

COMMITTEE ON INTERNATIONAL RELATIONS

UNIVERSITY OF CHICAGO

SUMMER 2023

THESIS

GEOGRAPHICAL PATTERNS OF CIVILIAN TARGETING

IN NORTH AND WEST AFRICA.

PROFESSOR: PAUL STANILAND

STUDENT: JORGE SECADES

CHICAGO, ILLINOIS

TABLE OF CONTENTS:

Abstract.	3
Literature Review.	5
Geographical measurements.	11
Civilian targeting in the capitals.	22
Chad	26
Burkina Faso	27
Niger	28
Mali	29
Geography: desert and jihadist.	30
Conclusion.	33
Bibliography.	35

ABSTRACT.

This thesis examines how civilian targeting is affected by urbanization, geography (maritime capitals versus landlocked), rough terrain and allocation of resources in the capitals of North and West Africa. The purpose is to answer questions like: is there a correlation between less urbanized countries and a safer capital? Does at least 25% of the civilian targeting occur in countries that are more than 50% urbanized? Does most of the civilian targeting occur within 25 miles from urban centers? Do maritime capitals in North and West Africa experience more civilian targeting?

The thesis starts by collecting the urbanization rates for countries in North and West Africa, a total of 20 countries, and follows by analyzing the location of the civilian targeting in the period between 2000-2022 and thus coding the results either as rural or urban and the latter ones if located in the capital or not.

Combining the last two outcomes, civilian targeting in the capital and the country's rate of urbanization, the paper found that in North and West African countries the lower the urbanization rate, the less civilian targeting that the capital experiences. Surprisingly, during this study, we discovered as well that civilian targeting was more frequent in maritime African capitals than landlocked capitals.

As a result of this finding, the thesis investigated three additional landlocked countries (Burundi, Central African Republic and Ethiopia) to contrast our results. Unfortunately, these results fail to provide us a meaningful answer since some landlocked African capitals outside West Africa were safe while others experienced high civilian targeting. Therefore, there must be another reason why some low urbanized

and landlocked countries experience less civilian victimization in the capital. At this point, we investigated the location of natural resources as a potential explanation for the civilian targeting patterns in West Africa. Our results showed that landlocked countries in the Sahel with low urbanization rates and scattered natural resources far from the capital experience significantly less civilian targeting in their capitals compared to other African countries that do not meet these three criteria. Finally, the paper unearthed the “**Desert Paradox**”, Landlocked countries in Africa with vast amounts of desert within their borders tend to have jihadist groups that operate in the rural areas and near the natural resources. This creates an environment where the African capitals of landlocked, low urbanized countries with vast amounts of desert within their border, have the safest capitals in Africa.

There are several hypotheses in this paper. First, this paper evaluates the relationship between population density and political violence in North and West African countries commencing with the Hypothesis that the more rural a country is, the less conflict the capital experiences. To accomplish this task, the paper makes several assumptions, defines certain concepts and assesses the context and circumstances of conflicts.

Additionally, there are four more hypotheses:

H1: The less urbanized the country, the safer it is the capital.

H3: Most of the civilian targeting happens within 25 miles of urban centers.

H2: Countries with more than 50% urbanization rates experienced at least 25% of the civilian targeting in the capital.

H4: Maritime capitals are more prone to civilian targeting than landlock capitals in North and West Africa.

LITERATURE REVIEW.

First, this thesis tries to bring some clarity to the relationship between civilian targeting in urban settings and in rural landscapes. The subject is complex and the researchers that argue that an urban setting has less civilian targeting are as correct as the researchers who assert that indeed there is less violence in rural landscapes. The reason for it is simple: it depends.

As the reader can understand, it is hard to discern the purpose of any attack, moreover, a single attack can accomplish multiple purposes and the exact location the rebel's group chooses depends not only on their strategy but also on competitors plans and the state's counterinsurgency implementation.

Taking as a case study the region of North and West Africa, a total of 20 countries (excluding Western Sahara), this thesis tries to find a theory for the question if the rapid growth of cities has made urban settings (explicitly, country's capital or the city with the highest population density in the country, ex. Nigeria's capital is Abuja, but the Nigerian city with the highest population density is Lagos) safer of civilian targeting. The first part of the thesis will focus on the geolocation of violence, as the dependent variable, to analyze the proximity of violent attacks to urban settings as a function of urbanization (population density), as an independent variable.

The only pattern that the thesis discovered is that **the more rural a country is, the less conflict that the capital experiences.** However, where the country has its natural resources and if the capital is maritime or not will play a role. Examples of these findings are Mali, Burkina Faso and Niger. The thesis opens avenues to extrapolate this

finding to the rest of the world although further precise geospatial data and qualitative study would be necessary to conduct such an interesting and challenging task.

What is different about this thesis, at least known to me, is the use of geospatial distribution of violence as a dependent variable and not as an independent variable. Most studies that examine violence and insurgency tend to focus only on outcomes, such as violence intensity, military effectiveness and civilian victimization. Some studies argue, for example, that rebellion is more likely to emerge and endure in places with rough terrain (Fearon and Laitin 2003). Other studies, demonstrate that access to variable rough terrain facilitated the development and survival of more distinct ethnic groups by both restricting interaction among communities in rugged areas and complicating state repression (Carter, Shaver, Wright 2019). There are scholars that affirm that certain type of violence, like for instance civilian victimization, are conditional by the degree of insurgent control (Kalyvas 2006) or by indiscriminate state violence like (Lyll 2009). Some scholars attribute violence to ethnic discrimination like (Cederman, Gleditsch and Buhaug 2018) while James Fearon (2003) studied and evaluated the effects of ethnicity on rebellions.

Moving the research now to the terrorism field, Findley and Young (2012) analyze the degree to which terrorist attacks occur within a civil war and demonstrate that most attacks occur where states forces are fighting insurgencies. Hamond (2018) focuses on how of population centers along transportation nodes drive rebel's attack locations.

