

How European colonialism has affected African demography up to the 21st century: between past stagnation and fostering contemporary development

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Introduction

Throughout history, the African continent has undergone significant transformation.

Different perspectives have been used to bring to light the substantial change the continent has undergone over the centuries.

In particular, the African continent was largely shaped by the impact of European colonialism. Therefore, this dissertation aims to delve into one of the profound consequences of colonial rule: its demographic effect.

The question that will be answered concerns not only if colonialism has had a demographic impact- because that is a fact- but whether this latter has contributed to stagnation or decline in the continent or whether it was the stimulus that contributed to the demographic advancement we see today and substantial development.

Understanding the demographic effects of colonialism in Africa is a complex task that requires meticulous research methodologies and robust analytical frameworks.

At the methodological level, investigating the demographic effects of colonialism necessitates navigating a multifaceted research terrain. Scholars, historians, and social scientists have extensively explored this topic, employing diverse methodologies to unravel the complexities embedded within the historical context. This research endeavors to mix different approaches to shed more light on the matter.

However, two main problems remain. Firstly, due to the brevity of this thesis in contrast to the enormous colonial context in which we will be immersing ourselves, the research will be restricted to a few areas where the demographic effect of colonialism is most noticeable, such as the impact of the

on the African population during the colonial period, which makes it difficult to establish an actual decrease or increase in population in the years following colonialism.

Colonial powers often maintained fragmented or biased records, making it arduous to obtain accurate information on population dynamics, migration patterns, and health outcomes during the colonial period. Researchers have grappled with this limitation by employing a combination of quantitative and qualitative approaches.

However, thanks to numerous estimates carried out by various scholars such as those of Pittsburgh University professor Patrick Manning and his extensive research, this thesis will be based on estimates made *a posteriori* previously carried out and not on data collected during the colonial period.

As a consequence, this thesis will be based on a wide range of secondary sources- such as scholarly publications and demographic data- and when possible on primary ones- colonial reports and historical records- whose aim is not to develop a new theory on the matter, but by critically examining the tools and techniques used in this field, this study seeks to contribute to a deeper understanding of Africa's demographic transformation under colonialism and inform future studies, policies, and interventions aimed at addressing historical injustices and promoting equitable development in Africa.

As for how this thesis will unfold in the different chapters, I will start with a first chapter that will cover two sub-sections respectively with a brief introduction on the historical context of colonialism and a general overview of population growth trends in Africa.

On the other hand, the second and third chapters focus on the actual research question and are mirrored in each other. The second will focus on what are considered to be the negative effects of colonialism that could lead to actual population growth or stagnation during the colonial period carried out by the European powers, such as land expropriation, the slave trade, the creation of a system of labor exploitation, the introduction of diseases and socio-cultural distortion. These hypotheses will then be

applied concretely to the case study of the Congo to bring to light any colonial practices that could have had an impact on demographic trends.

The third chapter will focus instead on what may have been practices that brought about an advancement in technology and the healthcare system as an aid, assistance that may have contributed to a subsequent increase in population. Again, these hypotheses will be applied in practice in a case study, that of Algeria, dealing in particular with the role of the medical corps and the migration that took place on the part of the French population in Algeria.

The fourth chapter focuses instead on comparing the data collected from the previous two chapters to ascertain the contribution of colonialism from a demographic point of view.

The fifth chapter, on the other hand, will bring to light the current demographic trend in Africa, how it relates to the colonial period of the 18th century, and what the impact of globalization, urbanization, and current migration has been. It thus bridges colonial Africa and Africa in the 21st century and their respective demographic trends.

Finally, the sixth chapter will discuss the conclusions reached in this thesis and how they can fit into a framework of future implications.

1.1 Background on Colonialism in Africa

The origins of colonialism in Africa can be traced back to the rich historical and geopolitical context of the exploration and geographical discovery era, which prominently characterized the 15th and 16th centuries. During this transformative period, European powers such as Portugal, Spain, Holland, England, and France embarked on audacious maritime expeditions driven by a thirst for new trade routes and resource-rich lands. These voyages were fueled by a fervor for exploration, a desire to expand their dominions, and the economic promise of distant shores.

However, it is essential to recognize that colonialism in Africa did not unfold as a monolithic or continuous phenomenon; rather, it evolved through distinct waves and stages, each characterized by unique motivations and strategies.

The earliest phase, often referred to as 'the early exploratory and trading ventures,' saw European explorers, travelers, and navigators such as Bartolomeu Dias, Vasco da Gama, Pedro Álvares Cabral, Cristoforo Colombo, and many others documenting their interactions with African peoples and documenting their territorial discoveries.

Often preserved in travel diaries and letters, these narratives offer rich insights into the initial contacts between Europeans and Africans. During this period, European powers primarily established trading posts and forts along the African coast, driven primarily by commercial interests rather than a direct intention of colonization.

A pivotal turning point in the trajectory of African colonialism occurred with the convening of the Berlin Conference in 1884-1885, often termed the 'Scramble for Africa.' This significant event brought together major European colonial powers to negotiate guidelines and agreements for the partitioning of the African continent.

Notably absent from this conference were representatives of African peoples and their aspirations for self-determination, underscoring the blatant disregard for indigenous voices.

The motivations behind this wave of colonialism were a complex amalgamation of economic, political, and strategic factors. Europe's Industrial Revolution spurred a voracious demand for raw materials, and Africa, with its vast resources, emerged as an enticing target.

European colonial rule during this period exhibited marked characteristics, ranging from the direct administration of territories to the imposition of regimes of indirect control through methods like 'settlement colonies' or 'protectorates.'

Regardless of the specific approach, colonization uniformly involved the expropriation of land, the subjugation of local populations, the establishment of coercive labor systems, the imposition of new political boundaries, cultural oppression, and egregious violations of human rights.

Scholarly sources such as Thomas Pakenham's 'The Scramble for Africa: White Man's Conquest of the Dark Continent from 1876 to 1912' and Walter Rodney's 'How Europe Underdeveloped Africa'¹ provide detailed and comprehensive overviews of the origins of colonialism in Africa. These texts delve into the intricate web of political, economic, and geostrategic factors that impelled European powers to embark on the audacious mission of colonizing the vast African continent.

Given the extensive and multifaceted nature of colonialism, it is imperative to narrow the scope of research to facilitate a more in-depth analysis.

Therefore, this dissertation will specifically focus on the 18th and 19th centuries, recognized as the second wave of colonialism. This period assumes paramount significance due to its pronounced implications for demographic aspects. Situated within an unmistakably Eurocentric context, this era offers critical insights into the demographic trends that unfolded.

It is essential to bear in mind this historical backdrop when conducting a demographic analysis, as it profoundly influenced the population dynamics of the time.

1.2 Understanding Africa's regional diversity

The multifaceted impact of colonialism in Africa gives rise to a complex narrative where the strength and nature of this influence vary significantly based on the specific regions where colonial rule was imposed.

¹ Rodney W., How Europe Underdeveloped Africa, Bogle-L'Ouverture Publications, London and Tanzanian Publishing House, 1973, 6th reprint, 1983

This regional diversity is a central facet of understanding the intricacies of Africa's demographic growth patterns.

However, it prompts us to delve deeper into the fundamental question: why does colonialism exert differing levels of influence across the continent's diverse landscapes?

The answer to this question lies in the heterogeneity of colonial endeavors; colonial powers adopted a range of policies, strategies, and governance styles tailored to each region's unique circumstances and resources. As a result, the demographic consequences of colonialism are not uniformly distributed across Africa but rather manifest in distinctive ways, reflecting the historical legacies of each colonial administration.

Recognizing these regional disparities becomes particularly relevant when we observe the disparities in population growth rates across different parts of the continent. While it may be tempting to attribute these variations solely to regional differences, it is essential to acknowledge that colonialism played a pivotal role in shaping these demographic variances.

Therefore, we must resist oversimplifications and engage in a more nuanced analysis that considers how colonialism contributed to these differences in population dynamics.

In this pursuit of a more profound understanding, I have undertaken the rigorous examination of two distinct case studies.

These case studies serve as windows through which we can explore the intricate interplay of historical legacies, economic dynamics, and sociocultural factors, all of which contribute to the regional diversity that characterizes Africa's demographic growth.

By dissecting these case studies, we aim to uncover the intricate mechanisms through which colonialism's footprint left indelible marks on demographic trends.

These case studies enable us to appreciate how the effects of colonialism reverberate across the continent, shaping the demographic destinies of African nations in unique and sometimes unexpected ways.

Through these case studies, we endeavor to elucidate the difference between different areas and not only understand why certain regions experienced more pronounced demographic shifts during colonial rule while others remained relatively stable, but especially to comprehend that there are differences even among the areas that have had drastic demographic changes.

The case of Congo and Algeria, with all their regional differences between north and south, which will be presented in the next chapters represent the antithesis underlying this thesis: the negative effect of colonialism and development brought by Europeans.

It is crucial to consider the overt colonial policies and practices and the underlying socioeconomic and political contexts that influenced demographic trends. By scrutinizing these case studies, we aim to provide a comprehensive analysis that illuminates the complex relationship between colonialism and demographic growth, enriching our understanding of Africa's diverse and evolving demographic landscape.

1.3 Brief overview of population growth trends in Africa

In the past century, we have borne witness to an unprecedented surge in the global population, with significant demographic differentials that are now intertwined with the formidable forces of globalization. It is projected that billions of individuals will be added to the existing 6.7 billion, and

notably, the majority of these newcomers are expected to hail from the less developed regions, particularly the African continent.

To comprehend the reasons behind these ongoing and anticipated trends and their implications for Africa's future, it is imperative to delve into the historical demographic conditions that have shaped the current state.

Exploring whether colonialism exerted a predominantly negative or, perhaps, "positive" influence on the African continent is crucial for comprehending the evolving nature of Africa and the factors underpinning its present circumstances.

Throughout much of human history, the global population experienced sluggish growth, primarily due to divergent living conditions, with high birth rates serving as a counterbalance to elevated mortality rates. The African continent's historical demographic pattern largely mirrored this, characterized by a high birth rate to compensate for substantial mortality.

However, contemporary trends reveal a stark departure from the past, as Africa has emerged as the world's fastest-growing region in terms of annual growth rates. Over the last century, the African population has tripled, and this trajectory is poised to persist, with projections indicating a population nearing 2 billion inhabitants by 2050.

As previously mentioned, this substantial shift is predominantly attributed to persistently high fertility rates (as depicted in Figure 1) and 'as John Bongaarts puts it, "the pronatalist nature of African societies implies a resistance to fertility decline that is absent or weaker in non-African countries."²

² Mbacké, Cheikh. "The persistence of high fertility in sub-Saharan Africa: a comment." *Population and Development Review* 43 (2017): 330-337

Figure 1: Ten Countries with Highest and Lowest Total Fertility

Ten Countries with Highest and Lowest
Total Fertility: 2000-2005 (average number of children per woman)

Highest	Total fertility	Lowest	Total fertility
Niger	7.9	Ukraine	1.12
Timor-Leste	7.8	Czech Republic	1.17
Guinea-Bissau	7.1	Slovakia	1.20
Afghanistan	7.5	Slovenia	1.22
Uganda	7.1	Republic of Korea	1.23
Mali	6.9	Republic of Moldova	1.23
Burundi	6.8	Bulgaria	1.24
Liberia	6.8	Belarus	1.24
Angola	6.8	Poland	1.26
Dem. Rep. Congo	6.7	Romania	1.26

Source: United Nations (2005a)

Source: Chamie J., Future Challenges, in ‘Population Trends: Humanity in Transition’

Despite the historical prevalence of high birth rates among African women, contemporary circumstances diverge markedly from the past due to a significant decline in mortality rates. As a consequence, the previously established equilibrium between high birth and mortality rates has been disrupted, resulting in exponential population growth. In summary, the African continent historically witnessed high birth rates as a means to counterbalance high mortality rates. However, current and future trends appear to be markedly different, if not opposite. This departure from past demographic patterns is, in part, attributed to advances in medical technology and evolving lifestyle and nutrition standards.

This is precisely where the significance of the colonial impact comes into play. The forthcoming third chapter will delve into how European colonialism in Africa contributed significantly to enhancing health conditions and technological advancements. Consequently, these factors played a pivotal role in reducing mortality risks and increasing life expectancy at birth. However, it is essential to underscore that this chapter serves as an introduction, with subsequent chapters dedicated to a comprehensive exploration and analysis of these themes.

Simultaneously, it is crucial to acknowledge that while African population growth is currently on a rapid upward trajectory, colonialism also engendered a less favorable demographic legacy for the continent. A case in point is the scourge of the transatlantic slave trade, which resulted in the widespread disruption of African populations. Hence, the fundamental question no longer revolves around whether colonialism had a positive or negative effect, as both aspects are intertwined. Instead, the central query centers on which of these effects exerted a more profound impact on African population trends and demographic dynamics.

The forthcoming chapters will delve into the factors deemed detrimental to African demography, followed by an examination of the improvements ushered in by colonialism. In dissecting these multifaceted influences, we aim to provide a comprehensive understanding of the intricate tapestry that is Africa's demographic history.

European Colonialism and Population Disruption in Africa

2.1 European colonial powers' policies and strategies

Prior to the epoch of colonization, the African continent existed as an integral participant in the global economic framework, demonstrating a profound interconnectedness with distant lands.

The historical tapestry of Africa reveals an enduring tradition of international trade that stretches back to time immemorial, serving as a testament to the enduring spirit of commerce that thrived within its bounds. This rich tradition of trade found echoes in the annals of antiquity, with the ancient Egyptian pharaohs presiding over an intricate web of trade routes that crisscrossed continents, bearing witness to Africa's participation in the global exchange of goods and ideas.

It is particularly noteworthy to delve into the western reaches of Africa, where empires such as Ghana, Mali, and Songhai flourished, crafting sprawling networks of international trade that traversed vast distances.

These great African empires drew sustenance from the lucrative taxation of foreign trade, channeling the resultant revenue towards the machinery of governance. Their economic prosperity hinged significantly on the commerce of gold, augmented by a mosaic of tariffs, levies, profits from overseas expeditions, and fees affiliated with administrative functions.

As elucidated in our prior discourse, and in accordance with the scholarly work of Joshua Dwayne Settles³, the advent of colonialism on the African continent ushered in a change of seismic proportions. This transformation reverberated throughout the very fabric of African societies, impacting the realms of intellectual thought, cultural evolution, political structures, and most notably, economic paradigms.

³ Settles D. J., The Impact of Colonialism on African Economic Development, in 'Tennessee Research and Creative Exchange', 1996

A pivotal aspect of this transformative process stemmed from the strategies and policies devised and executed by European powers during their colonization of Africa.

While it is incumbent upon us to acknowledge the variances that existed in the approaches undertaken by different European nations, a discernible common thread emerges in their overarching objectives. The overarching aim of colonialism was to harness the natural resources, human capital, and economic wealth of a region to serve the interests of the colonizing power. As Nwankwo et al. affirms ‘the first objective of colonialism is political domination. Its second objective is to make possible the exploitation of the colonized country’.⁴

European nations pursued this objective with a tenacious focus on fostering a trading system centered around coveted commodities and the cultivation of cash crops. Moreover, they masterminded an intricate trade network that bound the entire economic productivity of the colonized territories to the economic exigencies of the colonizing nations.

The inexorable march of colonialism, coupled with the arbitrary partitioning of Africa by European colonial powers, abruptly arrested the natural progression of Africa's economic, socio-cultural, and political development.

At its core, the primary strategy employed by European colonizers entailed territorial expansion aimed at establishing colonies, protectorates, or spheres of influence, thereby asserting a degree of dominion over the resources indigenous to those territories.

⁴ Nwankwo C. B., Ocheni S., Analysis of Colonialism and Its Impact in Africa, in ‘Cross-Cultural Communication’, vol. 8, n. 3, June 2012

‘The African colonies or territories were grouped into different categories. There were colonies that were sources of minerals; colonies for plantation crops; colonies for European settlement and colonies for peasant production’⁵.

This aggressive expansionism invariably precipitated the subjugation and exploitation of local populations through practices such as forced labor, exemplified by the sprawling plantations and the ruthless extraction of rubber in the Congo, among other instances.

These exploitative endeavors, in turn, engendered a complex system of trade between the colonized territories and their colonial masters, a system heavily skewed in favor of the latter.

It is here that we encounter a concept of paramount significance—the "Columbian exchange," as delineated by Alfred W. Crosby⁶. This theory, initially applied to the pre-Columbian era but eminently applicable in the colonial context, postulates an exchange of ideas, resources, and experiences between colonizers and colonies. While the concept of exchange typically connotes reciprocity, it is crucial to acknowledge that such reciprocity was conspicuously absent during the era of colonialism.

Hence, we are confronted with a profound asymmetry of resources, tilting the balance decisively in favor of the colonizers at the expense of the indigenous populations. This lopsided distribution of resources constituted one of the most potent and enduring legacies of colonialism.

The confluence of legal and political mechanisms further compounded this disparity, systematically favoring the interests of the colonizers while profoundly altering the fortunes of the indigenous peoples, leaving an indelible mark on the course of history.

⁵ Nwankwo C. B., Ocheni S., Analysis of Colonialism and Its Impact in Africa, in ‘Cross-Cultural Communication’, vol. 8, n. 3, June 2012

⁶ Specht, Joshua, and Etienne Stockland. *An Analysis of Alfred W. Crosby's The Columbian Exchange: Biological and Cultural Consequences of 1492*. Macat Library, 2017.

2.2 Factors contributing to population decline or stagnation

In the preceding section, we delved into a nuanced examination of the strategies deployed by European colonial powers during their dominance over Africa.

It is incumbent upon us to now illuminate a critical corollary of these strategies, one that had far-reaching and enduring consequences—the profound impact on the demographic dynamics of the African continent. European strategies, it must be noted, ushered in a set of circumstances that significantly contributed to the decline and stagnation of African populations.

