies in the Labour Theory of Value*. New York: Monthly Review Press.

----- 1954, "Adam Smith and the Classical Concept of Profit". In: *Scottish Journal of Political Economy, Scottish Economic Society*. June Vol. 1, No. 2, 138-153.

Karl Menger 1892, “On the Origin of Money”. In: *The Economic Journal.* June, Vol. 2, No. 6, 239-255.

John Milios 2002, “Theory of Value and Money”. In: *In Defence of the Endogeneity of Money.* https://content.csbs.utah.edu/~ehrbar/erc2002/pdf/i028.pdf

William Mitchell, L. Randall Wray, Martin Watts 2019, *Macroeconomics*. London: Red Globe Press.

Simon Mohun 1984/5, “Abstract Labour and its Value Form”. In: *Science & Society*. Vol. 47, No. 4, 388-406.

----- 1991, “Abstract Labour”. In: *A Dictionary of Marxist Thought.* 2nd Edition Ed. T. Bottomore et. al. Oxford: Basil Blackwell. 1991, 1-3.

----- 1994, “Value, Value-Form and Money”. In: *Debates in Value Theory*. Ed. Simon Mohun. Basingstoke: Macmillan, 214-230.

----- 2012, “Productive and unproductive labour”. In: *The Elgar companion to marxist economics.* Eds. B. Fine, B., & A. Saad-Filho, A. Cheltenham: Edward Elgar, 277-82.

A.W. Moore 2012. *The Evolution of Modern Metaphysics: Making Sense of Things.* Cambridge: Cambridge University Press.

Jacob Morris and Haskell Lewin 1973, “The Skilled Labor Reduction Problem”. In: *Science and Society*. Vol. 37, No. 4, 454 - 472.

Fred Moseley (ed.) 2005, *Marx’s Theory of Money: Modern Reappraisals*. London: Palgrave MacMillan.

----- 2015, “Marx, Karl Heinrich, on Ricardo”. In: *The Elgar Companion to Ricardo.* Northhampton: Edward Elgar.

------ 2016, *Money and Totality: A Macro-Monetary Interpretation of Marx’s Logic in* Capital *and the End of the ‘Transformation Problem’*. Chicago: Haymarket.

Warren Mosler 1998, *Full Employment and Price Stability*. In: *Journal of Post Keynesian Economics*. Winter 1997-8, Vol. 20, No. 2, 167-182.

Paul Mattick 1969, *Marx and Keynes: The Limits of the Mixed Economy*. London: Merlin.

Ellen Meiksins Wood 2017, *The Origin of Capitalism: A Longer View*. London: Verso.

Leonidas Montes 2003, “Smith and Newton: some methodological issues concerning general economic equilibrium theory”. In: *Cambridge Journal of Economics*. September, Volume 27, No. 5, 723–747.

James Mill 1808, *Commerce Defended*. London: C. New Bridge-Street.

John Stuart Mill 1844, "Of the Influence of Consumption on Production". In: *Essays on Some Unsettled Questions of Political Economy*. London: West Strand, 47-74.

1985, *Principles of Political Economy with some of their Application to Social Philosophy Books IV and V.* Ed. Donald Winch. London: Penguin.

Takashi Negishi 2000, "Adam Smith's division of labor and structural changes". In: *Structural Change and Economic Dynamics*. July, Vol. 11, No. 1, 5-11.

Anitra Nelson 2005, "Marx's Objections to Credit Theories of Money". In *Marx's Theory of Money: Modern Reappraisals*. Ed., Fred Moseley. London: Palgrave MacMillan, 65-77.

Mark Neocleous 1988, "Policing the System of Needs: Hegel, Political Economy, and the Police of the Market". In: *History of European Ideas*. Vol. 24, No. 1, 43-58.

Friedrich Nietzsche 1989, *On the Genealogy of Morals and Ecce Homo*. New York: Vintage Books.

Robert Nozick 1974, *Anarchy, State, and Utopia*. Oxford: Basic Books.