Buhaug and Gates (2002) concentrate their work on the location and scope of the rebel violence and show that separatist conflicts are mainly fought further away from the capital. Carter, Kaplan and Schultz (2022) argue that most separatist groups

attacks take place in the periphery because most groups concentrate their attacks within the claimed region, which also tends to overlap with the main zone of conflict with the state.

There have been several writings on the effects of geography on rebellions and revolutions. It is widely accepted that rough terrain favors rebel's group (Carter 2019). Currently, there are a few studies about city revolutions like the work from Mark Beissinger, "The Revolutionary City". However, there is little or none, at least to my knowledge, literature concerning the effects of maritime capitals versus interior capitals from landlocked countries especially in Africa where most of the urbanization is taking place worldwide.

Looking from the historical perspective, we will find the following: before the Industrial Revolution there were peasants' revolutions, however with the Industrial Revolution the revolutions shifted towards the cities. Then, the cities were not as developed as today and lack the dimension for protests to be effective and therefore the government had the advantage of using force with the consequences of many unsuccessful revolutions and countless deaths. Due to this phenomena, rebel's group started to move away from the cities into the countryside till the late twentieth century when revolutions returned to the cities. The return to the cities was marked by an international watchdog (the international press) and thus incumbents could not open fire on the protesters as easily as in the past. Now, the arms were swapped by the number of people supporting peaceful protest in cities. (Beissinger 2022).

What this thesis hopes to accomplish first is to take the existing literature discussions and add an additional variable: location of the attacks, to investigate if there

is more civilian targeting in urban settings or rural landscape. This thesis concentrates in Africa since it is where the biggest demographic change is occurring. Additionally, Africa is the less urbanized continent and thus the meets the optimal location criteria for this thesis.

However, interesting would be to know why some countries choose to have rural rebellions while other states opt for urban mass protest. One of the variables that affect this decision is rough terrain. For instance, there is a relationship between the type of independent movement and the level of democracy discovered by employing an instrumental variable approach that exploits exogenous variation in terrain conditions to predict anticolonial rural insurgencies. This strategy relates the degree of terrain roughness to the level of democracy through its impact on the probability that a country experienced an anti-colonial rural insurgency.

“Armed rebellion” or “mass protest” may depend on the geography, demography and economic factors. According to Fearon and Laitin (2003) members of the opposite movement may choose the use of violence or armed rebellion if the country is covered by mountainous terrain. In contrast, they may be tended to choose mass protest or peaceful demonstrations if they are in urban settings with flat terrain.

“Rural insurgency” refers to armed rebellions, predominantly based in rural settings and involved the implementation of guerrilla-like tactics, which usually are performed better with rough terrain (Buhaug and Gates 2002, Fearon and Laitin 2003, Hegre and Sambanis 2006). Rough terrain is defined as the percentage of the country’s surface covered by mountains. To be a rural insurgency has to meet these four criteria: (1) the rebel group originated in a rural area or in the country’s periphery. (2) the goal

was independence or regime change, (3) guerrilla-like tactics were employed during the conflict (4) the estimated death toll was at least 1,000.

Carter et al. (2019), puts forward two reasons why ethnic groups that have contentious relations with the state are often located in areas with variable and rugged terrain. First, rugged terrain historically facilitated the formation of distinct ethnic identities by restricting the interaction between populations in rugged areas and nearby territories. Second, in contrast, when the state wants to eliminate a rebel group, the difficulty of the terrain fosters ethnolinguistic heterogeneity making the state's efforts very difficult.

On the other hand, to carry successful attacks on the state, the group must be able to reach state forces. Maximally rugged areas might be very effective in blocking states advances, but also impede the group's capability to target state forces. Additionally, the rebel's group must be able to supply itself with recruits, weapons, equipment and food. Rebels group have to control areas with a supportive population and that frequently means co-ethnics. Therefore, areas with significant variation in terrain ruggedness are more friendly in the long run to rebel's groups.

Mass protest enable participants to develop norms of peaceful political expression and compromise, which in turn, facilitates democracy. In the past, urban mass protest have led to non-radical forms of political expression, such as demonstrations or workers strikes, which facilitated political compromise and the consolidation of democratic reforms. In contrast, armed rebellions generate a culture of political exclusion that tends to perpetuate the use of violence as a form of political expression and conflict resolution. Throughout African history, rural rebellions have

created norms of violent collective actions and repressive forms of government which impede the peaceful and efficient development of democratic institutions. Rural armed rebellions are violent social movements with relatively vertical hierarchical organizational structures. If the rural armed rebellions fail, they are more likely to generate self-censorship as in Madagascar following the 1947 rebellion (Garcia-Ponce and Wantchekon 2017). Moreover, there is evidence that those who in the past used violence to achieve their political goals, rarely shift to unarmed strategies. In rebellions, Individuals or groups decide to participate in the movement depending on their assessments of the likelihood that others would join them.

Consider the case of Guinea Bissau and Cape Verde to see how geography dictates the choice between rural insurgency and urban protest. The leaders of the Party for Independence of Guinea Bissau and Cape Verde (PAIGC) chose the urban protest strategy in the flat terrain of Cape Verde while the armed resistance occurred in the dense jungle of Guinea-Bissau. Amilcar Cabral wrote:

“Everyone knows that in general the guerrilla force uses the mountains as an starting point for the armed struggle. We had to convert our people themselves into the mountain needed for the fight in our country, and we had to take advantage of the jungles and swamps in our country to create difficult conditions for the enemy in his confrontation with the victorious advance of our armed struggle” (Cabral 1969, pq18).

Urban centers will likely continue to serve as recruitment grounds for ideologically committed young people, locales for the mobilization of capital, and sites

for urban riots, but the dynamics of contestation and state repression that help generate and sustain insurgency are likely to favor the hinterland, not major cities. Successful insurgencies may eventually strike the city again and fight for government's control, but only once they have gathered enough strength.

GEOGRAPHICAL MEASUREMENTS AND DATA.