These circumstances, arising from the confluence of various colonial factors, have exerted an indelible influence on demographic trends, the reverberations of which continue to shape the population landscape in contemporary times.

The multifaceted and intricate interplay of colonial factors has operated as a fulcrum upon which demographic trajectories in Africa have pivoted. This exploration, therefore, necessitates a meticulous dissection of the manifold colonial influences that have left an indelible mark on population trends. Such an undertaking compels us to scrutinize the intricate nexus of historical, social, economic, and health-related factors that have intersected to mold the demographic landscape of Africa.

By embarking on a comprehensive analysis of the myriad facets of colonialism's influence on population decline or stagnation, our objective is to unearth deeper insights into the enduring consequences of this historical phenomenon on the demographic composition of the regions that bore its weight.

It is essential to underscore that this paragraph serves as the inaugural juncture in our pursuit of the overarching hypothesis, which posits that the European colonial powers wielded a formidable influence on the demographic contours of the African continent.

Over the next three ensuing paragraphs within this chapter, we shall undertake a broader analysis, casting a wide net over potential factors that contributed to demographic shifts, if indeed they occurred. These paragraphs shall provide a panoramic overview, affording a comprehensive understanding of the complex dynamics at play.

In the subsequent section, our analytical lens shall narrow, as we embark on a meticulous case study—a deep dive into the Belgian Congo. This particular case study promises to illuminate the nuanced mechanisms through which colonialism's impact on demographics manifested in a specific context, allowing us to glean invaluable insights that may offer broader lessons applicable to the African continent as a whole.

In sum, the following pages shall constitute a comprehensive exploration into the multifaceted and enduring repercussions of European colonialism on African demographics, a scholarly endeavor that seeks to unveil the intricate tapestry of historical causality, social transformation, economic consequences, and health outcomes that continue to shape the demographic mosaic of Africa today.

2.2.1 Slave trade and disruption.

During this research, of great help were the studies and estimates of Professor Manning⁷ who greatly contributed to the accurate study of the African demographic context, both colonial and pre-colonial. Based on his studies and UNECA reports, it can be estimated that by the year 2000, Africa's population was around 800 million compared to 220 million in the year 1950: This shows an enormous and rapid growth that is still taking place today.

⁷ Manning P., African Population: Projections, 1850-1960, in 'Africa's Development in Historical Perspective', 2014

The aim is to understand the impact that the slave trade had on the African population from the 17th to the mid-19th century.

The exploitation of African peoples was a very delicate and closely connected piece of colonialism. To make an example, King Charles founded the Royal African Company and this shows us how this process was formalized and, not only that, but also welcomed by the administration of the time. The economic advantages were obviously twofold: on the one hand, the slave trade was profitable at that time, and, on the other hand, slaves were then employed on the plantations that were booming and flourishing in the American colonies at that time.

The most appropriate method to understand this impact is to start from a simulation proposed by Professor Manning in his paper: If we create a demographic model for the entire continent and focus our attention on the factor of age and gender distribution of those who were enslaved, we notice a considerable decline in the population. But why?

During the slave trade that accompanied most of the colonial era, the primary focus was on young adult males who were better adapted to the harsh working conditions to which they were subjected. But when in a society such as Africa's based on the male labor force this main component is missing, the suspected consequence is that of a hypothetical decline or, at the very least, a stagnation of the population.

As we have previously stated because of the high mortality rates, Africa based its growth on a large number of births, which are lacking with the absence of a young male component or at least a malnourished, exploited, and unhealthy one.

According to Professor Manning's estimates from 1730 to 1850 in Central and West Africa, the African population declined sharply, and again from 1820 to 1880 in East Africa.

The table below (Figure 2) shows Professor Manning's estimates of an expected crude growth rate per decade that does not consider the export of slaves. As we can see from the mid-19th century to the

mid-20th century the population growth rate increased, looking at 2.4 in 1951-60. The general assumption is that mortality rates fall sharply and very quickly while births remain relatively constant over time, consequently, the population increases.

In the 1910s to 1920s, on the other hand, a slight decline in growth rates was assumed due to wars, economic depression, and declining fertility.

In the decades of the mid-1800s, on the other hand, the table shows, until the early 1900s, a substantial stagnation in growth, which stops at 0.3%.

The hypothesis set out, therefore, in this thesis is whether indeed this decline and stagnation were caused by phenomena brought about by colonization since the periods of degrowth coincide with the latter.

Figure 2: Africa: Default growth rates

<i>Decade</i>	<i>Annual growth rate in percent</i>
1951–60	2.4
1941–50	1.5
1931–40	0.8
1921–30	1.0
1911–20	0.2
1901–10	0.3
1891–1900	0.3
1881–90	0.3
1871–80	0.3
1861–70	0.2
1851–60	0.2

Source: Manning P., African Population: Projections, 1850-1960

The next table (Figure 3) instead shows regional percentages of continental population for 1850 and 1950, showing which regions grew, and which declined during that century in relative terms.

Those that declined relatively included Tanzania and Mozambique but also Loango, Eastern Sudan, and Chad. Relatively unchanged were the Horn, Ivory Coast, Madagascar, Central Sudan, and Western Sudan. For the Bights of Biafra and Benin, slave exports ended relatively early, and prosperity fed colonial era growth rates. For Tanzania and Mozambique, the prolonging of slave exports to the end of the nineteenth century slowed long-term growth.

Figure 3: Africa: Mid-level estimated populations, by slave-trade regions

	1850	% 1850 Population	1950	% 1950 Population	Difference in %
Senegambia	2,020,997	1.9%	3,529,000	2.2%	+0.3%
Upper Guinea	3,562,752	3.3%	5,892,000	3.6%	+0.3%
Ivory Coast	1,568,935	1.5%	2,505,000	1.5%	+0.0%
Gold Coast	3,043,167	2.8%	5,381,839	3.3%	+0.5%
Bight of Benin	4,114,997	3.8%	7,222,478	4.4%	+0.6%
Bight of Biafra	6,162,335	5.7%	10,852,100	6.7%	+1.0%
Forest	433,858	0.4%	639,856	0.4%	+0.0%
Loango	7,487,167	7.0%	10,555,304	6.5%	-0.5%
Angola	4,015,345	3.7%	6,377,597	3.9%	+0.2%
Mozambique	8,392,608	7.8%	10,540,905	6.5%	-1.4%
Madagascar	2,816,274	2.6%	4,234,000	2.6%	+0.0%
Tanzania	11,208,394	10.4%	14,500,789	8.9%	-1.5%
Kenya	8,260,923	7.7%	13,691,000	8.4%	+0.7%
Horn	13,522,949	12.6%	21,901,000	13.4%	+0.8%
Eastern Sudan	6,557,378	6.1%	9,190,000	5.6%	-0.5%
Chad	2,442,180	2.3%	3,086,000	1.9%	-0.4%
Central Sudan	15,940,740	14.8%	24,564,422	15.1%	+0.3%
Western Sudan	5,823,418	5.4%	8,502,161	5.2%	-0.2%
Total ¹	107,374,417	100 %	163,165,451	100 %	

Source: Appendix B18

¹The totals refer to populations for the African regions from which captives were exported, and thus exclude North Africa and Southern Africa; the percentages refer to portions of those totals.

Source: Manning P., African Population: Projections, 1850-1960

Manning to confirm the thesis then proposes an estimate of the impact that certain situations may have had on the demographic growth of the African population.

Figure 4: Situational modification to growth rate

<i>Type of modification</i>	<i>Maximum annual magnitude (percent)</i>
a. Slave-trade disorder	-0.2
b. Sub-Saharan slave exchanges	+ or -0.3
c. Sub-Saharan slave exports	-0.6
d. Post-slave-trade recovery	+0.4
e. Colonial disorder	-0.4
f. Income growth	+0.2
g. Migration of free people	+ or -0.6
h. Epidemic and famine	-0.5

Source: Manning P., African Population: Projections, 1850-1960

In the table shown above (Figure 4), we note several events that led to the population change with their annual magnitude.

The first three focus on the impact the slave trade had. As we know, the export of slaves across the Atlantic supposedly ended around 1950 but, at the same time, the export to sub-Saharan Africa and North Africa continued into the first decades of the 1900s.

This is consistent with the growth estimates shown above where we can see how during most of the 1800s growth remained stagnant at 0.3%, We have a sudden decline in the early 1900s (0.2%) and then increase again from the second half of the 1900s.

This coincides with the beginning of the independence of the African continent which took place around the second half of 1900- the year 1960 is called the year of Africa- where as many as 17

countries declare their independence: A clear example is the Congo which in 1960 declares its independence from Belgium.

According to the present estimates, therefore, it would appear that the population has more than significantly declined, and entered a stagnant situation on average, and once the slave trade ended, it is assumed instead not only a decline in the mortality rate, but also an increase in birth rates, which is assumed to be mainly due to both a gradual increase in the young male population that was no longer being exported and exchanged, and also an improvement in health conditions.

This event is referred to by Professor Manning as the '*post-slave trade recovery*' which contributed to the 0.4% increase in population rates.

2.2.2 Colonialism, new diseases, and exploitative forced labor

The end of the slave trade coincides with the harshest period, however, of colonialism, which although it brought *imperial peace*, as Manning states, also brought with it other types of unrest.

Especially for the French and Belgian colonies, which, not least, are the colonies that will be analyzed in this thesis, there was a decline in population due to several factors.

Firstly, colonial recruitment for forced labor greatly influenced the seasonal production cycles. The reasoning made above also applies here: the absence of labor in African societies.

This in turn inevitably led to increasing malnutrition and higher mortality rates. Manning calls this '*colonial disorder*' and associates it with a reduction in population growth of about 0.3% per year.

The forced labor component is one of the most important aspects believed to have influenced African population growth, this will be further highlighted by the Congo case study in the last section of this second chapter.

In addition, another substantial component was the spread of diseases brought by European colonizers, particularly European and African officials, which contributed to a decline in fertility rates.

By 1600, Western countries had already faced several epidemics and, as we now know, had, as a consequence, developed antibodies to protect them from subsequent attacks.

The African populations, on the other hand, had never come into contact with them and the effect was what Todorov⁸; albeit referring to pre-Columbian populations, defined as '*bacteriological warfare*' and, although not aware of it, this was exactly what happened.

Moreover, epidemics are followed by a very often inevitable consequence: famine. People get sick and can no longer think about the needs of themselves and their families or, indeed, the entire community. After all, without labor power, survival is almost impossible.

Epidemics and famines have therefore in turn led to a high mortality rate, reducing population growth according to Manning by 0.5% per year.

During this research process to pursue my thesis, there were several countries that I researched and noted as having suffered the greatest effects.

Take, for example, Namibia under German colonization: a census shows that the population, only that of the Herero and not of the entire region, amounted to 100,000, after 1905 it had been reduced to 25,000. One can, of course, find differing opinions on this, but one thing is certain, compared to the German losses of 1,500 soldiers, some of whom also died of disease, that of the local populations was on a completely different level.

⁸ Todorov Tzvetan. *La conquista dell'America*. Torino: Einaudi, 1984.

It should be specified that not all regions of Africa suffered the same effects and impacts over time. For example, for the West African colonies on the coast, the growth of income from agricultural exports led to higher fertility rates.

It is good to remember while reading this dissertation that Africa is a vast continent that has experienced different colonizers and consequently different demographic impacts.

The following table (Figure 5) shows the different events that impacted the different African regions the most.

Figure 5: Outline of modifications to the growth rate

<i>Region</i>	<i>1850s–90s</i>	<i>1900s–20s</i>	<i>1930s–50s</i>
North Africa	c) slave immigration g) free immigration	g) free immigration	
West African savanna	a) slaving disorder b) slave exchanges c) slave emigration	d) post-slaving recovery e) colonial disorder g) free out-migration	g) free out-migration
West African coast	b) slave exchanges d) post-slaving recovery	f) income growth g) free immigration	f) income growth g) free immigration
Central Africa	a) slaving disorder b) slave exchanges d) post-slaving recovery	e) colonial disorder h) epidemic	
Northeast Africa	a) slaving disorder b) slave exchanges c) slave emigration h) epidemic	d) post-slaving recovery e) colonial disorder h) epidemic	
East Africa	a) slaving disorder b) slave exchanges c) slave emigration h) epidemic	d) post-slaving recovery e) colonial disorder h) epidemic	f) income growth
Southern Africa	e) colonial disorder	f) income growth g) free immigration	g) free immigration

Source: Manning P., African Population: Projections, 1850-1960

2.2.3 A new view of African demography

The outcomes of our meticulous analysis unfurl a compelling narrative of the African population's evolution over time.

As of 1850, our examination reveals the presence of a continental African populace amounting to approximately 140 million souls.

This demographic landscape, marked by relative stability, exhibited little variance through the ensuing seven decades, holding steady until the threshold of 1920.

It is in this period of interwar years that we perceive the stirring of change, as the African population embarked on a trajectory of accelerating growth.

By the onset of the 1960s, Africa's populace had burgeoned to a sizeable 280 million, and by the turn of the millennium in 2000, it had swelled to an astonishing approximate 800 million individuals. The zenith of this demographic upsurge manifested in the 1960s when growth rates soared to their pinnacle, and although they have since ebbed, their decline has been gradual, sustaining a substantial momentum.

The most profound and consequential shift in the structure and organization of the African population, a true demographic watershed, unfolded between the years 1850 and 1950.

The dawn of the 20th century, in particular, ushered in an era of extraordinary demographic transformation, marked by profound modifications that bore the unmistakable imprint of colonial influences.

The entire century that dawned in 1850, but especially the period following the year 1900, stands as incontrovertible evidence of a sweeping and unparalleled demographic metamorphosis—a metamorphosis that was undeniably catalyzed and shaped by the profound forces of colonialism.

These forces, both overt and subtle, exerted a profound impact on the demographic regime of the African continent, orchestrating changes that reverberate in the annals of history, underscoring the paramount significance of colonial factors in shaping Africa's demographic destiny.

2.3 The Case of Congo: specific colonial practices and their demographic consequences

The demographic research I want to carry out within this dissertation is remarkably broad and wide-ranging. As I stated earlier, it would be difficult if not impossible to narrow down the analysis of an entire continent within this dissertation, which is why, and because a dissertation must be supported by specific cases, the aim is to focus, in this case, on the Belgian Congo and how colonialism impacted on the demography of this country.

The pieces of information I am going to bring to light on this case study have the purpose of bringing out in detail what has been said so far in the previous paragraphs: to corroborate the hypothesis of a hypothetical decline or stagnation of the population during the slave trade and colonial periods.

When Manning speaks of '*colonial disorder*', '*slaving disorder*', and '*epidemic and famine*' in his research, he relates them to the African continent as a whole and divides his research by regional spaces. The aim of this thesis is, instead, to apply these variables to a particular country to see more closely the possible consequences that have occurred over time.

In the introduction to "Demographie Coloniale Congolaise: Entre Speculation, Idéologie et Reconstruction Historique," Jean-Paul Sanderson⁹ highlights the contentious and poorly understood

⁹ Sanderson J.P. La demographie du Congo sous la colonisation Belge, UCL 2010

nature of the impact of European colonization on the demographic changes in Congo. Various historical interpretations have relied on demographic statistics, but these numbers often lack critical examination of their origins, leading to a limited understanding of Congolese demographic history.

Sanderson addresses this issue by delving deep into colonial demographic archives and systematically analyzing various sources to provide a well-researched, scientifically grounded study.

Sanderson explores what was known about the Congolese population, outlining three major demographic eras: a period of high mortality and low birth rates from 1875 to 1925, a plateau period from the mid-1920s to the late 1930s, and a period of increased investment in medical infrastructure until independence in 1960.

Interestingly, in 1919, the Standing Committee for the Protection of Indigenous Peoples noted that "[...] it is no exaggeration to say that, as a whole, it [the population of the Belgian Congo] has been reduced by half"¹⁰.

This period and the one before 1908 were enormously troubled for the Congo to the extent that Adam Hochschild¹¹ described it as one of the darkest periods in Congolese history.

During these two key periods before independence, Leopold II and later the Belgian state employed every means to develop rubber cultivation through forced labor which exacerbated the African situation.

Preliminary research to understand the extent that Belgium has had on the Congo resulted in staggering demographic data to the point of declaring the deaths at around 10 million.

¹⁰ Sanderson J.P. *La démographie du Congo sous la colonisation Belge*, UCL 2010

¹¹ Hochschild, A. (2006). *King Leopold's Ghost: A Story of Greed, Terror, and Heroism in Colonial Africa*. pp. 225–33

Today, however, subsequent and more accurate research estimates that the Congolese population halved between 1885 and 1920 and only began to grow again from 1930 onwards.

