

Frankema, Ewout

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Ewout Frankema, Wageningen University

ewout.frankema@wur.nl

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Abstract

The life course of economic history as an autonomous academic sub-discipline is marked by two key transitions: the Cliometric revolution of the 1960s and a second, more recent, revolution in which persistence studies have caught most of the attention (Cioni et al. 2021). This second revolution put the spotlight on Africa. In this essay I explore why Africa has become such a popular place for adherents of persistence studies, and how this new branch has influenced our understanding of long-term African development. I survey and classify the main historical explanations for Africa's poverty and develop three interrelated arguments. First, that the portrayal of Africa as an *exceptionally poor* region offers an attractive explanandum for empirical tests of historical persistence. Second, that a pre-occupation with proving persistence has led to a *surplus of explanations* of structural poverty and an *underexposure* of both the realities as well as possibilities of change: Africa is neither as poor nor as static as the collective body of persistence studies suggests. Third, that the success of persistence studies in unearthing correlations between historical and contemporary variables impels scholars working with the notion of *path dependence* to reflect more systematically on the relationship between forces of persistence and forces of mutability.

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1. Introduction

To the envy of many other fields of scholarship, economic history can boast with a strong academic identity grounded in a collective effort to unravel a highly complex and important puzzle held together by a single meta-question: why are some societies rich and others poor? As long as questions of wealth, poverty and inequality resonate with public audiences there is a place for a community of economic historians. In times of methodological contestation, such as the Cliometric turn of the 1960s, this community may experience an identity crisis, but one that typically stimulates creativity and debate. It remains to be seen whether the second revolution in economic history, driven by so-called persistence studies, equally justifies the term ‘revolution’, but it is hard to deny that it has sparked new conversations (Cioni et al. 2021). Whether one identifies as an economic *historian* or as a historical *economist*, when we are able to stir debate, to rejuvenate, to excite, and to draw in new members from the outside, our community will thrive.¹

This is no less true for *African* economic history. Since the late 1990s a rising flow of studies has constituted, in the words of Hopkins (2009), a ‘new’ economic history of Africa, a renaissance of a field that faced near existential threats in the early 1990s (see also Austin and Broadberry 2014, Cogneau 2016). Africa became especially popular among scholars working in the new branch of persistence studies. Since 2001, more persistence papers have appeared on Africa than on all OECD countries together, and these have also been cited much more (Cioni et al. 2021, Table 4).² In addition, a considerable number of persistence studies of global scope, including the now famous “AJR 2001”, developed viewpoints on African comparative development that have gained considerable traction (Acemoglu et al. 2001).

Why did Africa attract the spotlight of the second revolution? And how has this new branch of research shifted the knowledge frontier on questions of long-term African development? This essay addresses both questions by surveying and classifying the various causal narratives that have been advanced in, what I for convenience-sake label as, African historical economics (AHE henceforth). The discussion will focus on the contribution of the persistence studies (PS). Persistence studies link historical phenomena - often referred to as ‘events’ or ‘treatments’ - to present-day societal conditions - often dubbed ‘outcomes’ – usually spanning one or more centuries in time. While the historical ‘events’ are wide-ranging, the

¹ I deliberately refrain from backing up these claims with references to publications that have had far-reaching societal impact. I presume all readers can fill this in for themselves.

² Most of the studies discussed in this chapter focus on parts of Sub-Saharan Africa. For convenience sake I will mainly refer to Africa.

‘outcomes’ are mostly confined to indicators of current economic performance. I will highlight how many of these studies are inspired by, and rooted in, older strands of African economic history (AEH). I will also discuss some theoretical and empirical contributions that qualify as non-economic outcome studies (NEOS), or studies that engage with African economic history by focusing on processes of transition instead of continuity.³

Three interrelated arguments will tie this essay together. Firstly, I contend that the conception of Africa as an *exceptionally* poor region offers a highly attractive *explanandum* for empirical tests of historical persistence in which poverty is implicitly equated with economic and institutional stasis. Secondly, I argue that a pre-occupation with proving persistence has led to a *surplus of explanations* of structural poverty and an *underexposure* of both the realities as well as possibilities of social, political, economic and cultural change: Africa is neither as poor nor as static as the collective body of persistence studies suggests. Thirdly, I claim that the overwhelming success of the persistence studies in unearthing correlations between historical and contemporary variables impels scholars working with the notion of *path dependence* to reflect more systematically on the relationship between forces of persistence and forces of mutability (see also Voth 2021).⁴