Geographers have long taken heed of Galton's characterization of dependence between data observations, a characterization that Tobler noted as the first law of Geography: "everything is related to everything else, but near things are more related than distant things" (Cliff and Ord 1981:8). A few researchers have tried to assert the validity of these claims in respect to the regional and global distribution of inter and intrastate conflict.

O'loughlin and Anselin (1991,1992) assess the levels of spatial dependence and heterogeneity in cooperative and conflictual relations in Africa between 1945 and 1985. Their work looked at the relationship between consecutive wars in African wars and attempted to identify the process by which infection occurred. The study demonstrates that significant spatial dependence is present between observations that high levels of participation in wars appear to cluster geographically within the African continent (Braithwaite 2010).

How to measure what is urban and what is not? There are several ways to approach this dilemma.

LandScan, is a popular method to determine urbanization. This dataset calculates a 24-hour average of where people are located depending on their commuting patterns. According to (Dijkstra et al., 2021:15) LandScan has the unfortunate consequence of reducing” the number of size cities, especially in low-income countries” which is not appropriate for this thesis since violence tends to happen in low-income countries.

According to the United Nations, any city with a population of 50.000 or more constitute a city. This will be problematic in Africa where 92% of the cities have a population of less than 100.000. An alternative method would be to use the density of population. According to (Yin et al., 2021), WorldPop (2022) is global gridded population datasets that performs the best in spatial accuracy and estimated errors. In contrast to LandScan, WorldPop is a residential dataset that generates population density by dividing the number of people in each pixel-by-pixel surface area, in the form of mosaic rasters that are available annually since 2000. Another advantage of WorldPop is that the data has a high resolution of 30 arc-seconds, in other words, approximately 1 km from Equator. Disadvantages of WorldPop is that it does not identify individual cities or urban areas and thus we need to use population density. The United Nations Statistical Commission (United Nations, 2020) adopted recently a Degree of Urbanization definition based on population density. Helpful here is the fact that the definition is based on counts per square km grids, which is also the pixels generated by WorldPop and thus will aid in avoiding generating additional geoprocessing conversion that could introduce significant errors on the raster. The breakdown of the UN definitions estimates that cells that contain 1,500 or more inhabitants per square km are classified

as urban, the cells between 300 and 1,499 people per square km are semi-urban and lastly, the cell with less than 299 are designated rural.

Description of Violence	Urban	Rural
Conflicts in Nigeria.	YES	
Jihadist Insurgency Boko Haram.	YES	
Islamic State in West Africa Providence (ISWAP) in the lake Chad Region.		YES
Armed groups in the Niger River Delta against federal gvt and international oil companies.		YES
Local violence between pastoral herders and farmers in the Middle Belt.		YES
Anti-government violence aftermath Arab Spring in Algeria and Tunisia.	YES	
Civil wars related to the removal of Gaddafi regime in 2011.	YES	
West African Sahel violence due to Tuareg rebellion.		YES
Coups d'etat in Mali.	YES	
Persistent communal strife in Burkina Faso and Niger.		YES
Violence of Islamist extremist groups in Burkina Faso and Niger.		YES

Now that we have the population density, we can move to the geography of political violence using the Armed Conflict Location & Event Data (ACLED) project which provides violent events since 1997 (Raleigh et al., 2010). Here we concentrate on one event type:

() Violence against unarmed civilians.

The resulting data, from 1 January 2000 to 31 December 2022, shows that the geographic distribution of violence is not uniform and reflects many dynamics occurring on the ground.

First, Nigeria is the epicentrum of violence and a place where many events overlapped. Instances of this violence are the jihadist insurgency led by Boko Haram and the Islamic State in West Africa Providence (ISWAP) in the Lake Chad region. Additionally, there is violence conducted by armed groups in the Niger River Delta against incumbents and international oil companies and, lastly, the local rivalries produce violence between herders and farmers in the Middle Belt.

Second, there is violence due to civil unrest in Algeria and Tunisia in the aftermath of the Arab Spring as well as numerous civil wars in Libya in relation to the overthrow of the Gaddafi regime in 2011 that contributed to the spiral of violence in the area.

Third, there is ongoing violence in the communal strife in Burkina Faso and Niger which is exacerbated by Islamic extremist groups.

Before we dive into the analysis, we should keep in mind that West Africa is a peculiar region where interstate conflict is rare and civil wars are the most frequent type of conflict, which according to (Carter and Strauss, 2019) follows the overall worldwide conflict trend since the end of the Cold War. However, in this thesis we are interested in the relationship between violence and the rapid ongoing urbanization.

In a nutshell, technically speaking, most of the violence happened in rural areas but there is a hack that we will unpack. 41% of all events, corresponding to 42% of all fatalities, occurred in areas coded with a density of lower than 300 inhabitants per

square km. In the areas coded with more than 1,500 inhabitants per square km, urban areas, 31% of all events and deaths took place here. Lastly, the semi-urban areas accounted for 27% of events and 26% of fatalities.

However, what the analysis brought pellucid to light is that the semi-urban civilian targeting was conducted within 40 km (15 miles) of an urban setting. Therefore, adding the urban number of events and casualties, we find that 68%, more than two thirds of the events and casualties are within 40 km of an urban setting and thus led us to think that with the increase in population in the cities and the physical necessity to expand the city limits, the number of casualties in urban setting would increase. It is important to notice that 40 km is not a huge distance in a continent like Africa. Moreover, nearly 50% of all casualties occurred within 10 km of the city border.

On the other hand, West Africa is home to countries like Mali and Niger which are renown for high levels of violence and low levels of urbanization. In contrast, we have in West Africa, countries like Nigeria and Libya which are nations with high levels of violence and high levels of urbanization.

Analyzing from the spatial perspective, in the last 25 years, the region has seen the end of conflict in Liberia and Sierra Leona while violence started in Mali and Burkina Faso. This is important since the violence created by the civil wars in Liberia and Sierra Leona was clearly due to rural components.