J. O'Leary 1943, "Malthus's General Theory of Employment and the Post-Napoleonic Depressions". In: *The Journal of Economic History*. November, Vol. 3, No. 2, 185-200.

Martin Öhman 2013, "A Convergence of Crises: The Expansion of Slavery, Geopolitical Realignment, and Economic Depression in the Post-Napoleonic World". In: *Diplomatic History*. June, Vol. 37, No. 3, 419-445.

Bertell Ollmann 2003, *Dance of the Dialectic*. Champaign: University of Illinois Press.

Paul Oslington 2012, "God and the Market: Adam Smith's Invisible Hand". *Journal of Business Ethics*. July, Vol. 108, No. 4, 429-438.

Simon N. Patten 1889, "The Fundamental Idea of Capital". In: *The Quarterly Journal of Economics*. January, Vol. 3, No. 2, 188-203.

----- 1891, "Another View of the Ethics of Land-Tenure". In: *International Journal of Ethics*, April, Vol. 1, No. 3, 354- 370.

----- 1893, "The Interpretation of Ricardo". In: *Publications of the American Economic Association*. January, Vol. 8, No. 1, 77-82.

----- 1893, "The Interpretation of Ricardo". In: *The Quarterly Journal of Economics*. April, Vol. 7, No. 3, 322-352.

----- 1908, “The Political Significance of Recent Economic Theories”. In: *The Annals of the American Academy of Political and Social Science*, July, Vol. 32, 82-94.

Gabiel Pacquette 2012, “Colonies and Empire in the Political Thought of Hegel and Marx”. In: *Empire and Modern Political Thought*. Ed. Sankar Muthu. Cambridge: Cambridge University Press, 292-323.

Carlo Panico 1987, “Interest and Profit”. In: *The New Palgrave Dictionary of Economics*. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_946-1

Louis Pasteur 1910, “On the Extension oft he Germ Theory to the Etiology of Certain Common Diseases”. In: *Scientific papers; physiology, medicine, surgery, geology, with introductions, notes and illustrations.* New York: P. F. Collier & son. The Harvard classics, vol. 38. https://sourcebooks.fordham.edu/mod/1880pasteur-germ.asp

Don Patinkin 2008, “Neutrality of Money” In: *Money. The New Palgrave.* Eds. J. Eatwell M. Milgate, P. Newman. London: Palgrave Macmillan, 273-87.

Charles Saunders Peirce 1955, *Philosophical Writings of Peirce*. Ed. Justus Buchler. New York: Dover.

A.C. Pigou 1949, *The Veil of Money*. London: MacMillan.

Terry Pinkard 1979a, “The Logic of Hegel’s Logic”. In: *Journal of the History of Philosophy*. October, Vol. 17, No. 4, 417-435.

----- 2001, *Hegel: A Biography*. Cambridge: Cambridge University Press.

Robert B. Pippin 2019, *Hegel’s Logic: The Realm of Shadows.* Chicago: University of Chicago Press.

Raymond Plant 1973, *Hegel*. New York: Routledge.

----- 1977a, “Hegel and Political Economy (Part I)”. In: *New Left Review*. May/June, Vol. 103, 79-92.

----- 1977b, “Hegel and Political Economy (Part II)”. In: *New Left Review*. July/August, Vol. 104, 103-113.

----- 1982, *Dialectics, Politics and Economics: Aspects of Hegel’s Political Thought.* In: *Revenue Internationale de Philosophie*. Vol. 36, No. 139/140 (1/2), 49-68.

Thomas Posch 2011, “Hegel and the Sciences”. In: *A Companion to Hegel*. Eds. Stephen Houlgate and Michael Baur. Chichester: Wiley-Blackwell, 177–202.

Moishe Postone 1993, *Time, labor, and social domination: A reinterpretation of Marx's critical theory.* Cambridge: Cambridge University Press.

Lucia Pradella 2014, "Hegel, Imperialism, and Universal History". In: *Science and Society*. October, Vol. 78, No. 4, 426-453.

Birger P. Priddat 1990, *Hegel als Ökonom*. Berlin: Duncker & Humblot.