Such systematic reflections include questions such as: how many paths from the deep past can run into the present without drifting apart or evaporating and petering out? How do paths from the deep past collide into other, younger paths without being overridden? How accurate is the term historical ‘event’ in reference to eight decades of colonial institutional development, four centuries of slave trading, or millennia of ethnic and genetic drift? Can such ‘events’ or ‘treatments’ be meaningfully cast into a single numerical variable, and if so, what are such variables exactly capturing, and what do they ignore – the baby, the bathwater? Has post-colonial history had any effect on the economic performance of African societies, or have the structural impediments of Africa’s historical legacies chiseled the region’s development trajectories in stone? And at the most fundamental level: how useful is it to conceptualize history in a classic Marxist fashion, as a chain of multiple equilibria, instead of a continuum of disequilibria? (Nunn 2009, p. 75). Engaging with such fundamental questions of durability and change in human history requires a shift in focus from static comparative research designs, towards more dynamic conceptions of long-term development. In such conceptions, *history* cannot be treated as a bridge connecting two banks of a sleepy river. History, as Heraclitus famously pondered, is an ever-flowing river in which one cannot step twice.

I do not aim to provide a comprehensive survey of the AHE literature. Several reviews have appeared in the past decade, including a recent one by Michalopoulos and Papaioannou (2020) which is more extensive than mine, but adopts a different categorization (see also Nunn 2009; Fenske 2012; Fourie 2016; Fourie & Obikili 2019). I will also largely refrain from discussing the methodological boundaries between the *historical economics* and *economic*

³ See Cioni et al. 2021 for the acronyms PS and NEOS, the acronyms AHE and AEH are mine.

⁴ For a fine example of the concepts used by sociologists to analyse the tensions between institutional durability and institutional change, see Clemens and Cook (1999).

history of Africa, apart from noting that there is substantial overlap, cross-fertilization as well as some outspoken heuristic antagonism (Hopkins 2009, Fenske 2012, Akyeampong et al. 2014, Austin and Broadberry 2014, Cogneau 2016).⁵

The persistence studies as such have been criticized from many sides – and not just by professional historians. Comments have been made on the reliability, validity and uncritical use of historical data (Albouy 2009, Jerven 2013, Meier zu Selhausen 2019), on estimation methods and specifications (Cogneau and Dupraz 2014, Bickenbach et al. 2016, Kelly 2019), on conceptual issues related to the ‘compression of history’ (Austin 2008a, Jerven 2015) and euro-centric bias (Austin 2007, Bayly 2008, Frankema et al. 2016). Voices have also been raised against the historical determinism inherent to persistence studies and their neglect of fundamental patterns of change in Africa and beyond (Jerven 2010, Frankema and van Waijenburg 2012, Banerjee and Duflo 2014, Arroyo Abad and Maurer 2019). I will keep most of these cans of worms closed. It is clear that persistence studies are hitting a nerve. This essay touches upon the nerve of the narrative.

2. Africa in the spotlight

Why has Africa attracted the spotlight? I believe the most important reason is that in the past three decades the *global* poverty problem has become the *African* poverty problem. Whereas in 1990 ca. 80% of the world’s extreme poor were of Asian descent, in 2020 ca. 85% of the world’s extreme poor are concentrated in Africa, and especially south of the Sahara. Despite the steady decline in relative rates of poverty, Africa’s total poverty headcount has continued to rise under pressure of population growth, and it may well continue to do so in the coming decades (World Bank 2020; Frankema and van Waijenburg 2018). Understanding why Africa is poor – or more precisely formulated, why the region faces greater barriers to overcoming poverty than other parts of the Global South - is not just a question of world historical significance, but also key for the design of effective development policies.

The conception of Africa as an *exceptionally poor* region offers a highly attractive explanandum for empirical research aiming to test forces of historical persistence. After all, poverty is associated with economic stagnation and institutional stasis. Right at the time that worldwide poverty eradication moved to the top of the international community’s policy agenda with the development and implementation of the UN Millennium Development Goals, debates on the *geographic versus institutional* roots of (under)development caught on. The proposition that Africa’s unique biogeographic endowments have placed constraints on long-term economic development was put forward in a series of papers (e.g. Sachs and Warner 1997, Bloom and Sachs 1998, Gallup et al. 1999) and one very popular book (Diamond 1997) appearing in the late 1990s. These studies provoked instant responses by proponents of the neo-

⁵ Not only are the boundaries with African Economic History diffuse, next to Historical Economics there is also something that could be called Historical Political Science.

institutional school (Acemoglu et al. 2001 and 2002, Rodrik et al. 2004). Instead of infertile soils, endemic droughts and endemic tropical disease, these studies pointed in the direction of ethnic heterogeneity, colonial institutions and the African slave trades to explain persistent African underdevelopment (Easterly and Levine 1997, Bertocchi and Canova 2002, Nunn 2008, Acemoglu and Robinson 2010). This all happened at a time when a large number of African countries reached the trough of a prolonged post-colonial depression, a series of ‘lost decades’ that were also observed in 19th century Latin America (Bates et al. 2007). At the time, influential media outlets such as *The Economist* characterized Africa as the ‘hopeless continent’.⁶ As we will see below, some of the early AHE studies used similar frames.