So, where do we find more violence in West Africa in urban settings or rural landscapes? The short answer is it depends. A factor to take into consideration is the spatial component. It depends what longitude of time we use and where do we start and

where do we end. In the last 25 years, West Africa saw two peaks of urban violence in 2004 and 2012.

The first urban peak corresponds to the First Ivorian Civil War (19 September 2002 - 04 March 2007) and mainly to the cities of Korhogo, Bouake and Abidjan where most of the violence occurred. The rebellion started when forces, that demanded a re-run of the 2000 election as well as a reform of exclusionary citizen policies, under the political leadership of Patriotic Movement of Ivory Coast (MPCI, *Mouvement Patriotique de Côte d'Ivoire*), attacked the Ivorian cities of Abidjan, Korhogo and Bouake with a record number of fatalities. Additionally, there was violence in Nigeria in the city of Kano with a population of 2,828,000 and a density of 5,700 per km well above the 1,500 established by the UN to determine the start of urbanization. Yelwa is a city with a population of roughly 8,000 that is mainly Hausa, Muslim.

Second, the peak of 2012 corresponds to the start of the Malian Civil War. At this episode, a coalition of secessionist rebels and Jihadist groups took control of pivotal cities in Northern Mali in a very short time, just a few weeks. Moreover, the spills of the first Libyan Civil War of 2011 is reflected on the fatalities figures.

However, we are not satisfied with these results and thus we break up the data into two sub-regions, North Africa (Libya, Tunisia, Algeria and Morocco) and West Africa (the remaining states). The starting point is that North Africa has higher urbanization rates (79% in 2015) than West Africa (46%). Thus, it is normal to expect higher rates of urban conflict in North Africa, however, in some periods the rate of urban conflict was about the same for both regions. This could mean that there is more overall rural violence.

The Boko Haram insurgency started in 2009, that is two years before the commence of the Lybian Civil Wars (2011, 2014-2020) and only a year before the Malian conflict (2012). This may suggest that the regional differences in urbanization are not enough to fully explain the original starting point of different urbanization rates.

So, this last step did not lead to any meaningful explanation, so the next step is to examine the distance to urban areas in the 20 sample countries, Now, we see a real difference in the distance to urban settings between North Africa and West Africa.

In several states, violence was reduced significantly as we move away from the cities. That was the case with Algeria, Cameroon, Libya, Nigeria and Tunisia. Other states followed this trend although less acute such as Ghana and Ivory Coast. However, in other states that experienced also conflict episodes, the relationship distance from urban settings and conflict was not clear. On the other hand, countries like Mali, Burkina Faso and Niger showed that these conflicts are largely rural in nature. Nevertheless, when all three countries are agglomerated together, roughly all events took place within 90 to 100 km (55 to 60 miles) from an urban setting.

				violence	Inconstant	
Country	Rural or Urban	Jihadist	No major conflict	around urban	relation U/R	Civil War
North Africa						
Algeria	URBAN	NO	YES	YES	NO	NO
Libya	URBAN	NO	YES	YES	NO	YES
Morocco	URBAN	NO	NO	NO	NO	NO
Tunisia	URBAN	NO	YES			
West Africa						
Benin	URBAN	NO	YES	NO	NO	NO
Burkina Faso	RURAL	YES	YES	NO	YES	NO
Cameroon	URBAN	NO	YES	YES	NO	NO
Chad	RURAL	NO	YES	NO	NO	NO
Cote d'Ivoire	URBAN	NO	NO	YES	NO	NO
Gambia	URBAN	NO	YES	NO	NO	NO
Ghana	URBAN	NO	NO	YES	NO	NO
Guinea-Bissau	URBAN	NO	YES	NO	NO	NO
Liberia	URBAN	NO	YES	NO	NO	NO
Mali	RURAL	YES	YES	NO	YES	YES
Mauritania	RURAL	NO	YES	NO	NO	NO
Niger	RURAL	YES	YES	NO	YES	NO
Nigeria	URBAN	YES	YES	YES	NO	NO
Senegal	URBAN	YES	YES	NO	NO	NO
Sierra Leone	URBAN	NO	YES	NO	NO	NO
Togo	URBAN	NO	YES	NO	NO	NO
Tunisia	URBAN	NO	YES	YES	NO	NO

	Urbanization		
Country	High Level	Medium Level	Low level
North Africa			
Algeria	YES		
Libya	YES		
Morocco	YES		
Tunisia			
West Africa			
Benin		YES	
Burkina Faso			YES
Cameroon		YES	
Chad			YES
Cote d'Ivoire		YES	
Gambia		YES	
Ghana		YES	
Guinea-Bissau		YES	
Liberia		YES	
Mali			YES
Mauritania			YES
Niger			YES
Nigeria		YES	
Senegal		YES	
Sierra Leone		YES	
Togo		YES	
Tunisia		YES	

FINDING. Mali, Burkina Faso and Niger are good examples to examine more carefully since all three have low rates of urbanization. Although most violence took place away from big urban settings, it did occur in small urban settings so there might still be a relation between violence and urbanization. If we draw a line from Mopti to Mali and Ouahigouya in Burkina Faso we see a string of violence taking place in small settlements. Additionally, violence has occurred in Maradi in Niger and in Douentza,

Gao and Niono in Mali. However, the violence has not cluster around the capitals in these countries. So, we could say that **the more rural a country is, the less conflict that the capital experiences.**

This finding suggests that the relationship between urbanization and violence is not straight forward, and other factors must be taken into consideration, for example, Jihadis insurgencies.

Jihadis insurgencies have a rather peculiar relationship with cities. On one hand, they use the cities for recruitment, like for instance, Boko Haram recruit youths from cities like Maiduguri and Sokoto. Other terrorist groups like AQUIM and Ansar Dine seized Timbuktu and Gao, two commercial and religious centers in a very short period. However, Jihadist are also known to avoid cities where the government forces are stronger while in remote rural areas security forces are absent.