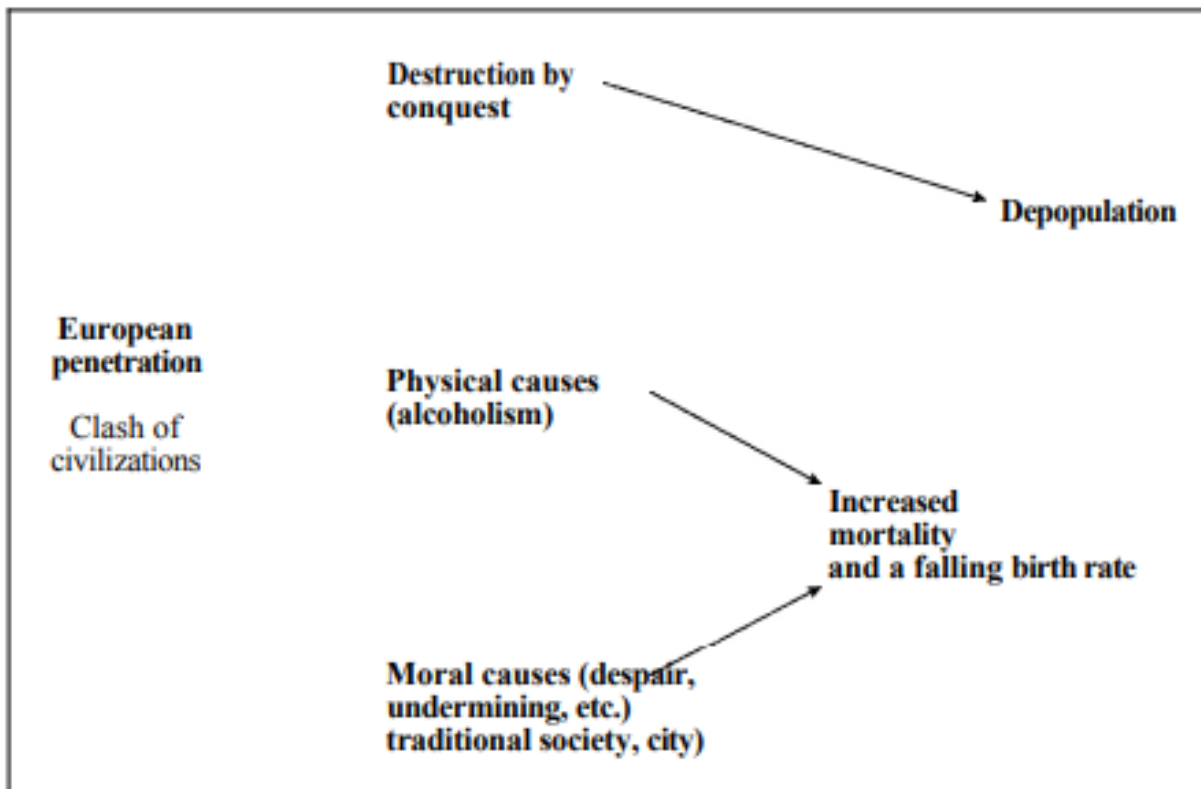
The purpose of this paragraph is therefore to apply the data cited in the previous paragraphs to answer a single question: *is the decline of the Congolese population under Belgian domination a myth or reality?*

This will lead us to an even better understanding of the demographic effect that European domination had in Africa.

In 1931 at the International Congress for Population Studies in Rome, Maunier¹² presented a paper showing the causes of depopulation and he identified the major causes associated with the phenomenon shown in the table below (Figure 6).

¹² Sanderson J.P. La demographie du Congo sous la colonisation Belge, UCL 2010

Figure 6: Causes of depopulation in colonized countries



Source: Maunier, 1934 in Sanderson J.P. La démographie du Congo sous la colonisation Belge, UCL 2010

European intrusion had a profound impact on colonized societies, manifesting in three significant aspects. Firstly, Europeans enforced their presence through conquest, destroying the native way of life. Secondly, colonization introduced a devastating problem in the form of alcoholism, which inflicted considerable harm on the indigenous population. Lastly, and this diagram underscores this facet, there were ethical factors at play.

During Belgian colonization, Congo's demography was significantly impacted by slavery, forced labor, and epidemics. While it's important to note that obtaining precise statistics from this period can be challenging due to limited and often unreliable historical data, historical research provides some insights into the demographic changes that occurred:

1. Slavery:

- **Transatlantic Slave Trade:** Before Belgian colonization, the Congo was already affected by the transatlantic slave trade, which resulted in the forced displacement and enslavement of millions of Africans over centuries. Exact statistics on the number of Congolese people enslaved during this period vary, but it had a significant impact on the population.
- Exact numbers are difficult to ascertain, but it's estimated that millions of Congolese people were subjected to forced labor, violence, and death due to slavery.

2. Forced Labor:

- **King Leopold II's Regime:** Under King Leopold II's rule (1885-1908), the Congo Free State was marked by extreme exploitation and forced labor, primarily for resource extraction, particularly rubber. Millions of Congolese were subjected to brutal working conditions, leading to a significant loss of life. Exact mortality figures from this period are a subject of historical debate, but estimates suggest that several million Congolese may have died due to forced labor and related abuses, overwork, disease, and mistreatment. In particular, this second point explained is strictly connected in Congo with the wild rubber boom.

3. Epidemics:

- **Disease Outbreaks:** The introduction of European diseases, such as smallpox, measles, and influenza, to which native Congolese had little immunity, resulted in devastating

epidemics. The consequences were also famine already exacerbated by the presence of rubber companies which worsened the effect of natural disasters.

4. Population Loss:

- Estimates suggest that the population of Congo, which was around 20 million at the start of Belgian colonial rule, may have decreased significantly during this period. However, all of these factors contributed to the increase in the mortality rate and death rate due to the conditions in which they were subjugated. In the same way due to malnutrition and exploitative labor, the infant mortality rate rises, and the fertility rate goes down rapidly.

Some research conducted by J. P. Sanderson has shown, however, that there were differences in Congo according to province. Interestingly a comprehensive national survey conducted during 1955-1957 unearthed a notable contrast in fertility rates within Equateur province, particularly in the Tshuapa district, which exhibited significantly lower fertility when compared to the national average, as documented by Romaniuck in 1967. On a separate note, the province of Katanga drew attention due to its distinctive population growth pattern, closely associated with the emergence of non-traditional centers and a decline in mortality rates.

This outcome brings to light the unique circumstances characterizing this province, which have been notably shaped by the influence of the Union in the mid-1990s and makes us understand the different impacts of colonialism not only in the whole continent but also in a single region.

However, going beyond the regional differences, various researchers have observed a population decline in the Congo during the transition from Leopold's control to Belgian state rule in 1908.

However, estimates of the death toll vary significantly due to a lack of reliable demographic sources for the region and the sometimes-unverified numbers reported by contemporaries in the late 19th and early 20th centuries.

Some contemporary scholars suggested that the population halved during this period. For example, Edmund D. Morel¹³ mentioned that the Congo Free State had around "20 million souls." Other estimates point out a possible decline which goes from two to 13 million. Roger Casement¹⁴, cited by Ascherson, estimated a population decline of three million but he also specified that according to his studies, it was likely an underestimate. Peter Forbath¹⁵ estimated at least 5 million deaths. John Gunther also proposed a minimum of 5 million deaths and a maximum of 8 million. Raphael Lemkin¹⁶ even affirmed that 75% of the population died.

Since no census data was available for the region at the beginning of the Congo Free State (the first census was conducted in 1924), the exact population change during this period remains unknown. However, demographer J.P. Sanderson estimated the population in 1885 to be around 10–15 million people and, in 2020, proposed three possible scenarios of population decline under Leopold II. He suggested that the most likely scenario was a population decline of 1.5 million people, from 11.5 million people to around 10–10.3 million people during the Congo Free State period.

Other scholars estimated even higher numbers of deaths. Adam Hochschild and Jan Vansina approximated the number at 10 million. Hochschild used various local sources (police records, religious records, oral traditions, genealogies, personal diaries), which generally supported the conclusion of the 1919 Belgian government commission: **approximately half the population perished during the Free State period.** Since the first official Belgian census in 1924 recorded a

¹³ Morel, E. D. (1904) *King Leopold's Rule in Africa*. London: William Heinemann, p. 105

¹⁴ Ascherson, Neal (1999). *The King Incorporated: Leopold the Second and the Congo* (New ed.). London: Granta

¹⁵ Forbath, P. (1977). *The River Congo: The Discovery, Exploration, and Exploitation of the World's Most Dramatic River, 1991 (Paperback)*. Harper & Row

¹⁶ Schaller, Dominik (2005). "Raphael Lemkin's view of European colonial rule in Africa: between condemnation and admiration" (PDF). *Journal of Genocide Research*.

population of about 10 million, these approaches suggested a rough estimate of a population decline of 10 million.

Jan Vansina¹⁷ later revised his estimate, indicating that the Kuba population, was one of the Congolese populations. Some scholars argued for a 20 percent decrease over the first 40 years of colonial rule, up to the 1924 census.

Historian Isidore Ndaywel è Nziem initially claimed that 13 million people died, though he later adjusted this number downward to 10 million.

At this point the question no longer becomes whether the European impact has contributed to a decline or stagnation of the population in Congo, it is clear from the various sources analyzed that the colonization factor has influenced Congolese demography. What remains uncertain is the magnitude it has caused. Unfortunately, one can only rely on rough estimates here due to the lack of past data.

In any case, it is clear that the European incursion into Congo led to important and diverse demographic changes that cannot be ignored or excluded in this research.

But if it is clear that colonialism had a demographic impact significant enough to alter the demography of some areas, is it possible, on the other hand, to say that colonialism also contributed to a much later repopulation?

¹⁷ Vansina, Jan (2010). *Being Colonized: The Kuba Experience in Rural Congo, 1880–1960*. Madison, Wisconsin: University of Wisconsin Press. pp. 127–49.

Europe as a Guarantor of Demographic Development

3.1 Analysis of Europe's Role in colonial Africa: natalism theory

In the previous chapter, we analyzed the different variables that influenced the demographic transformation that occurred in Africa between 1800 and 1900, particularly focusing on the effect that the slave trade and colonialism had on the continent as a whole.

Understanding, therefore, the impact that the European incursion had on Africa is neither an easy task nor one without its antitheses and contrasts. Several scholars have gone into their research to understand whether the impact was positive or negative, or rather, as Manning states, whether the benefits outweighed the costs. In this thesis, the aim is not to understand whether or not the costs outweighed the benefits but, instead, whether the European presence could have contributed over time to a repopulation of the African continent. It is interesting here to reproduce the table (Figure 2) already shown in chapter two where the growth rates of the continent per decade proposed by Professor Manning are highlighted.

Figure 2: Africa: default growth rates

<i>Decade</i>	<i>Annual growth rate in percent</i>
1951–60	2.4
1941–50	1.5
1931–40	0.8
1921–30	1.0
1911–20	0.2
1901–10	0.3
1891–1900	0.3
1881–90	0.3
1871–80	0.3
1861–70	0.2
1851–60	0.2

Source: Manning P., African Population: Projections, 1850-1960

As we can see, during the decades of imperialism, followed by colonialism, the growth rate remained steady at 0.3%, then fell by 0.1% between the early 1900s and the first half of the century. From 1930 onwards, according to Manning, there is instead a progressive growth in demographic rates.

It should be specified that demographic transitions are not events that happen overnight but are progressive transformations and very often the causes lie years before when the effect begins to be felt. Therefore, it has been debated over time whether colonialism somehow gave a boost to the population growth in Africa that occurred over time.

This hypothesis goes hand in hand with the Natalist Theory¹⁸ which sees Africa in a framework of Demographic Transition Theory and states that pre-colonial African societies were characterized by large fertility rates to compensate for large mortality rates caused by various factors.

Yet according to this pre-colonial theory, Africa was characterized by sparsely populated areas, and with the contribution of European medicine, the so-called imperial peace of colonialism, and the contribution of a different economic and political system, famines decreased and consequently, the mortality rate went down, while the fertility rate remained high, contributing to new births.

This theory proposed by John Caldwell¹⁹ therefore a paradox overturns the most common assumption of the negative impact of colonialism and puts it in a different light by associating it not with a high mortality rate but with a lowering of it.

Just as it is true that the European impact of colonialism and the slave trade contributed to a partial depopulation that varies from region to region in Africa, it is evident that from 1930 onwards we can

¹⁸ Iliffe J., Review Article: The Origins of African Population Growth, in 'Journal of African History', vol 30, 1989

¹⁹ J. C. Caldwell, 'The social repercussions of colonial rule: demographic aspects', in A. Adu Boahen (ed.), UNESCO General History of Africa, VII (London, Paris and Berkeley. 1985)

see an ever-increasing population growth in Africa if we compare the numbers of 114 million in 1850 and about 166 million in 1930 and finally, within 20 years, 240 million in 1950.

From 1930 onwards there was a rapid population growth not previously noticeable, yet some argue that there is no convincing evidence to show that colonial medicine and innovations brought by Europeans made this growth possible.

‘The major impact of colonialism in African is that it brought about the under-development of African territories in many different ways. It is usually argued in favour of colonialism that it brought western education and hence western civilization to the shores of Africa which by implication is a positive contribution towards African development. This argument will appear to be true on the surface level’²⁰.

In the table below we can see how more or less since the mid-1900s the population in the south (i.e. Africa and Asia excluding Japan, Australia, and New Zealand) has increased exponentially. This is what is called the 'global demographic transition'.

Figure 2: Population size estimates, 1900-2005

²⁰ Nwankwo C. B., Ocheni S., Analysis of Colonialism and Its Impact in Africa, in ‘Cross-Cultural Communication’, vol. 8, n. 3, June 2012

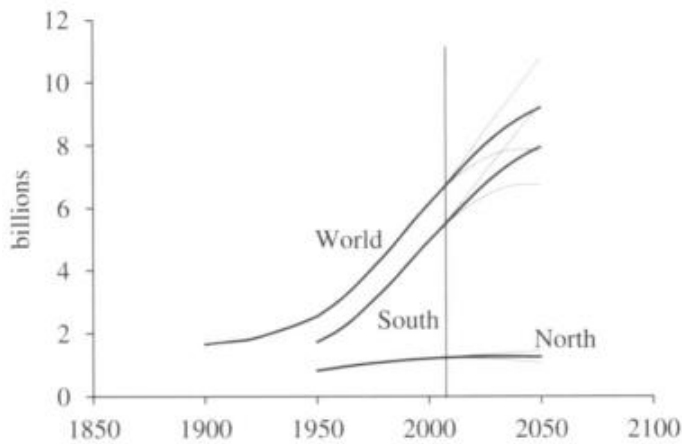


Figure 1. Population size estimates, 1900–2005 and projections 2005–2050. High, medium and low variants.

Source: Bongaarts J., Human Population Growth and the Demographic Transition, in ‘Philosophical Transactions: Biological Sciences’, vol. 364, n. 1532

In the next section, assuming that this growth may actually and partially be due to the European impact on the continent, we will bring to light what were the possible factors that contributed to this great and rapid transformation.

3.2 Factors contributing to population growth

When we talk about the hypothetical factors that could have contributed to the successive population growth in Africa, we mainly focus on two aspects, the medical and the technological.

The European colonization of Africa had significant technological and medical implications.

1. Technological Advancements:

- **Transportation:** Europeans brought advanced transportation technology to Africa, including steamships and railways. These innovations facilitated the movement of goods and people across the continent.

- **Communication:** The construction of telegraph lines allowed for faster communication between European colonial authorities and their home countries.
- **Infrastructure:** European colonial powers built roads, bridges, and other infrastructure to support their economic interests.

2. Medical Advancements:

- **Healthcare Infrastructure:** Europeans established healthcare systems in their colonies, including hospitals and clinics, which aimed to serve the needs of European settlers and colonial officials.
- **Medical Research:** European medical researchers studied diseases in Africa and made some important discoveries. For instance, Sir Ronald Ross's work on malaria transmission in Africa led to a better understanding of the disease globally.
- **Vaccination and Treatment:** Europeans introduced vaccines and treatments for diseases like smallpox and yellow fever, which had devastating effects on local populations.
- **Public Health Measures:** European colonial administrations implemented public health measures such as sanitation and hygiene improvements in certain areas, which helped reduce the prevalence of some diseases.

3.2.1 Healthcare interventions and mortality rate

At the turn of the century, Europeans still held onto beliefs about the supposed immunity and natural biological advantages of Africans living in their home continent.

However, these convictions gradually started to crumble. Colonial authorities began to believe that Africans were susceptible to a wide range of tropical diseases and that the overall health and survival rates among them were quite low.

This shift in perspective was partly driven by the expanding European presence in Africa, which yielded new data about the actual prevalence of diseases among African populations.

Additionally, it was influenced by changing views on the value of the African population for European colonialism. Given the unresolved challenges of acclimatization, having a healthy and growing African population became increasingly important for both the economic development of these colonies and the perceived legitimacy of colonial rule²¹.

They also believed in a vague mission to "civilize," "improve," and "develop" the populations they governed, establishing governance structures that gave European officials, often unfamiliar with the regions, significant political and cultural authority over the Africans.

Given this emphasis on improvement, health initiatives played a crucial role, as they were a visible and seemingly uncontroversial way to address the needs of the African population.

Consequently, a significant portion of development funds earmarked for social welfare went to medical projects, and medical personnel comprised the majority of employees in the technical services of each colonial state.

Moreover, colonial attempts to establish export-oriented economies had similar negative impacts on the health of Africans. Whether people were engaged in mining, construction, or agricultural projects, they often lacked adequate workplace safeguards and fell victim to diseases brought on by their strenuous work.

For example, in mining regions like Southern Africa and the Belgian Congo, workers saw significant spikes in tuberculosis rates.

In areas with large-scale plantation agriculture, they became more susceptible to diseases transmitted through water, mosquitoes, and worms due to changes in their living environments.

The need was therefore felt on the one hand to protect the labor force that drove the European economy forward and thus to lower the mortality rate that had risen mainly due to the intensive exploitation of the African population.

The campaigns to combat diseases in Africa were expensive in terms of both finances and the number of people involved. These substantial investments were driven by European concerns that these diseases could lead to the depopulation of entire regions. This, in turn, would reduce the availability of the African labor force, which was seen as essential for the "development" of their tropical colonies.

²¹ Coghe S., Disease Control and Public Health in Colonial Africa in Oxford Research Encyclopaedias (<https://oxfordre.com/africanhistory/display/10.1093/acrefore/9780190277734.001.0001/acrefore-9780190277734-e-620>), November, 2020

Nevertheless, these efforts would be carried out by flexible and mobile teams, especially in regions like French, Portuguese, and Belgian Central Africa. They would also be incorporated into broader plans known as "Assistance Médicale aux Indigènes" or Medical Assistance for Natives. At the same time, new methods and ideas for understanding and addressing diseases started to develop.