Joseph Priestley 1796, *Considerations on the Doctrine of Phlogiston and the Decomposition of Water.* Philadelphia: South Second Street. https://web.lemoyne.edu/giunta/phlogiston.html

----- 1799, "On the Phlogistic Theory," 17 Jan. 1799. *New York Medical Repository* 2 (1799): 383-87.

W.V.O. Quine 1953, "Mr. Strawson on Logical Theory". In: *Mind*. October, Vol. 62, No. 248, 433-451

Miguel D. Ramirez 1990, "Keynes, Marx and the Business Cycle". In: *Eastern Economic Journal.* April-June, Vol. 16, No. 2, 159-167.

Roy A. Rappaport 1971, "Ritual Sanctity and Cybernetics". In: *American Anthropologist*. Vol. 73, 59-76.

Dennis C. Rasmussen 2016, "Adam Smith on What Is Wrong with Economic Inequality". In: *The American Political Science Review.* May, Vol. 110, No. 2, 342-352.

Farhad Rassekh, 2009. "In the shadow of the invisible hand". In: *History of Economic Ideas*. Vol. 17, No.3, 147-165.

Paul Redding 1997, "Georg Wilhelm Friedrich Hegel", The Stanford Encyclopedia of Philosophy (Winter 2020 Edition), Edward N. Zalta (ed.). https://plato.stanford.edu/archives/win2020/entries/hegel/

David Ricardo 1951a, *The Works and Correspondence of David Ricardo. Volume I. On the Principles of Political Economy.* Ed. Piero Sraffa & M.H. Dobb. Cambridge: Cambridge University Press.

----- 1951b, "An Essay on the Influence of a low Price of Corn on the Profits of Stock". In: *The Works and Correspondence of David Ricardo. Volume IV. On the Principles of Political Economy.* Ed. Piero Sraffa. Cambridge: Cambridge University Press, 3-41.

----- 1951c, "Absolute Value and Exchangeable Value". In: *The Works and Correspondence of David Ricardo. Volume IV. On the Principles of Political Economy.* Ed. Piero Sraffa Cambridge: Cambridge University Press, 361-12.

David A. Reisman, 1998. "Adam Smith on Market and State". In: *Journal of Institutional and*

Theoretical Economics. June, Vol. 154, No. 2, 357-357.

Lawrence S. Ritter 1982, "An Exposition of the Structure of the Flow-of-Funds Accounts". In: *The Journal of Finance*. May, Vol. 18, No. 2, 219-230.

S. Abu Turab Rizvi 1994, "The Microfoundations Project in General Equilibrium Theory". In: Cambridge Journal of Economics. February, Vol. 18, No. 4, 357-77.

L. Robbins 1945, *An Essay on the Significance of Economic Science*. London: MacMillan.

Bruce Roberts 2017, "Abstract Labor". In: *Routledge Handbook of Marxian Economics*. Ed. David Brennan et. al. New York: Routledge, 59-68.

Joan Robinson 1966, *An Essay on Marxian Economics*. London: Macmillan.

----- 1978, "Kalecki and Keynes". In: *Contributions to Modern Economics*. New York: Academic Press, 53-60.

----- 2006. *Economic Philosophy*. New Brunswick: Aldinetransaction.

Tom Rockmore 1989, "Hegel and the Unity of Science Program". In: *History of Philosophy Quarterly.* Vol. 6, No. 4, 331-46.

John E. Roemer 1990, "Marxian Value Analysis". In: Marxian Economics. The New Palgrave. Eds., J. Eatwell, M. Milgate, P. Newman, London: Palgrave Macmillan, London, 257-64.

Roman Rosdolsky 1977, *The Making of Marx's Capital*. London: Pluto Press.

Michael Rosen 1984, *Hegel's Dialectic and its Criticism.* Cambridge: Cambridge University Press.

Don Ross 2006, "Ontic Structural Realism and Economics". In: *Philosophy of Science.* Vol. 75, No. 5, 732-743.

Emma Rothschild 1994, "Adam Smith and the Invisible Hand". In: *American Economic Review*. Vol. 84, No. 2, 319-22.