Analyzing the geographies of Boko Haram is a good example of this, in 2002, Boko Haram left Maiduguri declaring the settlement corrupt and moved to the small village of Kanam near the Nigerian border (Walker 2012). Nevertheless, after a fishing dispute with the police concerning fishing rights, the group returned to Maiduguri. In 2009, the group launched a massive uprising in the cities of Northern Nigeria before being expelled by the Civilian Joint Task Force (CJTF) – a group close to the government.

Mali is a similar case, where Katibat Macina conducts most of its activities in rural areas far away from major cities like Mopti, Djenne or Segou (Thurston 2020).

This ruralizing trend, that we see in Africa since 2012, can be explained by several factors. Violence in West Africa has shifted from the Sahara to the Sahel

(OECD/SWAC, 2022). Due to the geography of the Sahel, controlling cities is less important now. In the Sahel, there is no need for jihadist groups to control cities to have access to natural, mineral and agricultural resources. Here, the strategy is to impose embargoes on rural communities protected by the military or communities that refuse to let jihadist groups like Katibat Macina rule them and threaten them with the killing of traders, politicians and civil society leaders who own land in the rural areas. This way, Katibat Macina, imposed local taxes on trade and was able to steal cattle on a large scale. Finally, Jihadist have an interest in maintaining cities open for business and trade, after all, it is here where they have most of their supplies and family,

So, in a nutshell, it is very difficult to provide a “Law of Geographies” of violence in Africa. While the violence tends to cluster around the cities the overall tendency tends to go rural. There are however big episodes of violence in the urban areas related to civil wars. Jihadists are responsible for a high percentage of violence perpetrated in the rural areas. How much of all this violence is political motivated is open for discussion.

Much of this violence is caused still by Governments trying to exercise their sovereignty over the whole territory and groups challenging this authority. In this respect, given the importance of cities and urban settlements it is expected that violence will increase in the cities.

CIVILIAN TARGETING IN THE CAPITALS.

Countries with a higher urbanization rate than 70% did not, automatically, experience a higher degree of civilian targeting in their capital or most dense urban center. Although, we have Libya and Tunisia with 31% and 25% respectively of the total number of civilian targeting happening in the capital. In contrast, Algeria, with a rate of urbanization of 70%, has only 9% of the civilian targeting taking place in the capital. The reason for this low score, probably, has to do with the hard hand used by the president Abdelaziz Bouteflika to rule the country and tight hand with the natural resources. Similarly, Morocco has only 11% of the nationwide civilian targeting happening in the capital. Morocco is not a full democracy but neither a dictatorship although the influence of the royal family is significant. It is interesting to notice that the countries with the highest rates of urbanization in Africa are in North Africa, therefore we have to be cautious about drawing causal inferences. Libya had seen two civil wars since the beginning of the century and Tunisia was the birthplace of the Arab Spring which shook particularly the Arab cities of Northern Africa.

NORTH AND WEST AFRICA URBANIZATION RATES

Country	Urbanization	Civilian targeting
	Rate	in Capital
LIBYA	81%	31%
ALGERIA	74%	9%
TUNESIA	70%	25%
MOROCCO	64%	11%
GAMBIA	64%	51%
CAMEROON	59%	19%
GHANA	58%	31%
MAURITANIA	56%	60%
NIGERIA	54%	4%
LIBERIA	53%	40%
IVORY COAST	52%	0%
BENIN	50%	4%
SENEGAL	49%	9%
GUINEA-BISSAU	45%	64%
SIERRA LEONA	44%	30%
TOGO	44%	58%
MALI	41%	3%
GHINEA	38%	30%
BURKINA FASO	32%	4%
CHAD	24%	17%
NIGER	17%	3%

Interesting to notice, and we did not expect this and will require further research is that the Maritime capitals of West Africa experienced the highest civilian targeting of the 20 countries. Guinea Bisseau saw 64% of the civilian targeting actions concentrated in the capital and was the highest score of all the 20 countries in our sample. Another maritime city, this time Novakchott, had 60% of the civilian targeting incidents occurring within its city limits. Lome, the capital of Togo, followed with similar statistics, that is, the city saw 58% of all civilian targeting nationwide happening here. Gambia saw slightly more than

half of their civilian targeting (51%) happening in the maritime city of Banjul. Closing the group of countries that experienced the greatest percentage of civilian targeting in their capital is Liberia, experiencing 40% of the violence in the maritime city of Freetown, a maritime city.

This raises the question if maritime cities are more prone to civilian targeting than non-maritime cities and what factors do make maritime cities a target for it. As we can see from the table, the capitals of the northern African states have also a high percentage of their civilian targeting occurring in the maritime capitals, however not as high. In Libya, for example, 31% and 30% of the civilian targeting occurred in Tripoli, the capital, and Benghazi respectively, two major maritime ports. Tunis, another maritime city on the Mediterranean Sea, experienced one quarter of all civilian targeting in Tunisia that has an urbanization rate of roughly three quarters. Morocco and Algeria are here exceptions to the rule experiencing only 11% and 9% civilian targeting in their coastal capitals respectively and with a rate of urbanization of 64% for Morocco and even higher 74% for Algeria.

On the contrary, countries with a low urbanization rate below 44% and with capitals in the interior of the country experience significantly less civilian targeting in their capitals. There is a strong correlation here since the four countries with the lowest civilian targeting in their interior capital are also, coincidentally, the countries in the sample with the lowest rate of civilian targeting. Niger, for instance, has a 17% urbanization rate but only 3% of the civilian targeting takes place in the capital. In the urbanization rate scale, Chad follows with only a 24% urbanization rate and 17% of their total civilian targeting within the city limits of N'Damena. Burkina Faso and Mali have a small portion of the

civilian targeting happening in their capitals 4% and 3% respectively while Burkina Faso has an urbanization rate of 32% and Mali of 41%.