Although economists, as most social scientists, are ultimately driven to understand the challenges of the world today, and not primarily the problems of the past (Abramitzky 2015), *African history* quickly began to capture the imagination. Earlier generations of historians, anthropologists, sociologists and economists had formulated a range of thought-provoking theses on the deeper roots and nature of African development. Armed with state-of-the-art regression techniques, a new generation of economists, including some political scientists, ventured out to put these theses to the test. Add to the presence of testable theses the fact that the African continent - as well as many African countries - contain high degrees of demographic, genetic, ethno-linguistic, geographic and ecological variation, and one can see the treasure trove for econometricians in search of large N-samples shining. Heterogeneity is the fuel that keeps the motor of multivariate regression models roaring, and is key for obtaining the statistically significant results that top journals in economics find worth publishing.

Africa not only held the key to the global question of poverty, it also turned out that the quantitative data that could shed light on its *exceptional* development path were not as scarce as long thought. Colonial governments and ‘native’ authorities, Christian churches and missionaries, European slave traders and railway companies, courts and custom houses, they had all kept records on historical phenomena that are relevant to the study of long-term African development. Anthropologists, geographers and demographers had also compiled extensive qualitative and quantitative reports on topics as varied as the location of missionary stations, rates of urbanization, land use, agricultural output, marriages, polygamy and ethno-linguistic profile. Data sources such as the British colonial Blue Books, Murdock’s ethnographic atlas (1967) and the missionary maps of Beach (1903) and Roome (1925) have now been exploited for dozens of research projects. That these data were almost exclusively produced by non-Africans was of concern to hairsplitting historians who did (and do) not understand our models and techniques anyway, so I was told in the corridor. Meanwhile the data on contemporary societal conditions also expanded quickly, with micro-level data contained in censuses made accessible by IPUMS, public opinion data by the Afrobarometer, household survey and living standards data by, amongst others, the World Bank. Influenced by the burgeoning field of behavioral economics, historical economists have even started to generate new data in-the-field, through behavioral experiments wrapped up in pre-designed ‘games’ (e.g. Lowes et al. 2017).

⁶ Front cover of the issue of 13 May 2000. An apology followed in the ‘Africa rising’ issue of 3 December 2011.

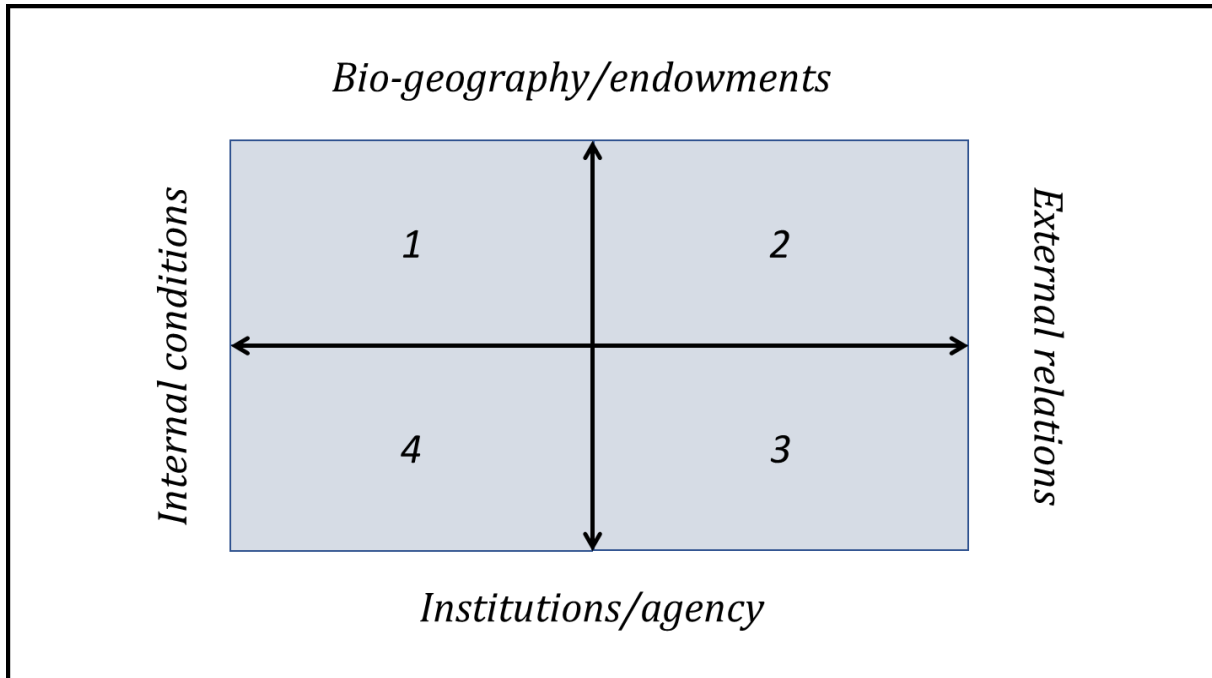
Advancements in GIS-software further enabled researchers to map ecological, demographic and geographical variation at fine-grained spatial resolutions, which have in turn allowed for the construction of new dependent variables as well as large batteries of control variables (e.g. colonial borders, ethnic borders, light density, ruggedness, crop suitability indices). While the first AHE papers were based on cross-country regressions, and mostly analyzed Africa's economic standing in a global comparative frame to maximize estimation power, in the 2010s the field moved on to exploit the promises of more fine-grained data at the sub-national level, shedding new light on Africa's highly diverse economic geography and its inherent spatial inequalities.