I.I. Rubin 1992, "Ricardo's Doctrine of Capital". In: *Vestnik Rossiiskoi akademii nauk*, No. 8, 144-152. https://www.marxists.org/archive/rubin/ricardo-capital.htm

----- 1978, "Abstract Labour and Value in Marx's System". In: *Capital & Class*. Vol, 2, No. 2, 107-109.

----- 2008, *Essays on Marx's Value Theory*. Delhi: Aakar.

----- 2017a, *A History of Economic Thought*. Delhi: Aakar.

----- 2017b, "Fundamental Features of Marx's Theory of Value and How It Differs from Ricardo's Theory (1924)". In: *Responses to Marx's Capital: From Rudolf Hilferding to Isaak Illich Rubin*. Leiden: Brill.

Frank Ruda 2011, *Hegel's Rabble: An Investigation into Hegel's Philosophy of Right*. London: Bloomsbury.

----- 2017, "That Which Makes Itself: Hegel, Rabble and Consequences" In: *Hegel's Elements of the Philosophy of Right: A Critical Guide.* Ed. D. James. Cambridge: Cambridge University Press, 160-76.

Geert Reuten 1988, "The money expression of value and the credit system; a value-form theoretic outline". In: *Capital & Class*. No. 35, 121-141.

Gilbert Ryle 2009, *The Concept of Mind*. London: Routledge.

Paul A. Samuelson 1962, "Economists and the History of Ideas". In: *The American Economic Review*. March, 1962, Vol. 52, 1-18.

----- 1971, "Understanding the Marxian Notion of Exploitation: A Summary of the So-Called Transformation Problem Between Marxian Values and Competitive Prices". In: *Journal of Economic Literature.* June, Vol. 9, No. 2, 399-431.

----- 1974, "The Transformation of Values: What Marx 'Really' Meant: Rejoinder: Merlin Unclothed, A Final Word". In: *Journal of Economic Literature*. Vol. 12, No. 75-77.

----- 1976, *Economics*. Tenth Edition. New York: McGraw-Hill.

Claudio Sardoni 1986, "Marx and Keynes on effective demand and unemployment". In: *History of Political Economy*. Vol. 18, No. 3, 419-41.

----- 1997, "Keynes and Marx". In: *A 'Second Edition' of the General Theory.* Volume 2. Eds. G.C. Harcourt and G.C. Riach. London: Routledge, 261-263.

Jean Baptiste Say 1821, *Letters to Mr. Malthus on Several Subjects of Political Economy, and one the Cause of the Stagnation of Commerce*. London: Paternoster-Row.

----- 1834, *A Treatise on Political Economy, or, the Production, Distribution, and Consumption of Wealth*. Philadelphia: Grigg & Elliot.

Friedrich Wilhelm Joseph Schelling 2016, *Stuttgarter Privatvorlesungen*. Hamburg: Felix Meiner Verlag.

Viktor Schklovsky 1990, *Theory of prose*. Elmwood Park: Dalkey Arhive Press.

Eldar Shafir, Peter Diamond, and Amos Tversky 1997, "Money Illusion". In: *The Quarterly Journal of Economics*. Vol. 112, No. 2, 341-374.

Anwar Shaikh 1978, "An Introduction to the History of Crisis Theories". In: U.S. Capitalism in Crisis. New York: U.R.P.E., 219-41.

----- 1979, "Foreign Trade and the Law of Value: Part I". In: *Science & Society*. Vol. 43, No. 3, 281-302.

----- 1980, "Foreign Trade and the Law of Value: Part II". In: *Science & Society*. Vol. 44, No. 1, 27-57.

----- 1981, "The Poverty of Algebra". In: *The Value Controversy*. London: Verso.

----- 1987, "Surplus Value". In: The New Palgrave: A Dictionary of Economics. 1st edition. Eds. John Eatwell, Murray Milgate and, Peter Newman. London: Palgrave McMillan.

Howard J. Sherman 1967, "Marx and the Business Cycle". In: *Science & Society.* Fall, Vol. 31, No. 4, 486-504.