CENTRAL AFRICAN URBANIZATION RATES AND CIVILIAN TARGETING

Country	Urbanization	Civilian targeting
	Rate	in Capital
BURUNDI	14	6
CENTRAL AFRICAN REPUBLIC	43	14
ETHIOPIA	23	6
MALAWI	18	36
RWANDA	18	40
ZAMBIA	46	42
ZIMBABWE	32	39

Thus, there must be another reason why maritime cities in North and West Africa experience more civilian targeting when the capital is on the shore than if the capital is in the interior.

Three concepts will help us solve this puzzle. These are: Geography, rough terrain and resource allocation. Let's start with the natural resource allocation of each country.

CHAD



Source: Central Intelligence Agency (CIA).

Chad has a series of natural resources like petroleum, gold, natron, uranium, limestone, sand, gravel, kaolin and salt. As the reader can see in the above map of Chad most of the natural resources are located outside the capital and thus there will be no need for rebels or jihadist to attack the capital and raise unwanted attention or further investment in national security that will jeopardize their operations in the periphery and rest of the country.

BURKINA FASO



Source: Central Intelligence Agency (CIA).

Burkina Faso has a mining industry that is smaller than Chad but nevertheless has an important metal: gold. Currently, Burkina Faso is the fourth country in Africa in the extraction of gold and is an industry that is predicted to expand in the next years. Cotton is the second biggest commodity adding to the GDP of Burkina Faso. As the reader can see in the map, all of these locations are located far from the capital Quagadougou and thus, the same logic would apply here that rebels and jihadist will have no enticement to attack the capital since all the resources are located outside its perimeter and scattered around the country.

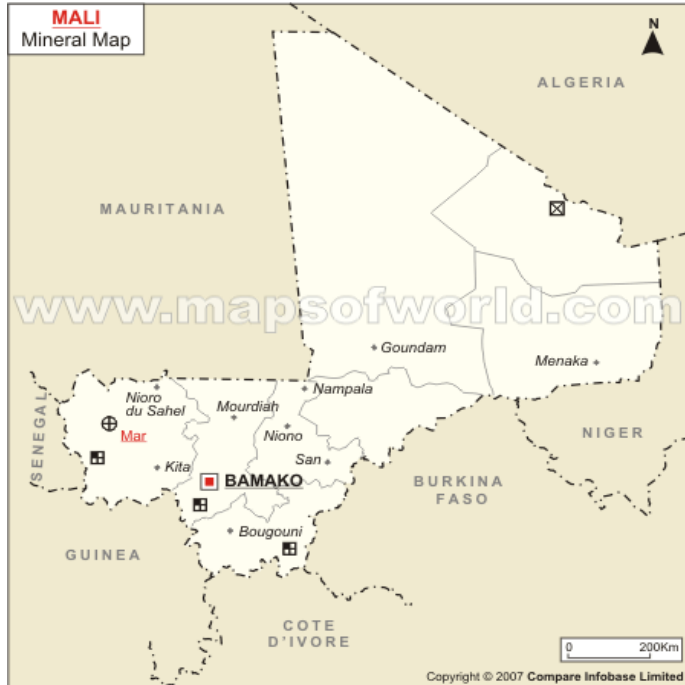
NIGER



Source: Central Intelligence Agency (CIA).

Most of the resources found in Niger are oil, uranium and coal. The oil fields are Tintouma and Adadem. Uranium is one of the biggest resources in Niger and the main mines seen on the map are Azelik, Arlit, Madaduela, Imouralen and Tassa. The Coal mine which contributes to 86% of the consumption in Niger is Anou Araren. It is clear that the main resource locations are away from the capital and therefore meets the criteria that the lower the urbanization rate and the more scattered the resources are in a country, the safest is the capital.

MALI



Source: Central Intelligence Agency (CIA).

Mali has several natural resources which are similar to the ones found in Burkina Faso and Niger. These include gold, uranium, phosphates, limestones, Kaolin, salt and granite. Gold is the main contribution to the GDP and it can be produced in two ways, by artisanal miners and by industry operators. The former are located in the Kenieba Valley while the latter are located in Molilla, the Sandiola Hill, the Tabakoto, the Kalana, the Loilo, the Syama and the Yatala. Again, we see the trend that all these locations are found outside Bamako, the capital of the country, and Mali meets the criteria of having a low urbanization rate.

GEOGRAPHY: DESERT.

IDEOLOGY: JIHADIST.

These results fail to provide us an answer to our question however, there is something interesting to observe in the fact that Lilongwe, Kigali, Lusaka and Harare, the capitals of Malawi, Rwanda, Zambia and Zimbabwe respectively are not geographical located in the desert and neither the rest of the country. The natural resources in the desert are instinctively an easy target for rebels and where the supply lines from governments and multinationals will have greater difficulty. A close inspection to the data shows that if the natural resources are well protected by the government and multinationals, it would be harder for rebels to target civilians here and thus targeting the capital becomes a rational option. However, which group is most interesting in taking control of natural resources and use them to finance their own cause: Jihadist.

The Sahel region, an area covering 3 million sq km, has been the nest of Islamic Jihadist groups in recent years. As of today, the Sahel has at least seven insurgent groups scattered in six countries with an area of operation covering ten countries: Burkina Faso, Cameroon, Chad, The Gambia, Guinea, Mauritania, Mali, Niger, Nigeria and Senegal. These Islamic jihadists groups made inroads by stepping the vast ungoverned amount of land, the desert, full of natural resources and where governments have been largely absent. Their strategy is like in other areas of the world, for instance, they help resolve land tenancy issues, protect cattle from theft and prosecute thieves. Moreover, they provide food and medicine as well as some type of social welfare and offer some basic government services while simultaneously funding

their undertaking with natural resources illegal trading among other financial capabilities.

The other side of the coin is that Islamic jihadist groups target civilians. In 2015, al-Sahrawi created the Islamic State in the Greater Sahara and pledged allegiance to ISIS. In the same year, Boko Haram pledged also allegiance to the Islamic State. The result was the creation of its breakaway faction -Islamic State West African Providence.