Colonial medical professionals also began to rely more on demographic information to identify health issues and assess the effectiveness of ongoing health initiatives.

Since there were no reliable civil registries or population censuses in place, these colonial healthcare workers started generating more intricate and up-to-date data regarding the birth rates, death rates, and migration patterns of rural African communities. They achieved this through the use of medical records and surveys based on interviews with a sample of the population.

Another important aspect besides lowering the mortality rate was to increase the birth rate among African populations through careful policies.

Moreover, colonial governments implemented various policies to address issues of undernourishment and malnutrition among the African population. One approach involved providing better diets to certain groups of Africans.

This primarily included plantation and mine workers, as well as colonial soldiers, who were given scientifically calculated and improved food rations tailored to the strenuous labor they were expected to perform. Additionally, children sometimes receive extra nutritional support.

During the 1920s, larger cities saw the establishment of infant welfare centers that distributed baby milk to improve child nutrition. In the 1950s, colonial and international efforts targeted rural areas to combat kwashiorkor, a protein deficiency disease affecting children. These campaigns provided skimmed milk and, in some cases, other high-protein supplements to address the issue.

Although it is clear that the European incursion has had an impact on medical and health development in Africa, it is also true that on-the-ground efforts to control diseases were not consistent throughout different regions.

While knowledge and best practices were shared across imperial and colonial borders, the actual implementation of disease control measures varied between empires and colonies. This variation was influenced by factors such as distinct political, economic, and financial circumstances.

Even within a single colony, there were noticeable disparities between regions and population groups. Some areas and communities were considered more vital to the success of the colonial endeavor, receiving more attention and resources for disease control.

Additionally, gender and age played discriminatory roles in these efforts, with certain groups receiving more support and focus than others.

It is difficult to ascertain what the actual outcome of this medical spread in Africa was and whether it really contributed to and caused the subsequent population growth.

It certainly prevented total depopulation due to all the negative consequences of colonialism such as exploitation, the spread of various diseases, and famine.

3.2.2 Technological advancements and migration

Another pivotal aspect that likely contributed significantly to the remarkable population growth in Africa was the array of technological advancements ushered in by Europeans, especially in the realms of transportation, infrastructure, and agriculture. These innovations, embedded within the fabric of colonial enterprise, played a multifaceted and transformative role in shaping demographic trends across the vast and diverse African continent.

To commence our exploration, it is essential to acknowledge how the advent of more efficient means of transport engendered a substantial transformation in the movement of people and goods across Africa.

These improvements in transportation networks not only facilitated the ease of travel but also expedited the exchange of goods, giving rise to a dynamic economic landscape. The development of extensive railway lines, well-paved roads, and navigable waterways significantly expanded the geographical reach of trade and commerce, fostering regional and even intercontinental integration. The enhanced mobility of goods and people ignited a web of economic activities, stimulating trade, investment, and entrepreneurial ventures that, in turn, propelled population growth in various regions.

Furthermore, the infrastructural investments made by colonial powers held a dual-edged significance. On one hand, they contributed to the establishment of crucial healthcare facilities, which had a direct and profound impact on the well-being of the population.

The presence of well-equipped hospitals, clinics, and advanced sanitation systems bolstered public health, mitigating the deleterious effects of diseases that had once wreaked havoc on African communities. This improvement in health infrastructure resulted in decreased mortality rates, longer life expectancies, and increased population growth.

Additionally, the overarching umbrella of infrastructure development laid the foundation for economic expansion. The creation of facilities that supported industries, agriculture, and trade galvanized economic activities, which, in turn, stimulated population growth.

The construction of warehouses, factories, and processing plants served as catalysts for economic development, driving job creation and urbanization, which further bolstered population figures across various regions.

A noteworthy technological advancement in the agricultural sector played a pivotal role in alleviating the persistent issues of malnutrition and famine on the continent. Colonial administrations recognized the pressing importance of addressing these challenges and initiated comprehensive efforts in various domains.

This included collaborative endeavors between nutritional scientists, medical professionals, agricultural experts, and colonial administrators. It is worth noting that it wasn't until the 1920s that colonial powers fully acknowledged the widespread issue of chronic undernourishment and malnutrition among many Africans.

Undernourishment, characterized by insufficient calorie intake, and malnutrition, indicative of unbalanced diets lacking essential nutrients, were found to exert significant adverse effects on the health, work capacity, and reproductive success of the African population.

In response to these challenges, colonial authorities initiated agricultural reforms, introduced more efficient farming techniques, and promoted the cultivation of diverse crops, which not only addressed the issue of food scarcity but also contributed to the overall improvement of public health and population growth.

Furthermore, the advent of technological advancements is intimately intertwined with the phenomenon of migration. As European-style cities began to emerge and flourish within the colonies, an increasing number of individuals chose to settle there as bona fide citizens.

The allure of these burgeoning cities, with their modern amenities, economic opportunities, and cosmopolitan lifestyles, beckoned people from diverse backgrounds, regions, and walks of life.

This migration wave ushered in a transformative socio-cultural dynamic, fostering an eclectic blend of traditions, languages, and customs within the urban fabric.

The influx of settlers, often comprising not only European colonizers but also individuals from other parts of the world, contributed to the rich tapestry of diversity that became emblematic of many African cities. This convergence of diverse cultures and experiences, catalyzed by the attraction of urban life amid technological progress, further enriched the African continent's social and demographic landscape, leaving an indelible mark on its history and identity.

This often contributed to an increase in population size in the affected regions.

The establishment and growth of these cities attracted people from rural areas and sometimes from other parts of the world seeking better economic opportunities, improved living standards, and access to modern amenities.

This influx of settlers and migrants swelled the urban populations, which, in turn, contributed to overall population growth within the respective colonial territories. Additionally, the blending of diverse cultures and backgrounds within these urban centers fostered demographic diversity, enriching the demographic landscape of the African continent as a whole.

This demographic shift not only fueled the development of infrastructure and transportation systems but also spurred advances in medical and healthcare services.

Initially, these services were primarily focused on the well-being of the colonizing population; however, as the recognition grew that the African population constituted an integral component of the colony's workforce, their health and productivity became inextricably linked with the colony's economic performance.

This paradigm shift prompted a more inclusive approach to healthcare and led to the improvement of living conditions for the African labor force, thereby nurturing population growth.

Furthermore, certain colonial policies were specifically aimed at facilitating the transportation and sale of agricultural products by enhancing road infrastructure and improving market access. While these initiatives did enhance internal transportation within specific regions, they often prioritized routes connecting resource-rich areas with coastal ports.

Unfortunately, this selective approach occasionally left many interior regions underdeveloped, with limited access to the benefits of infrastructure improvements. Nevertheless, these endeavors were

instrumental not only in facilitating economic activities but also in consolidating European control over African resources, thereby enabling more efficient resource exploitation.

The economic impetus generated by such infrastructure investments contributed to the growth of various African communities, although the benefits were not always distributed equitably.

However, it is essential to approach these technological and medical advancements within the context of colonialism with a critical perspective. Many of these developments were exploitative in nature and primarily designed to serve the interests of the colonizers. Local populations frequently found themselves subjected to forced labor, involuntary displacement, and discriminatory healthcare practices.

Furthermore, the relentless exploitation of Africa's rich natural resources, including minerals and agricultural products, had long-term economic and environmental consequences that continue to affect the continent's development trajectory to this day.

Hence, while acknowledging the multifaceted impact of these technological advancements, it is crucial to recognize the often complex and exploitative dynamics that underpinned their implementation during the era of European colonization in Africa.

These dynamics shaped the demographic trajectory of Africa in profound and lasting ways, reflecting the intricate interplay between colonialism, technology, and population growth.

3.3 The Case of Algeria: the role of the Medical Corps and their demographic consequences

As previously done in chapter two, this third chapter culminates with the case study of Algeria, the aim being, as already stated, to apply the concepts expressed in general to the particular.

Chapters two and three represent two mirror chapters but with two different hypotheses and case studies precisely for comparison and contrast.

As Patricia M. E. Lorcin²² states, the military administration of Algeria lasted more or less forty years and laid the foundations for the creation of the French colony.

²² Lorcin M. E. P., *Imperialism, Colonial Identity, and Race in Algeria, 1830-1870: The Role of the French Medical Corps*, in 'Isis', vol. 90, n. 4, December 1999

An important presence in the French colony was certainly that of the medical corps and this allowed it on the one hand to increase its ambition and influence on subsequent developments within the colony itself.

The medical unit that accompanied the expeditionary force initially focused on providing healthcare to the troops and primarily served a military function.

The physicians, surgeons, and pharmacists were all part of the army, drafted, stationed, and compensated according to military regulations. While a few, such as Eugene Bodichon and Auguste Warnier, eventually transitioned to civilian practices, most of them continued to work within the military framework.

However, as the military campaign progressed from conquest to pacification and eventual occupation, the local population became increasingly involved with French medical services. The primary medical objective was initially to prevent and treat diseases, which led to a growing curiosity about the health conditions and diseases affecting the indigenous people: 'around 1900 [...] they started paying more attention to diseases among Africans, whose health and population growth were now deemed crucial for economic development and the legitimacy of colonial rule'²³.

When we also spoke earlier about technological development and infrastructure, we can see that in French Algeria, so-called civil hospitals soon sprang up, three of them in the city of Algiers alone, which were well maintained by the standards of the time and had a containment capacity that far exceeded the standards of the time. By 1840 as many as nine of these hospitals existed and by 1867 even distant tribal areas had their doctors.

Moreover, within the context of the evolving idea of social medicine, which sought to enhance humanity's well-being as articulated in the inaugural edition of the "Annales d'Hygiene Publique et de Médecine Légale" in 1829, the notion of "health through civilization" played a significant role in colonial discussions.

However, it's worth noting that both in Algeria and France, the desire to enhance hygiene conditions was intertwined with demographic considerations.

²³ Coghe S., Disease Control and Public Health in Colonial Africa in Oxford Research Encyclopaedias (<https://oxfordre.com/africanhistory/display/10.1093/acrefore/9780190277734.001.0001/acrefore-9780190277734-e-620>), November, 2020

The aim was to avoid the outbreak of possible diseases due to the poor hygienic conditions within the colonies that could have led to depopulation, not only of the native labor force but also of the white labor force there.

Another important aspect was, as we mentioned earlier, the migration of the French into Algeria. If at first, it was only a military presence, over time the so-called scientific commission was created to explore Algeria. The medical division of the commission intended to ascertain that the conditions of the place, such as the presence of disease, climate, hygiene, and sanitation, were within European standards and could permit settlement.

When talking about migration to Algeria, an important mention must be made of the so-called *pieds-noirs*: French citizens of European origin who lived in Algeria during French colonization. This term was purely used to distinguish them from the indigenous Algerian population.

The presence of the *pieds-noirs* greatly contributed to significant demographic changes in Algeria during French colonization.

Not only did their presence contribute to a repopulation that was in contrast to the decline of the indigenous Algerian population due to various factors including war, disease, and socio-economic changes.

Moreover, as we mentioned earlier, these *pieds-noirs* settled mainly in the cities along the coast, bringing certain urbanization - with increasingly remarkable transport and infrastructure development - and this change from rural to urban ways of life had demographic implications as more and more people concentrated in urban centers.

It is also true that at the same time, this presence brought with it tensions, conflicts, and problems for the indigenous population.

First of all, it relates to the discourse of land displacement: in fact, the acquisition of land by the *pieds-noirs* led to the displacement of Algerian communities and this had enormous demographic and population distribution changes between different regions of Algeria.

Another aspect was the economic impact, especially from an agricultural point of view, which saw the Algerian natives sidelined, once again finding themselves in totally exploitative working conditions.

Moreover, the presence of the *Pieds-Noirs* and their economic and social advantages led to social and demographic disparities between the European and indigenous Algerian populations. This segregation persisted for many years.

The presence of the Pieds-noirs was a complex and contradictory presence accompanied by tensions and conflicts due to demographic changes that are part of Algeria's complex history.

Here again, the colonial presence represents a paradox, on the one hand contributing to the depopulation of a territory and on the other hand partially contributing to its repopulation.

Another vivid example of the contradictory nature of all of this is also the case of the Congo which, even in this context, stands as a perfect example.

On the one hand, it is shown in the *AMA Journal of Ethics*²⁴ that according to a physician who visited the Belgian Congo during the 1920s, he concluded that the primary reason for the declining population in the Congo was the growing presence and influence of Europeans in the region.

He pointed to the increasing prevalence of diseases, infertility, and people crossing borders, stating that these health issues were intensifying as the colony's economic, commercial, and industrial development progressed. Consequently, he believed that the population decline posed an even greater threat as these factors continued to rise.

On the other hand, Nancy Rose Hunt²⁵ has delved into the various strategies employed by the Belgian Congo's colonial administration to boost the birth rates of African women. These strategies included encouraging early weaning of infants and the swift return to sexual activity after childbirth to minimize the time between births.

Additionally, the government provided tax incentives for larger families while imposing higher taxes on polygamous men and unmarried women. There were also campaigns aimed at preventing illegal abortions.

This demonstrates and highlights the effective effort to reduce what could be negative demographic changes within the African continent by the colonizing populations, but it is also true that in most cases the motivations for which they were perpetrated were purely aimed at favoring the colonizers and not the colony per se.

²⁴ <https://journalofethics.ama-assn.org/article/medicine-empires-and-ethics-colonial-africa/2016-07>

²⁵ Coghe S., Disease Control and Public Health in Colonial Africa in *Oxford Research Encyclopaedias* (<https://oxfordre.com/africanhistory/display/10.1093/acrefore/9780190277734.001.0001/acrefore-9780190277734-e-620>), November, 2020

Population Growth before and during the Colonial Period

4.1 Assessing demographic transitions in Africa

As we have meticulously observed thus far, the demographic transitions in the African continent represent an incredibly intricate and multifaceted phenomenon that defies easy categorization into a single overarching narrative. This complexity stems from the continent's tumultuous history, marked by successive periods of European colonial domination. These colonial experiences, spanning various European powers and executed through diverse methods, have highlighted the undeniable non-uniformity of the demographic changes across Africa.

To further illuminate the diversity of colonial impact, we have presented two distinct case studies – the Belgian Congo and French Algeria. The selection of these regions is driven by the divergent portrayals they receive in the annals of research. While the Congo often epitomizes the darker side of colonialism, characterized by exploitation, brutality, and population decline, French Algeria is frequently associated with advancements and developments brought about by European influence.

It is imperative to underscore that demographic shifts were far from uniform across the continent. In regions where colonial powers established a more enduring presence, such as British-controlled East Africa or French West Africa, the demographic impact was more pronounced. The imposition of colonial borders disrupted traditional trade and migration patterns, leading to displacement and substantial demographic shifts among affected communities. Additionally, coercive labor practices and exploitative economic systems, such as the "indirect rule" in British colonies or the "encomienda" system in Portuguese territories, exacerbated the hardships faced by indigenous populations, contributing to demographic changes.

As we have noted thus far, Africa has traversed several distinct demographic transitions, influenced by a myriad of factors. According to Manning²⁶, these factors include changes in nutrition, the ebb and flow of social violence, epidemics, alterations in immunities, the nature and efficacy of governance, public health practices, transformations in traditional and modern medicine, and the connections facilitated by commerce and communication. The demographic history of Africa can be traced back to the 18th and 19th centuries, characterized by the pernicious influence of the burgeoning slave trade, which brought about a crisis marked by high mortality and births.

The second major demographic transition occurred during the period from 1890 to 1920, coinciding with the intense colonial conquests and partitions by European powers in Africa, notably the Scramble for Africa in 1880. As Shane Doyle²⁷ contends, these events resulted in population decline and a delayed recovery due to the breakdown of social structures and a loss of environmental control. Factors contributing to this decline included reduced fertility levels, and high mortality rates, particularly among infants due to malnutrition, famine, exploitative labor, and woefully inadequate hygiene standards. Moreover, the colonial era introduced new diseases, such as smallpox and influenza, which exacted a devastating toll on African populations without prior immunity. The legacy of the slave trade also persisted, further exacerbating population declines in certain regions. Additionally, the practice of segregating indigenous populations into reserves or reservations, as witnessed in South Africa or Kenya, frequently disrupted traditional social structures and contributed to demographic upheaval.

The third significant demographic transition occurred from around 1920 onwards, lasting until roughly 1950. During this period, a reduction in famine and epidemics, coupled with improvements in healthcare systems and vaccinations introduced by European powers, led to a notable decrease in mortality rates and an increase in life expectancy among African populations. These improvements,

²⁶ Manning P., African Population, 1650-2000: Comparisons and Implications of New Estimates, in 'Africa's Development in Historical Perspective', 2014

²⁷ Doyle, S. (2000). Population Decline and Delayed Recovery in Bunyoro, 1860-1960, in the Journal of African History, vol 41, 2000

alongside the expansion of cash-crop agriculture and labor-intensive industries, spurred rural-to-urban migration, thereby contributing to the growth of cities and urban centers.

The most recent demographic transition, starting from 1950 onwards, has witnessed the development of healthcare, education, and economic systems, leading to a gradual decline in mortality rates and an increase in living standards. Consequently, fertility rates have risen, while birth rates have remained relatively stable, resulting in slow but steady demographic growth.

As elucidated in Figure 2, adapted from Professor Manning's research on African population projections, the last transition from 1950 onwards is particularly noteworthy, marked by an annual growth rate that increased from 1.5% to 2.4% within a decade. This transition underscores the complex interplay of internal and external factors shaping Africa's demographic landscape.