----- 1979, "A Marxist Theory of the Business Cycle". In: *Review of Radical Political Economics*. Vol. 11, No. 1, 1-23.

----- 1991, *The Business Cycle: Growth and Crisis under Capitalism*. Princeton: Princeton University Press.

----- 2001, "The Business Cycle Theory of Wesley Mitchell". In: *Journal of Economic Issues*. March, Vol. 35, No.1, 85-97.

Joseph A. Schumpeter 1951, *Essays of J.A. Schumpeter.* Ed. Richard V. Clemence. Cambridge: Addison-Wesley Press.

----- 1954, *Economic Doctrine and Method*. London: Routledge.

----- 2017, *The Theory of Economic Development*. New York: Routledge.

----- 1994, *History of Economic Analysis*. London: Routledge.

----- 2008, *Capitalism, Socialism and Democracy*. London: Harper Perennial.

Wilfrid Sellars 1963, *Science, Perception, and Reality*. Atascadero: Ridgeview Publishing Company.

Ignác Fülöp Semmelweis 1981, *The Etiology, the Concept and the Prophylaxis of Childbed Fever*.

Birmingham: The Classics of Medicine Library.

Ignaz Philipp Semmelweis and Frank P. Murphy 1981, “Childbed Fever”. In: *Reviews of Infectious Diseases.* August, Vol. 3, No. 4, 808-811.

Tsenay Serequebernham 1989, “The Idea of Colonialism in Hegel’s Philosophy of Right”. In: *International Philosophical Quarterly*. September, Vol. XXIX, No. 3, Issue 115, 302-18.

Erica Sherover 1979, “The Virtue of Poverty: Marx’s Transformation of Hegel’s Concept of the Poor”. In: *Canadian Journal of Political and Social Theory / Revue Canadienne de théorie politique et sociale.* Winter, Vol. 4, No. 1, 53-66.

Bernice Shoul 1957, “Karl Marx and Say’s Law”. In: *The Quarterly Journal of Economics.* November, Vol. 71, No. 4, 611-629.

J.-C.-L. Simonde de Sismondi 1915, “Political Economy”. https://www.marxists.org/reference/subject/economics/sismondi/index.htm

----- 2019, *New Principles of Political Economy: Of Wealth in Relation to Population*. New York: Routledge.

Robert Skidelsky 2010, “The Crisis of Capitalism: Keynes versus Marx”. In: *Indian Journal of Industrial Relations*. January, Vol. 45, No. 3, 321-335.

Adam Smith 1978, *Lectures on Jursprudence*. Eds. R.L. Meek, D.D. Raphael, P.G. Stein. Indianapolis: Liberty Fund.

----- 1993, *An Inquiry into the Nature and Causes of Wealth of Nations.* Ed. Kathryn Sutherland. Oxford: Oxford University Press.

----- 2000, *An Inquiry into the Nature and Cause of Wealth of Nations*. New York: Modern Library.

Alfred Sohn-Rethel 1950/51, “Introduction MS 1950/1 Lawrence & Wishart”. Manuscript in the German Staatsarchiv at Koblenz (N / 1492 # 42).

----- 1978, *Intellectual and Manual Labour: A Critique of Epistemology*. Atlantic Highlands: Humanities Press.

----- 2018, *Geistige und körperliche Arbeit. Theoretische Schriften 1947-1990. Schriften IV.* Eds. Carl Freytag, Oliver Schlaudt, Françoise Willmann. Freiburg/Wien: ça ira.

Thomas Sowell 1963, “Marxian Value Reconsidered”. In: *Economica.* August, Vol. 30, No. 119, 297-308.

----- 1967, “Marx’s Capital after One Hundred Years”. In: *The Canadian Journal of*

Economics and Political Science / Revue canadienne d'Economique et de Science politique. February, Vol. 33, No. 1, 50-74.

----- 1972, *Say's Law: An Historical Analysis.* Princeton: Princeton University Press.

----- 2006, *On Classical Economics*. New Haven: Yale University Press.