The Islamic State West Africa is known for kidnapping and targeting civilians in Nigeria, Mali, Niger and Burkina Faso. As of 2018, it is estimated that Islamic State in the Greater Sahara had over 3,500 fighters with most, if not all, of the fighters operating in north-eastern Nigeria such as Borno state (the center of Boko Haram's networking) and the lake Chad Basin area. As we have seen in this thesis, these are precisely the countries that have low urbanization rates whose capitals are relatively safe from civilian targeting. Most of the civilian targeting in these countries are conducted by terrorist groups located outside the main urban area, the capital.

However, in recent years, Islamic State in the Greater Sahara, has expanded its operations to include urban areas in Mali, for instance, Mopti, Gao and Menake regions (please see Mali map in the previous pages). Additionally, the East Burkina Faso and the Tillabery and Tahoua regions of Niger are also covered by their operations. All these locations are miles away from their capitals and thus such metropolises experienced less civilian targeting as discovered in this thesis. The goal of the Islamic State in the Greater Sahara is to establish a Salafi-jihadist caliphate in the Sahel under Sharia law and their strategy is to start in the unurbanized areas and then move to the urbanized areas and therefore, temporarily, excluding the countries' capital from their attacks.

The Global Terrorism Index (GTI) is based on the Global Terrorism Database (GTD) which is the most authoritative data source in terrorism today. The GTD consists of systematically and comprehensively coded data for 170,000 terrorist incidents. The GTI produces a composite data score to provide an ordinal ranking of countries on the impact of terrorism. The GTI scores each country on a scale from 0 to 10; where 0 represents no impact from terrorism. There is no worldwide internationally accepted definition of terrorism and in the terrorism literature there are a plethora of definitions and typologies. The GTI therefore defines terrorism and ‘the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.’

Terrorism index in African Countries as of 2021

Burkina Faso	8.3	Rwanda	1.2
Nigeria	8.2	Malawi	0
Mali	8.1	Zambia	0
Niger	7.9	Zimbabwe	0
Chad	6.4	Eswatini	0

Source: GTI Global Terrorism Index 2022.

From the above table it is pellucid clear that the countries with the vast amount of desert within their borders are the countries with the highest Terrorism Index score.

Coincidentally, these are the countries with the safest capitals when it comes to civilian targeting. If we see the countries on the right column, that is countries with landlocked capitals, we see a neglected influence on terrorism apart from Rwanda which is renowned for the ethnic clashes. This shows the argument of this thesis which is that landlocked countries, vastly covered by deserts tend to have one the safest capitals in the African continent and hardly experience civilian targeting in the urban setting.

Terrorist groups and insurgencies tend to favor not only rough territory, like mountains and forest, (Carter 2019, Fearon 2003) but also deserts. African countries with vast empty desert territories, far from the presence of the government and with natural resources, are the ideal places for terrorist to perform their social support for the community but also to conduct their civilian targeting while the capital, outside the range of operations of terrorist groups, experiences less civilian targeting than other African capitals. It is surprising that with the modern technology of drones and other artificial intelligence devices, that would perform better in vast, empty spaces that in the forest and mountains, are not used more frequent in the desert. This thesis calls it the **“Desert paradox”**, The more the desert covers the geography of a landlocked country, the safest is the capital and the more dangerous is the rest of the country.

CONCLUSION.

This thesis was an eye-opener. My original idea was to have a definite answer to which side experiences more political violence, the urban setting or the rural landscape? However, as I read many books and articles, I started to see patterns that deserved my attention. First, I noticed that there was more rural than urban political violence in low urbanized countries however I kept observing significantly more civilian targeting in the more urbanized capitals. Second, the thesis discovered that maritime capitals in North and West Africa are more prone to civilian targeting than landlocked capitals. Third, the paper showed that landlocked countries with low urbanization rates and with natural resources far away from their capital experience significantly lower civilian targeting in

their capitals than in the rest of the country. Finally, the paper unearthed the “Desert Paradox”, Landlocked countries in Africa with vast amounts of desert within their borders tend to have jihadist groups that operate in the rural areas and near the natural resources. This creates an environment where the African capitals of landlocked, low urbanized countries with vast amounts of desert within their border, have the safest capitals in Africa.

Many questions remain open concerning how geography affects the civilian targeting in the capitals of Africa and worldwide therefore it should be studied further in future papers like for instance: Does violence concentrate in cities close to the borders? Are border cities, far away from the capital, more prone to violence? Are border cities more prone to recruitment against the government? Do violence patterns differ in littoral regions in comparison to the Sahel? Does violence have to do with the season of the year? A better understanding of how marginal cities relate to the capital is necessary in finding any patterns of violence.

Answering these questions are necessary steps in detangling the relationship between urbanization and violence to formulate a monolithic theory over time and space. All these steps are essential in understanding how, why, when and where violence and conflict come together in urban settings.

BIBLIOGRAPHY

Asal, Victor, Justin Conrad, and Peter White, (2015), "Going Abroad: Transnational Solicitation and Contention of Ethnopolitical Organizations". *International Organization* 68 (4): 495-78.

Aydin, Aysegul and Cem Emrence. (2025). "Zones of Rebellion: Kurdish Insurgents and the Turkish State. Ithaca, NY: Cornell University Press.

Cunningham, Kathleen Gallagher (2013), "Actor Fragmentation and Civil War Bargaining: How Internal Divisions Generate Civil Conflict. *American Journal of Political Science*. Volume 57, No. 3 pp 659-672

Baithwaite, Alexander, (2010) 'Conflict Hot Spots, Emergence, Causes and Consequences', Ashgate Publications,
Bessinger, Mark (2022) "The Revolutionary City, Urbanization and the Global Transformation of Rebellion" Princeton University Press.

Beissinger, Mark (2013). 'The Semblance of Democratic Revolution: Coalitions in Ukraine's Orange Revolution'. *American Political Science Review*, Vol 107, No 3.

Buhaug H, Urdal H (2013), "An Urbanization Bomb? Population Growth and Social Disorder in Cities. *Global Environment Change* 13(1): 1-10.