Figure 2: Africa: default growth rates

<i>Decade</i>	<i>Annual growth rate in percent</i>
1951–60	2.4
1941–50	1.5
1931–40	0.8
1921–30	1.0
1911–20	0.2
1901–10	0.3
1891–1900	0.3
1881–90	0.3
1871–80	0.3
1861–70	0.2
1851–60	0.2

Source: Manning P., African Population: Projections, 1850-1960

In summation, Africa's demographic history is a tapestry woven with diverse threads, each representing a unique period influenced by a complex interplay of internal and external forces. As we move forward,

the objective is to scrutinize the aspects of colonialism that have hitherto been identified as detrimental to demographic trends and those that have contributed to development. Through this comparative exploration, we aim to gain a nuanced understanding of the manifold impacts of colonialism on Africa's ever-evolving demographic trajectory.

4.2 Comparing positive and negative effects on population growth

Colonialism's intricate and multifaceted impact on population growth in Africa has left a legacy that is characterized by a complex interplay of both positive and detrimental consequences. It is a legacy that continues to shape the continent's demographic landscape in the 21st century. While it is tempting to view this legacy through a simplistic lens, a more nuanced examination reveals a multifarious tapestry of influences that have left lasting imprints on African populations.

To begin with the potentially positive contributions of colonialism, it is important to acknowledge that European colonial powers did introduce elements of modern healthcare and sanitation in certain regions. These advancements did yield tangible benefits, including reduced mortality rates and improved life expectancy for some segments of the population. Moreover, the construction of transportation infrastructure, such as railways and roads, facilitated trade and facilitated the movement of goods and people. This, in turn, had the potential to foster population growth, particularly in burgeoning urban centers where economic opportunities beckoned.

However, the adverse effects of colonialism on population growth were widespread and profound, often overshadowing any positive developments. The coercive exploitation of African labor was a prevailing feature of colonial rule, subjecting many communities to brutal working conditions. In industries like mining and plantation farming, where labor demands were relentless, elevated mortality rates became the tragic norm. The forced displacement of populations, often accompanied by land confiscation and the imposition of arbitrary colonial borders, disrupted traditional ways of life. This

engendered social upheaval and turmoil that significantly hindered population growth, as communities grappled with the challenges of rebuilding their lives in unfamiliar territories.

Moreover, the introduction of novel diseases, such as smallpox and influenza, for which Africans had no pre-existing immunity, resulted in catastrophic pandemics. These diseases swept through certain regions, exacting a heavy toll on populations and leading to significant declines. The enduring consequences of the brutal transatlantic slave trade also cast a long shadow over African demographics. This inhumane trade not only resulted in the forced migration and displacement of countless individuals but also wrought profound disruptions in family structures and population imbalances.

In summation, while there were indeed limited positive aspects associated with colonialism, primarily in terms of healthcare and infrastructure, the overall legacy of colonialism in Africa was marked by pervasive and far-reaching negative effects on population growth. These effects have left indelible marks on the continent's demographic landscape, shaping the challenges and opportunities that African nations continue to grapple with in the present day. In the subsequent chapters of this thesis, we will delve deeper into these nuanced dynamics, examining both the detrimental and beneficial aspects of colonial influence on African populations and seeking a comprehensive understanding of the complex forces at play.

Post-colonial Africa: Population Growth in 21st Century

Throughout the extensive journey of this research endeavor, we have scrupulously delved into the multifaceted facets of European colonialism in the vast and diverse tapestry of Africa. With meticulous precision, we have juxtaposed and dissected the intricate web of its negative demographic ramifications against the catalytic role it played in driving technological advancement and, consequently, population growth on the continent.

The culmination of this exhaustive exploration has unveiled a tapestry of complexity, rendering Africa's demographic history an intricate narrative spanning the epochs from the 1800s to the mid-1900s.

Africa emerges as a continent imbued not merely with an extensive demographic chronicle, but one profoundly marked by multifarious complexity, where an array of divergent factors interplay, at times even paradoxically.

Indeed, the colonial legacy is a rich tapestry of changes and demographic transitions, and it is imperative to appreciate the multitude of influences that have collectively shaped Africa's population dynamics during this epoch.

Consider, for instance, the dual role of European-introduced diseases on the continent. On one hand, these pernicious diseases wreaked havoc upon African populations, inflicting immeasurable suffering and engendering death on an unprecedented scale.

Yet, paradoxically, it was the European impact that ushered in significant advancements in medical and health infrastructure, ultimately contributing to a decrease in mortality rates and an increase in life expectancy among African communities.

Such intricacies underscore the need to perceive the colonial legacy not in isolation but as a complex interplay of forces, replete with both positive and negative consequences.

Furthermore, it is imperative to recognize that African demography is not a monolithic entity but rather a rich mosaic that diversifies at regional levels. The influences, factors, and phenomena that have sculpted demographic trends vary across the vast expanse of the continent.

Therefore, African demography warrants not only a diachronic analysis, which examines trends over time but also a synchronic examination, which probes spatial variations. Changes in population dynamics manifest distinctly from one region to another, underscoring the need to adopt a nuanced approach that acknowledges and respects regional disparities.

In the context of this concluding chapter, our intellectual endeavor extends beyond a mere chronicle of historical events. Instead, we embark upon a journey to position the phenomenon of colonialism in Africa within a more comprehensive analytical framework.

This holistic perspective is indispensable for us to attain a nuanced understanding of the manifold consequences, both detrimental and potentially beneficial, that colonialism has bequeathed to Africa.

To this end, we must tether the phenomenon of colonialism and its demographic implications to the contemporary state of Africa, encompassing the post-independence period up to the present day. In doing so, we engage in a critical re-evaluation of the historical legacies and their enduring impacts on the continent.

Thus, we confront an overarching and renewed question that transcends the boundaries of history and extends into the present:

Can today's burgeoning population growth in Africa be attributed, at least in part, to the advances introduced by Europeans during the colonial period?

This question forms the crux of our inquiry, inviting us to consider the lasting legacy of colonialism in the context of Africa's demographic landscape, urging us to reflect on how the past reverberates into the present and exerts its indelible influence on shaping the trajectory of the future.

As we embark on this final chapter, we embark on a profound journey of critical reflection and nuanced analysis, seeking to unravel the complex and intertwined forces that have defined Africa's demographic history and continue to exert their profound influence on its demographic destiny.

In so doing, we aspire to contribute to a more comprehensive and enlightened comprehension of Africa's multifaceted demographic narrative and the enduring legacy of colonialism that remains etched into its socio-cultural, economic, and political fabric.

5.1 Transition from colonial rule to independence

The mid-20th century represented one of the most important moments in African history.

Indeed, from 1950 onwards, after decades if not centuries, African nations began to demand their independence from the colonial powers that had until then decided the fate of the continent.

The African countries, in fact, began to recognize themselves in that concept of self-determination, brought by superpowers such as the United States and the Soviet Union, which until then had been, whether directly or indirectly, denied them.

It should be emphasized that like all historical changes, independence was not something that happened overnight, nor was it a change that showed its effects immediately.

In fact, after the Second World War and the devastation it brought, the colonial powers found themselves at the end of their tether.

Hence African independence movements began to spring up more and more, creating a rough path to independence.

Here it is interesting to note that while some countries managed to gain their independence peacefully, others represent the great effort that Africa made to achieve a government independent of Europe (exemplary in the case of Algeria).

It is also true, however, that there have been changes and not a few. Both from a socio-political point of view and above all from a demographic point of view.

We had already stated in the previous chapter that intensifying relations between colonies and colonizers meant that there was a push for urbanization that could allow the settlement of Europeans in Africa within their colonies.

Following independence, this factor grew enormously caused of the migration of people from rural to urban areas: rural-urban migration occurs if expectations of economic benefits from opportunities in areas with a high concentration of economic activity (such as urban areas, where job opportunities - both formal and informal - are greater and wages are, on average, higher than in rural areas) outline the possibility of improved living conditions or safer environments than in the area of origin.

This implies that pre-independence urban creation could already be observed on the European side, which certainly contributed to the post-independence urban situation.

This impacted the demography of the continent by diversifying it and concentrating more people within urban centers.

Another consequence resulting from a push between development during colonialism and the independence of countries is that of population growth.

On the other hand, independence has led to an intense quest to improve and adapt to 'European' standards in health and healthcare, and this has led to an ever-lower mortality rate. This mixed with a high birth rate has resulted in the population growing exponentially.

Again, Manning's²⁸ estimates are appropriate and necessary as we can see in the table below (Figure 7).

Figure 7: Estimated African populations by Regions, 1700-2000, in millions

	West	Central	Southern	East	Northeast	Northern	Total
2000	226	93	50	172	112	154	807
1950	60	26	15	42	33	44	220
1890	41	19	10	26	20	29	145
1790	46	17	12	22	22	23	141
1700	50	22	10	20	19	17	138

Source: Manning P., African Population: Projections, 1850-1960, in 'Africa's Development in Historical Perspective', 2014

As we can see from 1890 to 1950 -that is the colonial era for much of the African continent- there was a shift from demographic stagnation to demographic transition.

²⁸ Manning P., African Population: Projections, 1850-1960, in 'Africa's Development in Historical Perspective', 2014

If we take the totals, we can see how it goes from 145 million to 220 million, obviously as we have also specified above this changes from region to region. But although at the regional level there is a difference, it is also true that, to a greater or lesser extent, there is a clear increase in population, albeit at a still modest level.

From 1920 onwards there was an increasingly rapid growth due to a lowering of mortality levels due in particular to the reduction in the incidence of malaria due to rapid technological advances brought about during colonialism: such as insecticide.

As we have pointed out, however, until 1950 the growth was neither drastic nor dramatic, and this was due to the effects of colonialism and the perpetrated violence that continued to be inflicted on the continent at the hands of Europeans, which therefore helped to balance births and deaths.

In contrast, the period from 1950 onwards - characterized by the new, albeit slow and gradual, African independence - was one of the greatest periods of growth characterized by a growth rate of 2.5% per year.

This was on the one hand due to the ever-lower mortality rates due to an ever-increasing technological and health development and on the other hand, it was due to the access of African countries to independence that allowed a substantial expansion of spending in the public health sector by the new governments.

Moreover, we can also see how after colonialism African population started to grow even more profoundly and this can be linked back with the pronatalist sentiment born in Africa during colonialism. John Casterline and Samuel Agyei-Mensah²⁹ have underscored the paramount importance of gaining profound insights into the enduring and robust desire for children in Middle and West Africa, categorizing this as a pressing concern within the realm of African demography. Within this

²⁹ Mbacké, Cheikh. "The persistence of high fertility in sub-Saharan Africa: a comment." *Population and Development Review* 43 (2017): 330-337

sphere of inquiry, a constellation of intriguing questions takes center stage, beckoning for exploration and elucidation. These questions revolve around the following core inquiries: Why do African societies exhibit a proclivity towards pronatalism that surpasses the procreative tendencies of other societies? Charles Bongaarts³⁰ has coined the term 'African effect' to encapsulate this distinctive phenomenon, elucidating that this 'African effect' is perpetuated by an elevated demand for offspring coupled with reduced utilization of modern contraception methods.

The demographic trajectory of pronatalism that helped grow the African population, finds its roots entwined with the legacy of colonialism. It is important to underscore that this trajectory did not emerge in isolation; rather, it is a product of protracted processes that unfurled over the course of a century of colonial dominion. These processes have, in turn, left an indelible imprint on the reproductive systems of the region.

In the face of exceedingly harsh and protracted conditions characterized by high mortality rates, African populations have, over time, evolved an exceptionally efficient system geared towards maximizing fertility and ensuring the survival of their progeny. Colonial rule, with its overarching influence, exerted additional impetus towards bolstering high fertility rates. This was achieved through the perpetuation of extraordinarily elevated mortality levels and by stoking the demand for labor, which was instrumental in serving the economic interests of colonial powers.

It is imperative to acknowledge that ample historical evidence attests to the fact that the initial phases of colonial rule exacerbated an already dire mortality situation, offering an explanatory lens through which we can comprehend the deep-seated apprehension of family extinction that Caldwell³¹ identified. Fertility, in this context, took on added significance as it had to satisfy the voracious demand

³⁰ Mbacké, Cheikh. "The persistence of high fertility in sub-Saharan Africa: a comment." *Population and Development Review* 43 (2017): 330-337

³¹ J. C. Caldwell, 'The social repercussions of colonial rule: demographic aspects', in A. Adu Boahen (ed.), *UNESCO General History of Africa, VII* (London, Paris and Berkeley. 1985)

for labor within a production system that not only catered to the needs of European countries but also sustained the continued production of staple resources.

In summation, the distinctive and enduring proclivity towards high fertility in Middle and West Africa, as expounded upon by Casterline, Agyei-Mensah, and Bongaarts, emerges as a multifaceted phenomenon deeply rooted in historical legacies, marked by the enduring influence of colonialism, and perpetuated by intricate economic and demographic dynamics.

However, even if the achievement of independence brought hope, optimism, and a sense of national pride to many African nations, it also exposed the deeply entrenched scars of colonialism: it exposed the challenges and vulnerabilities inherent in the legacy of colonial rule.

In this narrative of post-independence Africa, it is crucial to highlight the negative factors stemming from the enormous legacy of colonial rule. One of the most significant challenges was migration, which had profound implications for the newly independent countries.

In the years following independence, an exodus of people from Africa began to unfold. Many Africans, filled with aspirations for better opportunities and stability, believed that the West held the keys to realizing their dreams.

The allure of Western countries, often seen as more prosperous and stable, led to a substantial outflow of human capital from Africa. This migration phenomenon became commonly known as the "brain drain."

This migration trend posed myriad challenges to the post-independence period and had far-reaching demographic consequences: this depletion of human capital hampered the development efforts of independent nations, as they faced a shortage of skilled professionals needed for nation-building.

Another salient predicament that manifested itself in the aftermath of achieving independence pertained to instances of violence, a phenomenon arising from two primary causes. As elucidated

previously, the proliferation of the concept of self-determination, along with its ensuing implications, frequently precipitated violent struggles in the pursuit of autonomy.

To illustrate this point, one can examine the case of Algeria, which faced arduous trials and tribulations before attaining its sovereignty.

The Algerian War of Independence against France, spanning from 1954 to 1962, serves as an illustrative example replete with the ramifications of colonialism, characterized by its inherent violence and European assertiveness.

The wars waged to secure independence left nations ravaged by conflict, grappling with the arduous task of post-war reconstruction. Consequently, these conflicts engendered two paradoxes: a newfound indirect dependence on Europe and the ironic regression in various aspects of progress achieved during the colonial epoch.

Moreover, it is paramount to acknowledge that upon gaining independence, numerous African nations found themselves grappling with the inheritance of artificial geopolitical boundaries that frequently failed to harmonize with the intricate tapestry of ethnic and cultural divisions prevailing across the continent.

This enduring legacy of colonialism precipitated ethnic tensions and, in many instances, instigated political instability, thus impeding the developmental trajectory in the post-independence era.

To answer our initial inquiry posed at the beginning of this chapter, it is indispensable to delve into the colonial legacy. Can it be posited that the burgeoning growth of the African continent can be ascribed to the advancements undertaken during the colonial epoch?

As delineated through the estimations provided by Manning, it becomes evident that the inaugural phases of effective growth and the departure from demographic stagnation transpired during the colonial era (1890-1950), albeit obscured by recurrent episodes of violence.

This growth, *albeit partial*, transpired chiefly due to technological advancements, particularly in domains encompassing healthcare and infrastructure, as expounded upon hitherto.

Consequently, while the establishment of a direct causal link between colonialism and the ensuing demographic expansion in Africa may prove elusive, given its paradoxical nature, it can be contended that the developmental strides undertaken by European powers in the waning years of colonial rule partly contributed to a catalytic impetus that was subsequently harnessed during the subsequent era of independence and enabled an enormous demographic growth.

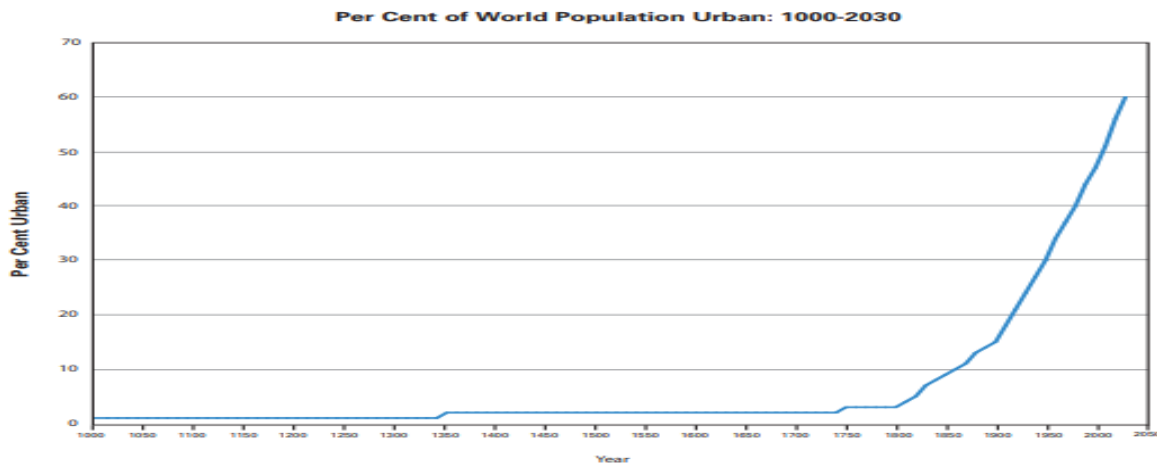
5.2 Current population trends in Africa and colonial legacy

For the preceding century, as expounded by Chamie³², the global human population underwent a notable transformation, experiencing a nearly quadrupled expansion, ascending from a figure of 1.6 billion to approximately 6.1 billion individuals. Remarkably, the lion's share of this inexorable growth materialized during the latter half of the century, constituting approximately 80% of the overall demographic surge.