Gareth Stedman Jones 2001, "Hegel and the Economics of Civil Society". In: *Civil Society: History and Possibilities*. Eds. Sudipta Kaviraj and Sunil Khilnani. Cambridge, England: Cambridge University Press, 105-130.

----- 2006, "Engels and the Invention of the Catastrophist Conception of the Industrial Revolution". In: *The New Hegelians: Politics and Philosophy in the Hegelian School*. Ed. D. Moggach. Cambridge: Cambridge University Press, 200-19.

Ian Steedman 1981, "Ricardo, Marx, Sraffa". In: *The Value Controversy*. London: Verso.

Howard Stein (2002), "Newton's Metaphysics". In: *The Cambridge Companion to Newton*. Eds. I. Bernard Cohen and George E. Smith. Cambridge: Cambridge University Press, 256-307.

Josef Steindl 1976, *Maturity and Stagnation in American Capitalism.* New York: Monthly Review.

Robert Stern 2000 (ed.), *Transcendental Arguments: Problems and Prospects.* Oxford: Oxford University Press.

Ross E. Stewart 1984, "Sismondi's Forgotten Ethical Critique of Early Capitalism". In: *Journal of Business Ethics.* Vol. 3, No. 3, 227-234.

George J. Stigler 1952, "The Ricardian Theory of Value and Distribution". In: *Journal of Political Economy.* June, Vol. 60, No. 3, 187-207.

----- 1958, "Ricardo and the 93% Labor Theory of Value". In: *The American Economic Review*. June, Vol. 48, No. 3, 357-367.

Paul M. Sweezy 1970, *The Theory of Capitalist Development.* New York: Monthly Review Press.

----- 1981, "Marxian Value Theory and Crises". In: *The Value Controversy*. London: Verso.

Paul M. Sweezy, Harry Magdoff, and Jonathan Penzner 2013, "Capitalism and the Fallacy of Crude Underconsumptionism". In: *Monthly Review.* Vol. 64, No. 8, 45-8.

Erik Swyngedouw, "Rent and landed property". In: *The Elgar companion to Marxist economics.* Eds. B. Fine, B., & A. Saad-Filho, A. Cheltenham: Edward Elgar, 310-315.

Charles Taylor 1975, *Hegel*. Cambridge: Cambridge University Press.

Ricard Teichgraber 1977, “Hegel on Property and Poverty”. In: *Journal of the History of Ideas*. January-March, Vol. 38, No. 1, 47-64.

James Tobin 2008, “Money”. In: *The New Palgrave Dictionary of Economics.* 2nd edition. Eds. Steven N. Durlauf and Lawrence E. Blume. DOI 10.1057/978-1-349-95121-5_2742-1

Shigetu Tsuru 1994, “Keynes Versus Marx: The Methodology of Aggregates”. In: *The Collected Essays of Shigetu Tsuru*. Volume 2. Brookfield: Edward Elgar, 3-34.

Lefertis Tsoulfidis 1998, “Ricardo’s Theory of Value and Marx’s Critique”. In: *History of Economic Ideas*. Vol. 6, No. 2, 69-88.

----- 2009, *Competing Schools of Economic Thought*. Heidelberg: Springer.

----- 2018, “Ricardo’s Theory of Value is Still Alive and Well in Contemporary Capitalism”. MPRA Paper No. 85822, 11 Apr 2018. https://mpra.ub.uni-muenchen.de/85822/

Lefteris Tsoulfidis and Dimitris Paitaridis 2012, “Revisiting Adam Smith’s theory of the falling rate of profit”. In: *International Journal of Social Economics.* Vol. 39, No. 5, 304-313.

G. Vaggi 2008, “Market Price”. In: *The New Palgrave Dictionary of Economics*. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95121-5_1251-2

----- 2018, “Natural Price”. In: *The New Palgrave Dictionary of Economics.* London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95189-5_1011

Hal R. Varian 1987, “Microeconomics”. In: *The New Palgrave: A Dictionary of Economics*. 1st edition. Eds. John Eatwell, Murray Milgate, and Peter Newman. DOI 10.1057/978-1-349-95121-5_1212-1

Giuseppe Varnier 2020, “Hegel’s Epistemology”. In: *The Palgrave Hegel Handbook*. Eds. Marina F. Bykova, Kenneth R. Westphal. London: Palgrave Macmillan, 65-81.