Buhaug, Halvard and Hendrik Urdal (2013) "AN Urbanization Bomb? Population growth and Social Disorder in Cities. *Global Environmental Change* 23 (1): 1-10

Buhaig and Gates (2002), "The Geography of Civil War", *The Journal of Peace Research*, Vol. 39, No. 4, Special Issue on Civil War in Developing Countries

Buhaug Halvard & Wischnath, Geddis (2014) On Climate Variability and Civil War in Asia, *Climatic Change* 122(4): 709–721.

Buscher Karen, (2018), "Urbanisation and the Political Geographies of Violent Struggle for Power and Control: Mining Boomtowns in Eastern Congo, Book Title: African Cities and the Development Conundrum, Editors Carole Ammann and Till Forster.

Carter KM and Strauss S, (2019) Changing Patterns of Political Violence in Sub-Saharan Africa. In Carter KM and Strauss S (eds) *Oxford Research Encyclopedia of politics*. Oxford: University Press.

Carter, Shaver and Wright, 2019, "Places to Hide: Terrain, Ethnicity, and Civil Conflict", *The Journal of Politics*, volume 81, number 4.

Carter David (2019), "Places to Hide: Terrain, Ethnicity, and Civil Conflict" *The Journal of Politics*, volume 81, number 4.

Carter David; Kaplan Morgan; Schultz Kenneth (2022), "The Geogrpahy of Separatist Violence" *International Studies Quartely* 66, sqac030

Cederman, Lars-Erik; Kristian Skrede Gleditsch & Halvard Buhaug (2013) *Inequality, Grievances, and Civil War*. Cambridge: Cambridge University Press. Cambridge Studies in Contentious Politics.

Cederman, Lars-Erik; Wimmer, Andreas and Min, Brian, (2010) "Why Do Ethnic Groups Rebel?" *World Politics* 62, No.1, pp 87-119

Christensen, Darin (2017), "The Geography of Repression in Africa". *Journal of Conflict Resolution*, Vol. 62(7) 1517-1543

Fearon, James (2004), "Why Do some Civil Wars Last So Much Longer Than Others". *Journal of Peace Research* Vol. 41, no.3, pp275-301.

Fearon, James and Laitin David (2015) "Integrating Qualitative and Quantitative Methods" preparation for Oxford Handbook of Political Science.

Fearon, James and Laitin David, (2003), "Ethnicity, insurgency and Civil War", *American Political Science Association*, Vol 97, No. 1.

Findley and Young, (2012) *Terrorism and Civil War: A Spatial and Temporal Approach to a Conceptual Problem*

Garcia-Ponce, Omar; Wantchekon, Leonard (2017). "Critical Juncture: Independence Movements and Democracy in Africa"

Kalyvas, Sthatis, 2006, "The logic of Violence in Civil Wars" Cambridge: Cambridge Univerisity Press.

Kalyvas Stathis N, and Laila Balcells, 2010. "International System and Technologies of Rebellion: How to End of the Cold War Shaped International Conflict". *American Political Science Review* 104(3): 415-29.

Lyall, Jason, 2009, "Does Indiscriminate Violence Incite Insurgent Attack? Evidence from Chechnya" *The Journal of Conflict Resolutions*. Volume 53, Issue 3.

O'loughlin John & Anseling Luc, (1991) "Bringing geography back to the study of international relations: Spatial dependence and regional context in Africa, 1966–1978" *Empirical and Theoretical Research in International Relations*. Volume 17, 1991.

Polo, Sara M.T. 2020, "The Quality of Terrorist Violence: Explaining the logic of Terrorist Target Choice". *Journal of Peace Research* 57 (2): 235-50.

Raleigh, Clionadh; "Migration, Urbanization, and Political Power in Sub-Saharan Africa" *Annals of the Association of American Geographers*, 104 (2) 2014, pp253-261.

Raleigh, Clionadh; "Urban Violence Patterns Across Africa", *International Studies Review*, 2015.

Raleigh Clionadh, reu Linke, Håvard Hegre, and Joakim Karlsen, 2010 "Introducing ACLED: An Armed Conflict Location and Event Dataset", *Journal of Peace Research*, Volume 47, Issue 5.

Randil, Steven; Walther, Oliver; Dorward, Nicholas; Pflaum, Matthew, "Urban-Rural geographies of Political Violence in North and West Africa", Department of Economics and Geosciences, U.S. Air Force Academy.

Staniland, Paul, (2014), "Networks of Rebellion, Explaining Insurgency Cohesion and Collapse", Cornell University Press.

Strauss S (2012) Wars do End! Changing Patterns of Political Violence in Sub-Saharan Africa", *African Affairs* 111(443): 179-201.

Strauss, Scott. (2011) Its Sheer Horror Here: Patterns of Violence During the First Four Months of Cote d'Ivoire Post-Electoral Crisis. *African Affairs* 1110:481-489

Tollefsen, Andreas, Buhaug, Halvard, (2015) "Insurgency and Inaccessibility" *International Studies Review*

Thurston A (2017) *Jihadists of North Africa and the Sahel: Local Politics and Rebel Groups*. Cambridge: Cambridge University Press.

Toft, Monika Duffy, (2005), "The Geography of Ethnic Violence: Identity, Interest, and the indivisibility of Territory. Princeton, NJ: Princeton University Press.

Urdal H and Hoelscher K, (2012), "Explaining urban social Disorder and Violence: An Empirical Study of Event Data from Asian and Sub-Saharan African Cities. *International Interactions* 38(4): 512-528.

Urdal, Hendrik and Kristian Hoeschler, (2012) "Explaining Urban Social Disorder and Violence: An Empirical Study of Event Data from Asian and Sub-Saharan African Cities. *International Interactions* 38 (3): 512-528.

Weinstein, Jeremy, (2007), "Inside Rebellion, The Politics of Insurgent Violence", Cambridge University Press,

Walker A (2012) What is Boko Haram? Washington, DC: US Institute of Peace 17.