It is worth underscoring that the mid-20th century emerged as the epoch characterized by the most pronounced upswing in global population figures. This zenith in population growth rates reached its pinnacle in the year 1960, registering at approximately 2%, subsequently exhibiting a gradual decline to 1.3%, as substantiated by the data presented below.

³² Chamie J., Future Challenges, in 'Population Trends: Humanity in Transition', 2007

Figure 8: Per Cent of World Population Urban: 1000-2030



Source: Chamie J., Future Challenges, in ‘Population Trends: Humanity in Transition’, 2007

This trend can be attributed to a substantial reduction in infant and child mortality rates, accompanied by a remarkable increase in life expectancy, often surpassing previous expectations, courtesy of breakthroughs in disease control and healthcare.

When we factor in the profound impact of migration, the full magnitude of this phenomenon becomes apparent.

In terms of annual population growth rates, it is Africa that presently boasts the most rapid expansion. Over the last half-century, Africa's population has undergone a threefold increase, surging from 221 million to a staggering 800 million.

In stark contrast, several European nations, as well as Japan and Korea, are now embarking on a trajectory marked by population decline. This phenomenon is primarily attributed to diminishing fertility rates, denoting the average number of children each woman bears. As discernible from the data presented in the table below, the African continent unequivocally assumes pre-eminence in this regard.

Figure 9: Ten Countries with Highest and Lowest Total Fertility

**Ten Countries with Highest and Lowest
Total Fertility: 2000-2005 (average number of children per woman)**

Highest	Total fertility	Lowest	Total fertility
Niger	7.9	Ukraine	1.12
Timor-Leste	7.8	Czech Republic	1.17
Guinea-Bissau	7.1	Slovakia	1.20
Afghanistan	7.5	Slovenia	1.22
Uganda	7.1	Republic of Korea	1.23
Mali	6.9	Republic of Moldova	1.23
Burundi	6.8	Bulgaria	1.24
Liberia	6.8	Belarus	1.24
Angola	6.8	Poland	1.26
Dem. Rep. Congo	6.7	Romania	1.26

Source: United Nations (2005a) Source: Chamie

J., Future Challenges, in 'Population Trends: Humanity in Transition', 2007

It is worth highlighting that the phenomenon of population growth in developing regions and a simultaneous decline in developed regions portends an impending paradoxical shift in demographic dynamics. A pertinent illustration of this shift lies in the statistics: in the year 1950, the European population was thrice that of Africa, whereas, at present, these two continents exhibit comparable population figures. Furthermore, projections indicate that by the midpoint of this century, the African population is anticipated to be threefold that of Europe.

Researchers postulate that this demographic transformation will persist, substantiated by the persistent decline in mortality rates and the continued extension of life expectancy.

Yet another pivotal factor exerting an enormous influence on this demographic transformation resides in the decline of fertility rates within developed nations, concomitant with a notable augmentation in life expectancy. This convergence of demographic trends is precipitating a discernible aging of the

population in certain developed countries, characterized by a conspicuous absence of generational renewal. Consequently, these nations are experiencing a gradual contraction in their population sizes.

In stark contrast, the African demographic trajectory unfolds as the antithesis of this scenario. Within this context, Africa is witnessing a diametrically opposing trend marked by sustained and expeditious population growth.

In light of the discernible demographic reversal between the African continent and Europe, one might be inclined to infer that the influence of colonialism has been either negligible or has entirely dissipated. However, it is essential to underscore that this perception diverges markedly from the substantive realities that have unfolded.

Indeed, colonialism has had and continues to exert a palpable impact on Africa. To elucidate this multifaceted aspect, it is imperative to discern the intricate layers that constitute its foundation.

The legacy of colonialism, marked by its enduring impact on socio-economic, political, and cultural dimensions, forms an indelible backdrop against which demographic dynamics have evolved. This interplay is characterized by an intricate tapestry of historical trajectories, manifesting in the demographic transformation of nations and regions.

Central to this examination is the analysis of the paradoxes that arise from this dynamic.

On one hand, the demographic growth witnessed in post-colonial Africa stands in stark antithesis to the demographic trends experienced in developed nations, marked by declining fertility rates and an aging population.

On the other hand, colonialism, with its historical baggage of exploitation and displacement, has engendered demographic challenges and disparities that continue to resonate in the present day. These challenges manifest in the form of uneven population distribution, ethnic tensions, and economic imbalances that shape the contours of contemporary societies.

To elucidate this assertion, it is pertinent to acknowledge several salient facets:

Population Dynamics.

The historical legacy of colonialism unveils a period of profound population dislocation, characterized by momentous and often harrowing events that have significantly shaped Africa's demographic landscape. Among these defining episodes, the transatlantic slave trade casts an enduring shadow, standing as a stark testament to the immense human toll exacted by this heinous practice.

This nefarious trade, spanning centuries, witnessed the forced abduction and transportation of millions of Africans across the perilous Atlantic Ocean to labor under brutal conditions in the Americas. The repercussions of this traumatic chapter reverberate through the annals of time, leaving a deep and enduring scar on the African continent's population dynamics.

Moreover, the demographic disruptions that unfolded during the colonial era, while distinct from the horrors of the transatlantic slave trade, were equally impactful in shaping the demographic contours of Africa.

The colonial period bore witness to profound transformations in social structures, economic systems, and land ownership, often at the expense of indigenous populations. The imposition of colonial borders and administrative structures, frequently devoid of regard for preexisting ethnic and tribal boundaries, created social upheaval and population displacements.

These traumatic episodes have indelibly left their imprint on present-day population distribution and growth patterns across the continent.

Economic Dependencies.

One of the defining hallmarks of European colonialism in Africa lay in the meticulous structuring of colonial economies to serve the overarching objectives of economic exploitation and dependency upon European colonial powers.

This intricate and often exploitative economic framework shaped the destiny of African nations and their populations for generations to come. Post-independence, these newly liberated nations found themselves thrust into an uncharted realm, confronted with the daunting challenge of transitioning from colonial economic structures to self-sufficiency.

This shift was often accompanied by a profound sense of vulnerability, as many African countries were suddenly bereft of the external support upon which they had hitherto relied, and the specter of economic dependency continued to loom large.

The economic dependencies forged during the colonial era were deeply embedded in the fabric of African societies. They manifested through a complex web of trade relationships, resource extraction, and labor exploitation, all orchestrated to primarily benefit the colonial powers. As a result, many African nations became entrenched in a cycle of economic subservience, reliant on European markets for their raw materials and, in return, dependent on European imports for their manufactured goods.

This skewed economic relationship left African economies structurally vulnerable, subject to the fluctuations of global markets, and with limited autonomy over their economic destinies.

The transition to post-colonial independence brought with it a confluence of challenges. African nations, eager to assert their sovereignty, were faced with the arduous task of reshaping their economies to meet the needs and aspirations of their burgeoning populations.

However, these newly independent states often found themselves grappling with deeply ingrained economic dependencies that had been systematically cultivated during the colonial

era. Breaking free from these dependencies was a formidable undertaking fraught with complexities.

This transition has engendered multifaceted tensions, conflicts, and economic disparities within and between African nations. The struggle for economic autonomy, coupled with the enduring legacy of colonial-era economic structures, has given rise to intricate webs of political and economic power struggles.

Competition for control over valuable resources, foreign investment, and access to global markets has at times escalated into conflicts and political instability, further complicating the pursuit of economic independence.

The persisting afflictions of poverty, social unrest, and economic disparities continue to be stark manifestations of the enduring economic dependencies rooted in the colonial past.

The structural imbalances and economic vulnerabilities inherited from the colonial era have played a pivotal role in shaping the population dynamics of African nations.

Poverty and limited access to economic opportunities have, in many instances, contributed to high birth rates, as larger families were seen as a source of labor and social security.

Moreover, social unrest stemming from economic disparities has led to population displacements and migrations, both within and outside African borders.

In summary, the concept of economic dependencies in the context of African colonialism represents a multifaceted and enduring legacy.

In light of these historical underpinnings, it is evident that while colonialism may no longer be a direct instrument of governance, its enduring ramifications continue to shape the contemporary demographic landscape of Africa. The tensions, conflicts, and population fluctuations that emanated from the colonial period persist as potent forces, perpetuating population growth amid adversities and adversarial circumstances.

5.3 Future challenges

An additional objective inherent to the scope of this thesis is to contextualize the phenomenon of colonialism within a comprehensive framework that encompasses both its historical repercussions and the enduring ramifications it holds for contemporary societies. This framework not only serves as a lens through which to scrutinize the past but also facilitates the exploration of potential future challenges precipitated by the exponential growth of populations. In essence, this undertaking seeks to unravel the intricate interplay between colonial legacies and burgeoning demographic trends, thereby shedding light on their antithetical aspects, paradoxical dimensions, and conceivable perils.

The thesis also endeavors to explore potential dangers that may arise in this evolving demographic landscape. These perils are not confined to the past or the present; rather, they beckon from the horizon of the future. Rapid population growth in some regions may strain resources, exacerbate social tensions, and challenge the capacity of governments to meet the needs of burgeoning populations. Understanding these potential pitfalls is paramount in formulating policies and strategies to navigate the complex terrain of demographic change.

Indeed, in a paradoxical twist of historical dynamics, the contemporary demographic trend appears to have undergone a profound transformation. Contrasting with the concerns of bygone centuries, where the primary apprehension was to avert the potential depopulation of Africa precipitated by the pernicious effects of colonialism, the quandary that beckons in our era is markedly different. As articulated by Chamie³³, the swiftness of contemporary population growth emerges as one of the most formidable challenges impinging upon human well-being, socio-economic development, security, and environmental sustainability.

³³ Chamie J., Future Challenges, in 'Population Trends: Humanity in Transition', 2007

It is imperative to delineate the dichotomy between gradual and precipitous population growth trajectories, for they harbor divergent consequences. In the former scenario, a nation's gradual population growth affords it the resources and adaptability to accommodate further demographic expansion. This measured pace of growth fosters an environment conducive to improving the quality of life for its citizenry, as well as orchestrating economic growth and development strategies commensurate with the expanding population. Furthermore, it underscores the imperative to safeguard the environment and the finite resources upon which our survival hinges. Such an approach not only cultivates countries marked by stability but also equips them with the requisite preparedness for future demographic growth, founded upon principles of sustainability.

As enunciated by the United Nations during the International Conference on Population and Development³⁴, it is imperative to facilitate the ongoing demographic transition occurring in regions characterized by a disjunction between demographic growth trends and the corresponding social, economic, and environmental dynamics. Present forecasts, however, proffer a disquieting outlook, prognosticating a population surge of approximately 2.5 billion by the year 2050. This projection signifies the second most substantial population increase in human annals, following the unprecedented surge of 3.6 billion recorded between 1950 and 2000.

The perturbing facet of this contemporary population growth lies in its distribution and implications. Virtually all estimations and prognostications concerning the burgeoning global population are centered on developing or underdeveloped regions, with Africa standing as a pivotal focal point. In stark contrast, developed populations, as elucidated earlier, appear destined, according to prevailing projections, for a gradual and sustained decline. This striking demographic divergence compels us to ponder the multifaceted implications of increased population growth in developing countries.

³⁴Chamie J., Future Challenges, in 'Population Trends: Humanity in Transition', 2007

To expound upon this theme, it is paramount to scrutinize the manifold dimensions and intricacies entailed by such population growth. It entails a multitude of challenges and opportunities, spanning socioeconomic, environmental, and geopolitical realms. These encompass issues ranging from resource allocation and distribution, infrastructure development, access to education and healthcare, economic sustainability, and the capacity to foster inclusive societies. Furthermore, issues of governance, political stability, migration patterns, and global equity.

Notwithstanding the rich potential inherent in the remarkable demographic growth currently observed in Africa, this transformative trend is also imbued with a spectrum of potential challenges- some of which already exist in the continent- each of which merits profound consideration.

These challenges encompass:

Resource Constraints.

As Africa's population continues its upward trajectory, a corresponding surge in demand for finite resources becomes an undeniable challenge. This escalating population exerts mounting pressure on resources already in limited supply, including crucial elements like arable land, freshwater reserves, and energy sources. These resources, which form the foundation of societies, are often scarce and unevenly distributed across the continent. The unfolding scenario of heightened competition for these essential resources has the potential to set in motion a chain of consequences that merit in-depth examination.

Arable land, an indispensable component of agriculture and food production, is already a precious commodity in many parts of Africa due to factors such as soil degradation, urbanization, and land tenure issues. With a growing population reliant on agriculture for sustenance and livelihoods, the increasing demand for arable land presents a palpable challenge. The intensified use of land to meet these demands can lead to soil depletion and reduced agricultural productivity, ultimately impacting food security.

Freshwater, another vital resource, faces mounting stress due to population growth, climate-induced shifts in rainfall patterns, and inadequate infrastructure for water management. The escalating competition for freshwater resources may exacerbate the prevalence of water scarcity, affecting both domestic use and agricultural irrigation. Prolonged water shortages can undermine health, sanitation, and agricultural productivity, perpetuating a cycle of vulnerability.

Energy sources, too, are subject to rising demand. As populations expand, so does the need for energy to power homes, industries, and transportation. However, Africa's energy infrastructure often lags behind this demand, leading to energy shortfalls and reliance on polluting and unsustainable sources. The depletion of finite energy resources can have far-reaching consequences, impacting not only daily conveniences but also economic development and environmental sustainability.

The consequences of resource constraints extend beyond immediate concerns. The depletion of these critical resources can significantly hinder the ability to provide essential amenities to the growing population. For instance, diminishing arable land can impede food production, resulting in increased food prices and heightened food insecurity. Shortages in freshwater resources can lead to compromised access to clean water, affecting public health and hygiene. Energy deficits can disrupt economic activities, inhibit industrial growth, and limit access to modern conveniences, thus perpetuating poverty and constraining economic development.

Moreover, resource constraints can exacerbate existing disparities and inequalities, as those with limited access to these resources often bear the brunt of their scarcity. Vulnerable populations, particularly in rural and marginalized communities, are disproportionately affected by resource constraints, exacerbating poverty levels and contributing to social and economic inequalities.

Addressing these challenges necessitates a multifaceted approach encompassing conservation, technological innovation, and policies aimed at ensuring equitable resource access and distribution,

not only for meeting the immediate needs of a growing population but also for fostering long-term economic development and resilience in the face of resource scarcity.

Food Security Dilemma.

The conundrum of food security looms as a critical challenge in the face of Africa's burgeoning population. The surging demographic growth necessitates a corresponding surge in food production to sustain the nutritional needs of expanding populations. However, the intricate interplay between population dynamics and food production presents a multifaceted dilemma that demands thoughtful consideration and proactive strategies.

The inexorable rise in population places an ever-increasing demand on agricultural systems to produce more food, both in quantity and quality. This demographic pressure obliges the agricultural sector to adapt and expand to meet the dietary requirements of larger and more urbanized populations. As the continent experiences rapid urbanization, dietary preferences, and consumption patterns evolve, further exacerbating the need for diverse and abundant food sources.

Yet, the potential pitfalls of this population-driven demand for food are evident. If agricultural practices fail to align with the pace of demographic expansion, the consequence may well be food shortages and the ominous specter of food insecurity. Such a scenario, characterized by an inability to consistently access sufficient, safe, and nutritious food, poses grave threats to human well-being and social stability. Regions struggling with limited agricultural productivity, often due to factors like adverse climatic conditions, soil degradation, or inadequate infrastructure, are particularly susceptible to malnutrition and hunger. The specter of food insecurity looms large in such areas, underlining the imperative for robust and sustainable agricultural strategies.

This is a complex issue intricately tied to population dynamics. As the continent grapples with the challenges and opportunities presented by a growing population, it is paramount that strategies and

policies are developed and implemented to ensure that food production keeps pace with demographic expansion.

Labor Market Challenges.

An expanding population may outstrip the capacity of the labor market to accommodate a burgeoning workforce. This can give rise to soaring unemployment and underemployment rates, with a pronounced impact on young individuals who may find themselves trapped in a cycle of economic disenfranchisement. The ramifications of labor market imbalances extend beyond economic turbulence, fostering social unrest and economic instability. This will be even more obvious in a continent such as Africa in which the labor market is fragmented and diverse according to regions and unstable.

Healthcare and Education Gaps.

Catering to the healthcare and educational requisites of a burgeoning populace constitutes a formidable challenge. In a continent such as Africa which still struggles for adequate access to healthcare and educational services this growth could hinder the development of human capital, constraining a nation's potential for economic progress and societal advancement.

Urbanization Strain.

As population growth advances, it frequently catalyzes even more urbanization, prompting individuals to migrate to urban centers in pursuit of improved prospects. However, the rapid influx of inhabitants into urban areas can strain existing infrastructure, resulting in overcrowded metropolises, inadequate housing, and subpar public services.

Political Volatility.

The intricate interplay of a rapidly growing population, political instability, and governance deficits within the African context raises a litany of concerns that warrant thorough exploration. This convergence of factors has the potential to engender social unrest and political turbulence, with far-reaching implications for the region. The intricate dynamics of political volatility in Africa, particularly in countries grappling with the challenges of post-colonial governance, underscore the complex nature of this issue.

The burgeoning population in Africa, marked by its youthful demographic profile, can exert significant pressure on political systems. The demographic youth bulge, characterized by a substantial proportion of young people, presents both opportunities and challenges. While this demographic dividend can potentially fuel economic growth and innovation, it also places demands on education, employment, and social services. Failure to meet these demands can lead to disillusionment among the youth, fueling social discontent and political unrest.

Political instability, often rooted in historical legacies, governance deficits, and uneven distribution of resources, adds another layer of complexity. Many African countries have grappled with periodic political upheavals, contested elections, and issues related to political succession. These challenges can undermine social cohesion, erode trust in institutions, and breed disillusionment among citizens, potentially catalyzing protests and civil unrest.