Thorstein Veblen 1901, “Industrial and Pecuniary Employments”. In: *The Place of Science in Modern Civilization*. New Brunswick: Transaction, 279-324.

----- 1906, “The Socialist Economics of Karl Marx I”. In: *The Place of Science in Modern Civilization*. New Brunswick: Transaction, 387-409.

----- 1908, “Professor Clark’s Economics”. In: *The Place of Science in Modern Civilization*. New Brunswick: Transaction, 180-230.

----- 1978, *The Theory of The Business Enterprise*. New Brunswick: Transaction.

----- 1997, *Absentee Ownership, Business Enterprise in Recent Times: The Case of America.* New Brunswick: Transaction.

Wilfried Ver Eecke 1983, “Hegel on Economics and Freedom”. In: *Archiv für Rechts- und Sozialphilosophie / Archives for Philosophy of Law and Social Philosophy.* Vol. 69, No. 2, 187-215.

Francisco Verdera 1992, “Adam Smith on the Falling Rate of Profit: A Reappraisal”. In *Scotting Journal of Political Economy*. February, Vol. 39, No. 1, 100-110.

F. Vianello 1990, “Labour Theory of Value”. In: *Marxian Economics. The New Palgrave. Palgrave*. Eds. J. Eatwell, M. Milgate, P. Newman. London: Macmillan.

Stéphan Vincent-Lancrin 2003, “Adam Smith and the division of labour: is there a difference between organisation and market?” In: *Cambridge Journal of Economics.* March, Vol. 27, No. 2, 209-224.

Wandschneider 2013, “Philosophy of Nature”. In: *The Bloomsbury Companion to Hegel*. Eds. Allegra de Laurentiis and Jeffery Edwards. London: Bloomsbury, 103-126.

E.F. Ward 1939, “Marx and Keynes’s General Theory”. In: *The Economic Record*. Vol. 15, 152-162.

E. Roy Weintraub 1977, “The Microfoundations of Macroeconomics: A Critical Survey”. In: *Journal of Economic Literature.* Vol. 15, No. 1, 1-23.

Max Weber 1946, *From Max Weber: Essays in Sociology*. Eds. H.H. Gerth and C.Wright Mills. New York: Oxford University Press.

Kenneth Westphal 2008, “Philosophizing about Nature: Hegel’s Philosophical Project”. In: *The Cambridge Companion to Hegel and Nineteenth-Century Philosophy*. Ed. F. Beiser. Cambridge: Cambridge University Press, 281-310.

Whitt 2013, “The Problem of Poverty and the Limits of Freedom in Hegel’s Theory of the Ethical State”. In: *Political Theory*. Vol. 41, No. 2, 257-284.

Michael Williams 2000, “Why Marx Neither Has Nor Needs a Commodity Theory of Money”. In: *Review of Political Economy*. Vol. 12, No. 4, 435-451.

Alan W Wood 1990, *Hegel’s Ethical Thought*. Cambridge: Cambridge University Press.

Michael Wolff 2013, “Science of Logic”. In: *Bloomsbury Companion to Hegel*. Eds. Allegra de Laurentis and Jeffery Edwards. London: Bloomsbury Press.

Robert Paul Wolff 1984, *Understanding Marx.* Princeton: Princeton University Press.

John Worrall 1989, “Structural realism: The best of both worlds?” In: *Dialectica*. Vol. 43, 99–124.

Wylicky and Skopec 1983, “Ignaz Phillip Semmelweis, the Prophet of Bacteriology”. In: *Infection Control*. September-October, Vol. 4, No. 5, 367-370.

Karl Georg Zinn 1986, *Arbeit, Konsum, Akkumulation: Versuch einer integralen Kapitalismusanalyse von Keynes und Marx*. Hamburg: VSA-Verlag.