Governance deficits, including corruption, lack of transparency, and inadequate provision of public services, further exacerbate the volatile political landscape. These deficits can erode public trust in the government and breed grievances among the population, creating fertile ground for political agitation and mobilization.

In regions and countries still grappling with political instability and unrest, the confluence of these factors can aggravate an already tenuous situation. The challenges posed by rapid population growth,

coupled with political and governance issues, may lead to increased social unrest, protest movements, and even conflict. Such instability can have dire consequences for peace, security, and economic development.

Moreover, the impact of political volatility extends beyond national borders. Regional stability can be jeopardized as political turmoil spills over into neighboring countries, leading to refugee crises, cross-border conflicts, and disruptions in trade and economic cooperation.

Migration Dynamics.

In the pursuit of improved living conditions and expanded opportunities, individuals frequently resort to migration as a strategy to alter their circumstances. This phenomenon of migration manifests both within the confines of the African continent and beyond its borders, giving rise to intricate migration dynamics that necessitate comprehensive scrutiny. The continuous movement of people bears profound consequences, impacting not only the migrants themselves but also exerting far-reaching effects on the regions and nations involved, encompassing social, economic, and political ramifications.

Internally within Africa, the patterns of migration are molded by an array of factors, chief among them being rural-urban migration, environmental dynamics, and economic prospects. Rural-urban migration, driven by the allure of urban centers with their superior educational facilities and employment opportunities, constitutes a prominent facet of internal migration. This phenomenon results in the rapid expansion of urban areas, bestowing both opportunities and challenges relating to urban infrastructure, housing, and social services.

Furthermore, economic disparities and inequities in resource allocation serve as catalysts for migration, whether it occurs within African borders or extends beyond them. In certain scenarios, individuals may seek livelihood prospects in neighboring countries, where economic potential seems more promising. Such intra-regional migration can, however, engender tensions related to labor market competition and resource distribution, particularly in regions characterized by limited resources and underdeveloped infrastructure.

Additionally, the complex nature of migration fluxes sometimes precipitates regional and international tensions, especially in situations where disputes arise concerning resource allocation or border delineation. The quest for scarce resources such as water or arable land can intensify in regions marked by significant migratory movements. As migration patterns shift, border-related conflicts may surface, sparking debates pertaining to territorial claims and the rights of citizenship.

In summation, the intricacies of migration dynamics, both within the African continent and beyond its borders, are underpinned by multifaceted factors. These dynamics are shaped by individuals' aspirations for improved livelihoods, environmental factors, and socio-economic opportunities. A comprehensive understanding of these dynamics is imperative for the development of effective policies that harness the positive aspects of migration while addressing potential challenges and conflicts. Implementing adept strategies for migration management, coupled with regional cooperation and international dialogue, holds the potential to maximize the benefits of migration while mitigating its associated complexities.

Global Implications.

The consequences of unchecked population growth in Africa possess the potential to reverberate globally. These ramifications may include alterations in global food prices, augmented international

migration patterns, and the perturbation of international efforts to combat climate change and ensure environmental sustainability.

In conclusion, the contemporary demographic landscape stands at the crossroads of immense change and multifarious challenges. We must delve into the intricacies of this transformative process, recognizing that the dynamics of population growth in developing countries such as Africa hold far-reaching consequences not only for those regions but also for the global community as a whole. In this ever-evolving narrative, understanding the implications of demographic shifts becomes an indispensable prerequisite for informed policymaking and sustainable development on a global scale.

Furthermore, international collaboration and support are pivotal in assisting African nations as they navigate the intricate landscape of rapid population growth, particularly in the absence of commensurate resources and political stability.

5.4 Youth bulge and future complication

We have so far discussed what could potentially be the future challenges facing the African continent with its enormous and evident population growth, in this section we intend to bring to light one phenomenon in particular that could hypothetically constitute one of the greatest challenges facing Africa and for this reason necessitate a paragraph alone.

Professor Giordano³⁵'s research and scholarly works delve into the concept known as the 'youth bulge,' which serves as a pivotal framework for understanding the quantitative and proportional surge in the youth demographic within a nation. This phenomenon is typically observed within the age range of 16 to 25 or 16 to 30. The 'youth bulge' manifests when a substantial portion of a country's populace,

³⁵ Giordano, Alfonso. "Youth Bulge Dynamics in the Mediterranean Region: The Geopolitical Implications of Human Capital on Security and Stability." *States, Actors and Geopolitical Drivers in the Mediterranean: Perspectives on the New Centrality in a Changing Region* (2021): 107-127

amounting to at least 30%, falls within the age range of 15 to 29 or, alternatively, when a minimum of 20% of the population falls within the 15 to 25 age brackets. In essence, what transpires is a perceptible amplification in the youthful cohorts of a nation's population pyramid.

The fundamental premise underlying this theory posits that societies characterized by a confluence of factors including a surplus of young individuals, limited resource availability, and notably, a dearth of esteemed social positions for the surplus youth—typically third, fourth, or fifth-born children—are more susceptible to experiencing social discord and are inclined towards exhibiting a propensity for belligerent behavior when juxtaposed with societies devoid of demographic stressors.

This proclivity becomes particularly pronounced in developing countries traversing the intricate phase of demographic transition, especially those undergoing a transition from high to low fertility and mortality rates, such as Africa. Such nations are uniquely susceptible to geopolitical instability and civil strife. The amalgamation of substantial numbers of youthful individuals, the rapid proliferation of the working-age populace, and the conspicuous absence of viable employment opportunities within the labor market coalesce to engender a potentially volatile scenario.

As emphasized by Lam³⁶ in Giordano research, a substantial contingent of young adults coupled with an accelerated rate of growth in the working-age demographic exacerbates the predicament of unemployment, prolongs dependency on parents, and curtails self-esteem. While this nexus of frustration and competition for jobs does not directly incite violence, it heightens the likelihood that unemployed young individuals will seek avenues of social and economic advancement through unconventional, extra-legal means.

³⁶ Lam, D. (2014, May 1–3). Youth bulges and youth unemployment. Paper presented at the Population Association of America Annual Meeting, Boston MA in Giordano, Alfonso. "Youth Bulge Dynamics in the Mediterranean Region: The Geopolitical Implications of Human Capital on Security and Stability." *States, Actors and Geopolitical Drivers in the Mediterranean: Perspectives on the New Centrality in a Changing Region* (2021): 107-127

Interesting is citing the words given by Professor Giordano research of Michelle Gavin, an authority in African affairs: "If you have no other options and not much else going on, the opportunity cost of joining an armed movement may be low"³⁷. This underscores the complex interplay of demographic dynamics and socio-economic pressures that can give rise to a combustible environment in societies grappling with a 'youth bulge.'

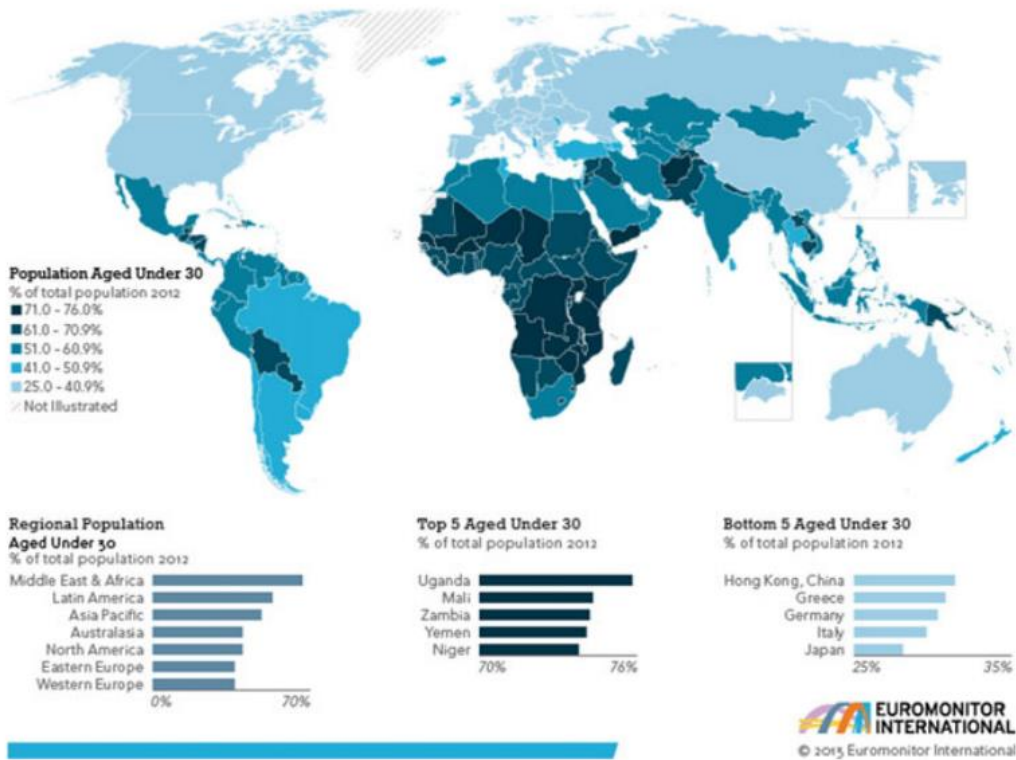
The question of whether a youthful population poses challenges warrants careful consideration. Delving into this inquiry, Professor Giordano references to the Global Conflict Risk Index³⁸, an analytical tool crafted by a European Commission study group, as an illuminating source of insights. Notably, within the index's 'Geography and environment' section, both 'demographics' and the 'youth bulge' are cataloged as pivotal factors carrying political, social, and economic implications.

To further scrutinize this matter, let us turn our attention to the table below (figure 10), which offers a graphical representation of the prevalence of the youth bulge (inclusive of the children bulge) across diverse countries and geographical regions worldwide. The chart employs a spectrum of shades, with the darker hues signifying nations where a remarkable 70% or more of the populace falls below the age of 30. Evidently, this demographic pattern is notably conspicuous in numerous countries within Sub-Saharan Africa.

³⁷ Blanton, S. L., & Kegley, C. W. (2020). World politics: Trend and transformation (17th ed.). Cengage Learning in Giordano, Alfonso. "Youth Bulge Dynamics in the Mediterranean Region: The Geopolitical Implications of Human Capital on Security and Stability." *States, Actors and Geopolitical Drivers in the Mediterranean: Perspectives on the New Centrality in a Changing Region* (2021): 107-127

³⁸ Smidt, M., Vernaccini, L., Hachemer, P., & De Groeve, T. (2016) The Global Conflict Risk Index (GCRI): Manual for data management and product output. Bruxelles: EUR 27908 EN in Giordano, Alfonso. "Youth Bulge Dynamics in the Mediterranean Region: The Geopolitical Implications of Human Capital on Security and Stability." *States, Actors and Geopolitical Drivers in the Mediterranean: Perspectives on the New Centrality in a Changing Region* (2021): 107-127

Figure 10: The youth bulge and children bulge in the world



Source: Giordano, Alfonso. "Youth Bulge Dynamics in the Mediterranean Region: The Geopolitical Implications of Human Capital on Security and Stability." *States, Actors and Geopolitical Drivers in the Mediterranean: Perspectives on the New Centrality in a Changing Region* (2021): 107-127

Furthermore, this intricate demographic landscape, coupled with other myriad challenges, elucidates why economic development in Sub-Saharan Africa has encountered impediments—simply put, the region contends with an excess of young individuals seeking opportunities.

Expanding the geographical perspective, it becomes evident that the regions of the Middle East and Africa register the highest proportion of individuals below the age of 30. Nevertheless, this demographic tale takes a nuanced turn when considering the age bracket of 20 to 30, encompassing what can be defined as 'real young adults.' In this regard, North Africa and the Middle East emerge as

regions boasting the highest concentration of such individuals, thereby presenting a distinctive demographic dynamic worthy of scrutiny.

In sum, the implications of a youthful population, as elucidated by the Global Conflict Risk Index and underscored by the graphical representation in Figure 10, unveil a multifaceted panorama. The interplay of demographics, social factors, and economic considerations in regions marked by a 'youth bulge' poses both challenges and opportunities, shaping the trajectory of these areas on the global stage.

Conclusion

6.1 Understanding the complex relationship between European impact and population growth in Africa

From the beginning of writing this dissertation, my main question was to understand whether colonialism had played its part in contributing to the demographic situation in Africa at that time. In this concluding chapter, we will synthesize the key findings and insights from our exploration of this complex relationship.

Unfortunately, due to the limited data that can be traced back to that period and the absence of well-drafted censuses, we can only rely on rough estimates that have been made by various scholars over time. In my research, as you can see, I have relied mainly on Professor Manning's data and the various estimates he has created.

Thanks to Professor Manning's research, I was able to base my thesis on the data he found to hypothesize a hypothetical demographic trend that took place from 1800 until 1900.

According to Professor Manning, annual growth rates per decade appear to have stagnated until the early 1900s and then relapsed in the early 1900s. What we will notice is that they only began to rise in the mid-1900s.

So, to answer the question I posed at the beginning of this thesis: colonialism and the slave trade first contributed to changing the demographic structure of the continent and partly led to the decline of the population. As well as the importation of diseases such as smallpox and measles, ravaged African populations, resulting in demographic setbacks.

Furthermore, colonialism often involved cultural and social assimilation efforts, which disrupted indigenous traditions and identities. The erosion of cultural practices, languages, and social structures

had repercussions on fertility rates and family dynamics, influencing population growth it is good to specify, however, as I pointed out within the thesis, that the impact of these two factors varies from region to region: for example, for Biafra and Benin the export of slaves ends relatively early and this certainly makes the impact different from another region where it lasted until the end of the 19th century, such as Mozambique.

It is crucial to acknowledge the vast regional variations in Africa's experience of colonialism. North Africa's history differs from that of Sub-Saharan Africa, while East Africa's colonial legacy is distinct from West Africa's. These regional differences contribute to the complexity of the relationship between colonialism and population growth.

As a result, it becomes abundantly clear that the relationship between colonialism and population growth in Africa is a multifaceted one. The continent's vastness and diversity, coupled with the varying colonial powers that laid claim to different regions, have resulted in a nuanced and variegated demographic landscape.

This is one of the reasons why the cases of Congo and Algeria were brought up in the research. The two countries have very different colonial histories, one Belgian and the other French, used very different colonial practices and, overall, were influenced differently by colonialism: while Leopold II saw the Congo as a resource to be exploited, France saw Algeria as something to be annexed and integrated.

It is, therefore, evident that this external factor has led the African continent to a remarkable demographic transition with a decidedly high level of mortality which in turn has contributed to raising or lowering the rates of other internal aspects: Think how the malnutrition factor has led to low fertility levels.

At the same time, however, it should be specified that each region has suffered a different approach and impact.

To answer the second question in this thesis, however, we need to understand what the 'positive', if you want to call it that, impact of Europeans in Africa has been.

There is no doubt that even in this case, think of the case of Algeria mentioned above, the European incursion certainly contributed to an improvement in living standards and hygiene, the infrastructure and health aspect, and all this contributed greatly to lowering infant and non-infant mortality rates, to eradicating various diseases with the presence of vaccines and appropriate medical facilities.

On the other hand, from 1930 to 1950 there was an increase from 166 million to 240 million in just 20 years.

However, the impact of marginalization must be specified.

Very often, even when it came to technological or health advances, European colonizers tended to have their preferences. For example, the actual implementation of disease control measures varied between empires and colonies. This variation was influenced by factors such as different political, economic, and financial circumstances.

Within individual colonies, disparities in access to health care were pronounced. Certain regions and communities were considered more strategically important to colonial interests, which led to an unequal distribution of resources and attention to disease control. In addition, gender and age biases influenced health efforts, with some groups receiving more support and attention than others, further exacerbating inequalities in health outcomes.

It is my belief that the crux of colonial Africa's population history can be found in the gradual alignment of countless local developments. It is conceivable that specific regions, likely those where environmental conditions were carefully controlled, may have witnessed a continuous increase in population even during the initial upheavals of colonial rule that affected the rest of the continent.

As we progressed into the 1920s, other areas might have also started experiencing population growth once more, potentially driven by the beneficial impact of European innovations. This growth likely had a more significant effect on reducing mortality rates, possibly owing as much to educational advancements as to medical interventions.

Assessing the precise impact of healthcare efforts on subsequent population growth is a complex task. While these efforts may not have directly driven population growth, they did serve as a crucial mitigating factor against complete depopulation. Without access to healthcare interventions and efforts to control the spread of diseases, the demographic consequences of colonialism could have been even more dire.

To summarize, the depopulation that occurred in Africa during the colonial era represents a complex and multifaceted historical phenomenon. It is essential to recognize that this depopulation was not driven by a single isolated cause but rather emerged from the intricate interplay of various factors, each contributing to the demographic challenges faced by the continent.

One of the primary drivers of depopulation during colonialism was the pervasive exploitation of Africa's abundant natural resources. European colonial powers, motivated by economic gains, engaged in the ruthless extraction of minerals, agricultural products, and other valuable commodities. This exploitation disrupted traditional economies, leading to economic instability and vulnerability among indigenous populations. In some instances, this economic strain could have contributed to depopulation as communities struggled to endure the harsh conditions imposed by colonial powers.

The introduction of diseases by colonial forces also had a devastating impact on African populations. Diseases such as smallpox, measles, and malaria, previously unfamiliar to many regions, exacted a heavy toll on communities that lacked immunity. These diseases caused significant mortality, further exacerbating the depopulation trend.

Additionally, famines emerged as a consequence of colonial policies and practices. The disruption of traditional agricultural systems, often in favor of cash crops or export-oriented agriculture, combined with land dispossession, disrupted food production. Moreover, colonial authorities frequently prioritized the export of food resources to their home countries, leaving local populations susceptible to food shortages and famines.

Disparities in healthcare access within individual colonies intensified the depopulation challenges. Some regions and communities were deemed strategically vital for colonial interests and consequently received more resources and attention for disease control efforts. This uneven distribution of healthcare resources and attention exacerbated health disparities within the population.

Despite the complexity of these dynamics, it is challenging to definitively ascertain the precise role that healthcare efforts played in subsequent population growth. However, it is evident that these efforts played a critical role in mitigating the catastrophic demographic consequences that could have unfolded in the face of the numerous negative impacts of colonialism.

It is worth noting that healthcare interventions likely contributed to reduced mortality rates, potentially stemming from both medical advancements and educational initiatives. Education, as a tool for promoting health awareness and hygiene practices, could have played a significant role in curbing disease-related mortality and fostering population resilience.

The depopulation experienced in Africa during the colonial era resulted from a complex interplay of factors that included exploitation, disease introduction, famines, and advancements. The disparities within colonies further exacerbated these challenges. While the precise role of healthcare interventions in subsequent population growth remains challenging to pinpoint, it is undeniable that they played a vital role in averting even more severe demographic consequences amid the numerous adverse effects of colonialism.

So, what is the reason for the ever-increasing growth in the African continent?

As previously discussed, three significant influences have played a pivotal role in this ongoing demographic transition: colonialism, the transformative impact of European advancements, and the evolving landscape of African independence.

Decolonization efforts and post-colonial governance policies have been instrumental in shaping population growth in Africa. Independent African governments recognized the importance of healthcare, education, and economic development as essential components of nation-building and improving the quality of life for their citizens. Investments in healthcare infrastructure, access to education, and economic development initiatives have collectively contributed to the continent's population growth.

Moreover, the drive for self-determination and economic development fostered by African nations resulted in increased urbanization and migration. This, in turn, led to shifts in population dynamics, as more people gravitated toward urban centers in search of economic opportunities and improved living standards.

In conclusion, the ongoing population growth in Africa can be attributed to a combination of factors, including the legacy of European advancements introduced during colonialism and the progressive independence of African nations. The end of colonial rule marked the beginning of a new era, during which decolonization efforts and post-colonial governance policies played a crucial role in influencing population growth through advancements in healthcare, education, and economic development. Africa's demographic trajectory reflects both the challenges and opportunities inherent in the continent's complex historical and contemporary context.

Summary

This dissertation represents a concerted effort to delve into the multifaceted and intricate demographic impact of European colonialism on the African continent. Our central focus lies in untangling the question of whether colonialism acted as a force of demographic stagnation or advancement. It is a research endeavor of profound complexity, one that demands the application of meticulous research methodologies and the construction of robust analytical frameworks capable of navigating the intricate terrain of African history and its colonial legacy.

Within the scope of this study, we have set out to grapple with two pivotal challenges. The first revolves around the inherent limitations posed by our research domain, which necessitates a judicious selection of specific regions where the demographic effects of colonialism manifest most conspicuously. This geographical focus, while essential for in-depth analysis, inherently restricts the breadth of our research, prompting a keen awareness of the need to extrapolate our findings judiciously to the broader African context. The regional variations in colonial policies, economic structures, and sociocultural dynamics further compound the complexity of our study, emphasizing the importance of our research methodology in navigating these diverse landscapes.

The second challenge we confront lies in the scarcity of readily available, comprehensive, and reliable data pertaining to the African population during the colonial period. Historically, colonial powers maintained fragmented and often biased records, reflecting the colonial perspective and priorities of the time. These limitations render the task of obtaining accurate and comprehensive information on critical demographic elements, such as population dynamics, migration patterns, and health outcomes, during the colonial era exceedingly challenging. Consequently, our research methodology must be adapted to account for these data constraints, employing innovative approaches and rigorous scrutiny of existing sources to draw meaningful conclusions.

Navigating these complex challenges is central to our research mission. As we embark on this academic expedition, we aim to shed light on the nuanced and multifaceted relationship between colonialism and African demographics

Researchers have employed a combination of quantitative and qualitative approaches to address this limitation. The thesis will be based on estimates made a posteriori, utilizing secondary sources like scholarly publications and demographic data, and when available primary sources.

The aim is not to develop a new theory on the matter but to critically examine the tools and techniques used in this field, contributing to a deeper understanding of Africa's demographic transformation under colonialism and informing future studies, policies, and interventions aimed at addressing historical injustices and promoting equitable development in Africa.

In the introduction, the origins of colonialism in Africa are explained and can be traced back to the 15th and 16th centuries, when European powers like Portugal, Spain, Holland, England, and France embarked on ambitious maritime expeditions to find new trade routes and resource-rich lands. According to my findings, colonialism can be divided into three waves: 'the early exploratory and trading ventures', 'the scramble for Africa', and 'the period of decolonization'.

The Berlin Conference of 1884-1885 marked a turning point in African colonialism, as it established guidelines and agreements for the partitioning of the African continent. This wave was driven by economic, political, and strategic factors, with the Industrial Revolution in Europe creating a demand for raw materials. European colonial rule during this period involved direct administration and exploitation of African resources, including minerals, rubber, and agricultural products. This is why this dissertation focuses on the 18th and 19th centuries during the second wave of colonialism, which had more implications for the demographic aspect.

Therefore, this thesis will explain or- better- try to explain whether colonialism has had a negative or 'positive' effect as a past trend of the continent.

This is also necessary to understand the current state of African demography. In fact, due to improvements in medical technology and lifestyle modifications, the population patterns and demographics of the African continent have changed over time. Lower death rates and birth expectancies are the results of the colonial influence obtained in the area, which has also considerably improved health conditions and technical breakthroughs. However, the conditions and developments associated with colonialism may have had a long-lasting impact on the rapid growth of the African population. For instance, the slave trade has significantly impacted the population of Africa. Since both positive and negative effects are additive, the actual question is which had a greater impact on African population patterns and demographic coordinates.

European strategies surely contributed to the decline and stagnation of the African population, with colonial factors playing a crucial role in shaping demographic trends. In the second chapter, we put forward Professor Manning's studies and estimates which have been instrumental in understanding the impact of the slave trade on the African population from the 17th to the mid-19th century.

The primary focus during the slave trade was on young adult males, who were better adapted to harsh working conditions. This as a result contributed to the vacancy of the male labor force: when this component is missing, the population may experience a hypothetical decline or stagnation.

The African population declined sharply between 1730 and 1850 in Central and West Africa, and again from 1820 to 1880 in East Africa: in the mid-1800s, there was a substantial stagnation in growth, stopping at 0.3%. Regions that declined included Tanzania and Mozambique, Loango, Eastern Sudan, and Chad, while regions like the Horn, Ivory Coast, Madagascar, Central Sudan, and Western Sudan remained relatively unchanged. From the mid-19th century to the mid-20th century, the population growth rate increased, with an expected crude growth rate of 2.4 in 1951-60. This coincided with the beginning of the African continent's independence, which took place around the second half of 1900.

However, in the 1910s to 1920s, a slight decline in growth rates was assumed due to wars, economic depression, and declining fertility. Manning also proposed an estimate of the impact of certain situations on the demographic growth of the African population, such as the slave trade. The export of slaves across the Atlantic ended around 1950, but the export to sub-Saharan Africa and North Africa continued into the first decades of the 1900s. According to the present estimates, the population has significantly declined and entered a stagnant situation on average. Once the slave trade ended, it was assumed that there would be an increase in birth rates due to a gradual increase in the young male population and improved health conditions.

However, the end of the slave trade coincided with the harshest period of colonialism, bringing imperial peace but also causing unrest. The French and Belgian colonies experienced a decline in population due to forced labor recruitment, which influenced seasonal production cycles and led to increased malnutrition and higher mortality rates. This was referred to as '*colonial disorder*' and reduced population growth by about 0.3% per year. The spread of diseases brought by European colonizers, particularly European and African officials, also contributed to a decline in fertility rates. By 1600, Western countries had already faced several epidemics and developed antibodies to protect them from subsequent attacks. However, African populations had never come into contact with them, leading to 'bacteriological warfare'. Epidemics and famines led to high mortality rates, reducing population growth by 0.5% per year. Countries like Namibia under German colonization experienced the greatest effects, with a population of 100,000 in 1850 and 25,000 in 2000. The continent's population grew from 140 million in 1850 to 800 million in 2000, with the largest numerical change occurring from 1950 to 2000. The demographic regime, the largest change in the structure and organization of the African population, took place from 1850 to 1950.

In this thesis in particular I have decided to examine the case of Congo to better explain my findings. During Belgian colonization, Congo's demography was significantly impacted by slavery, forced

labor, and epidemics. Some scholars suggest that the population halved during this period, with estimates ranging from two to 13 million.

Demographer J.P. Sanderson estimated the population in 1885 to be around 10-15 million people and proposed three possible scenarios of population decline under Leopold II in 2020. Adam Hochschild and Jan Vansina approximated the number at 10 million, with some arguing for a 20 percent decrease over the first 40 years of colonial rule up to the 1924 census. Historian Isidore Ndaywel è Nziem initially claimed that 13 million people died, but later adjusted this number downward to 10 million. The question no longer becomes whether the European impact has contributed to a decline or stagnation of the population in Congo. It is clear from various sources analyzed that the colonization factor has influenced Congolese demography, but the magnitude of the impact remains uncertain. The European incursion into Congo led to important and diverse demographic changes that cannot be ignored or excluded in this research.

The impact of European colonialism on Africa is complex and multifaceted. This is why in the third chapter I examine whether it is possible that the enormous growth that Africa is undergoing could be associated with some advancement brought by European colonialism. While some scholars argue that the costs outweigh the benefits, this thesis wants to examine this possibility.

From 1930 onwards, there was an ever-increasing population growth in Africa, with numbers reaching 240 million in 1950. However, some argue that there is no convincing evidence to show that colonial medicine and innovations brought by Europeans made this growth possible. Two hypothetical factors could have contributed to the successive population growth in Africa: medical and technological. Medical efforts were needed to protect the labor force, lower mortality rates, and combat diseases. These campaigns were expensive and focused on reducing the African labor force, which was essential for the development of their tropical colonies. Colonial medical professionals began relying more on demographic information to identify health issues and assess the effectiveness of ongoing health

initiatives. Additionally, colonial governments implemented policies to address undernourishment and malnutrition among the African population. These included providing better diets to certain groups, such as plantation and mine workers and colonial soldiers, and providing extra nutritional support to children. Infant welfare centers were established in larger cities during the 1920s, and in the 1950s, colonial and international efforts targeted rural areas to combat kwashiorkor, a protein deficiency disease affecting children. However, on-the-ground efforts to control diseases were not consistent across different regions, and there were noticeable disparities between regions and population groups. Some areas and communities were considered more vital to the success of the colonial endeavor, receiving more attention and resources for disease control. Gender and age played discriminatory roles in these efforts, with certain groups receiving more support and focus than others.

Moreover, the substantial population growth in Africa during European colonization can be also attributed to technological advances, particularly in transport and infrastructure. These advancements made it easier for people and goods to get around and enabled the creation of health and additional facilities that could support economic interests. Agriculture also played a significant role in alleviating malnutrition and famine on the continent. Colonial administrations in Africa began to take action in various domains, such as nutrition, which led to the recognition of chronic undernourishment and malnutrition among many Africans.

The migration factor also contributed to population growth. With the advent and construction of cities up to European standards, more people settled in the colonies as actual citizens, leading to a greater focus on infrastructure and transport in the colony. This led to a greater focus on medical and health maintenance, which eventually took into account the African population as part of the colony's labor force. The large presence of civilians within the colonies also contributed to repopulating parts of the colonized African regions.

However, these developments were often exploitative and designed to serve the interests of the colonizers. Local populations were frequently subjected to forced labor, forced displacement, and discriminatory healthcare practices. Additionally, the exploitation of Africa's natural resources, including minerals and agricultural products, had long-term economic and environmental consequences that continue to impact the continent today.

In chapter three to support my findings I bring forward the case of Algeria. In fact, the military administration of Algeria laid the foundations for the creation of the French colony. An important presence in the colony was the medical corps, which initially focused on providing healthcare to the troops and primarily served a military function.

However, as the military campaign progressed from conquest to pacification and eventual occupation, the local population became increasingly involved with French medical services. The scientific commission was created to explore Algeria, ensuring that the conditions of the place, such as disease, climate, hygiene, and sanitation, were within European standards and could permit settlement.

The presence of the *pieds-noirs*, French citizens of European origin who lived in Algeria during French colonization, greatly contributed to significant demographic changes in Algeria.

The acquisition of land by the *Pieds-noirs* led to the displacement of Algerian communities and enormous demographic and population distribution changes between different regions of Algeria. Economically, the presence of the *Pieds-Noirs* led to social and demographic disparities between the European and indigenous Algerian populations, which persisted for many years.

Proceeding to Chapter 4, an extensive synthesis is presented, juxtaposing the key insights derived from Chapters 2 and 3. The examination of colonialism's profound influence on population growth in Africa uncovers a complex and nuanced legacy, wherein the adverse repercussions often overshadowed any favorable contributions.

On one facet of this multifaceted analysis, it becomes evident that colonial powers did introduce certain facets of modern healthcare and sanitation, engendering a discernible reduction in mortality rates and the commensurate enhancement of life expectancy within specific geographic regions.

Moreover, the establishment of transportation infrastructure, exemplified by the development of railways and road networks, served to facilitate trade and human mobility, potentially fostering population growth, particularly within burgeoning urban centers.

However, it is imperative to underscore that the pernicious effects of colonialism on population growth were extensive and profound. The coercive exploitation of African labor, orchestrated under inhumane working conditions, imposed a heavy toll on many communities, precipitating elevated mortality rates. This deleterious impact was especially pronounced in industries such as mining and plantation farming.

The forced displacement of populations, coupled with land confiscation and the imposition of arbitrary colonial boundaries, disrupted time-honored socio-cultural norms and traditional ways of life, thereby fomenting social upheaval that significantly impeded population growth trajectories.

Additionally, the introduction of hitherto unknown diseases, notably smallpox, and influenza, for which indigenous Africans possessed no immunity, wrought catastrophic pandemics and precipitated population contractions in select regions.

The enduring ramifications of the brutal transatlantic slave trade cast an indomitable shadow, leaving enduring scars and contributing to the disarray of population equilibrium and familial structures. In summation, while limited positive aspects did emerge, epitomized by advancements in healthcare and infrastructure, the overarching legacy of colonialism in Africa is incontrovertibly characterized by a pervasive and profound influence characterized predominantly by deleterious effects on population growth.

The fifth chapter delves into the post-colonial epoch in Africa, centering its examination on the onset of African independence in the 1950s. This pivotal juncture marked a watershed moment as African nations fervently sought emancipation from colonial dominion, thereby ushering in a transformative era defined by multifarious sociopolitical and demographic shifts.

During this epoch, one of the salient phenomena was the discernible migration from rural to urban locales, propelled by economic incentives and the allure of improved living conditions within burgeoning urban centers. Nonetheless, the attainment of independence was accompanied by an ardent aspiration to assimilate and conform to European standards, particularly in the realms of health and healthcare. This concerted drive precipitated a noteworthy reduction in mortality rates coupled with a conspicuous escalation in birth rates, collectively contributing to the exponential population growth that characterized this period.

The realization of independence imbued many African nations with a palpable sense of hope and optimism, ushering in an era brimming with promise. However, it also laid bare the enduring scars inflicted by the legacy of colonialism. One of the consequential challenges faced in the post-independence milieu was the significant emigration of individuals from Africa, a trend exacerbated by a dearth of skilled professionals indispensable for the arduous task of nation-building. Additionally, the painful vestiges of colonialism were punctuated by episodes of violence and protracted struggles for independence, exemplified by the protracted Algerian War of Independence.

As we delve further into this discourse, it becomes evident that the growth trajectory of the African continent can be attributed, at least in part, to the strides made during the colonial era, spanning from 1890 to 1950. These advancements, though often overshadowed by recurrent bouts of violence and upheaval, were notable, particularly in the domains of healthcare and infrastructure. While establishing a direct causal link between colonialism and the subsequent demographic expansion in Africa may prove elusive, it is tenable to assert that the developmental endeavors undertaken by European powers

during the waning years of colonial dominion did, in part, provide a catalytic impetus that was harnessed and leveraged during the subsequent era of independence, thereby facilitating the remarkable demographic growth witnessed on the African continent.

The second paragraph of chapter five aims to contextualize colonialism within a comprehensive framework, considering its historical repercussions and enduring effects on contemporary societies. It seeks to understand the complex interplay between colonial legacies and population growth, revealing their paradoxical dimensions and potential dangers. The thesis also explores potential dangers in the evolving demographic landscape, such as resource strain, social tensions, and government capacity to meet population needs. Understanding these pitfalls is crucial for formulating policies and strategies to navigate the complex terrain of demographic change.

Finally, the conclusion encapsulates the key findings accumulated thus far, affirming that the depopulation witnessed in Africa during the colonial era was the result of a multifaceted interplay of factors.

These factors encompassed exploitative practices, the introduction of diseases, periods of famine, and certain advancements, the cumulative impact of which was further exacerbated by disparities within the colonial framework.

Although the precise contribution of healthcare interventions to subsequent population growth remains elusive, it is incontrovertible that they played a pivotal role in mitigating the potentially more severe demographic consequences amid the myriad adverse effects of colonialism.

At the same time, the ongoing demographic expansion observed in Africa can be ascribed to a confluence of factors, including the enduring legacy of European advancements introduced during the colonial epoch and the progressive attainment of independence by African nations.

The cessation of colonial rule marked the inception of a new epoch characterized by decolonization endeavors and post-colonial governance policies that exerted a profound influence on population

growth through advancements in healthcare, education, and economic development. Africa's demographic trajectory is a testament to the intricate interplay of challenges and opportunities that are intrinsic to the continent's complex historical and contemporary milieu.

VIII. Bibliography

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