However, new data, methods and techniques cannot explain the sudden popularity of Africa as a place for persistence studies. After all, these factors were not unique to Africa. The real attraction of the region appears to be in its image of the exception: the only world region that remains mired in a state of poverty that other world regions escaped, or are escaping. It is this image of stasis that has sparked a wave of scholarly creativity and associated rhetoric of tragedy and failure. We shall now look more deeply into the explanations of African poverty.

3. Historical causes of African underdevelopment

The simple 2x2 diagram provided in Figure 1 helps us to classify the key explanations of long-term African development that have been advanced in both the AHE as well as the more 'traditional' AEH literature. The two axes divide the field into four areas. The vertical axis juxtaposes Africa's bio-geographic conditions - or endowments - with the role of institutions. The term endowment here refers to natural resources and ecological conditions as well as relative factor proportions (i.e. land, labour and capital). Institutions are broadly understood as the "*humanly devised constraints that structure political, economic, and social interaction*", loosely put "the rules of the game", the fruit of human agency (North 1991, p. 97). The horizontal axis then contrasts internal conditions with external relations, including foreign interventions. The conditions (and structures) that are endogenous to African environments and societies have obviously been of greater relative importance in times preceding globalization and imperial encroachment. The influence of external forces on the development of African economies have arguably grown with the rise of global trade and the onset of European imperialism. This temporal context is important to keep in the back of our minds.

Figure 1: Diagram to classify explanations of long-term African development



Source: author's own

In what follows I will trace the underlying logic of proposed causal mechanisms which are often cutting across two or more quadrants. Q1 refers to the various opportunities of, and constraints imposed on, long-term development by African endowments. Q2 refers to Africa's biogeography interacting with external forces, such as the comparative (dis)advantages underpinning Africa's trade relations with the rest of the world (e.g. slave exports, tropical cash-crop exports), as well as foreign (European) settlement patterns that have been determined by local biogeographic conditions (e.g. tropical disease incidence). Q3 refers to the institutions that have arisen in the context of external relations, especially those imposed by colonial powers. Q4 refers to historical institutions of African societies that have not, or only lightly, been affected by external forces.

3.1 Africa's biogeographic misfortunes

African bio-geographies, so it is argued by many, have severely constrained the region's opportunities of agricultural productivity growth, commodity transportation and demographic expansion, more so than in other world regions (Sachs and Warner 1997, Bloom and Sachs 1998, Gallup et al. 1999). These impediments include relatively poor soils that tend to be quickly exhausted, vast savannah and desert ecologies that are unsuitable for (intensive) crop cultivation, and highly erratic rainfall regimes which have kept African farmers mobile and risk averse. The relatively limited number of navigable waterways and natural harbors made human portage the default mode of transportation in many places before the arrival of motorized transportation technology. Compared to the possibilities of water transportation in Europe and

North Africa, with its inland Mediterranean Sea, dense web of navigable rivers and meandering coastlines dotted with navigable inlets, Sub-Saharan Africa indeed seems to have unfavorable geographic conditions for processes of agricultural commercialization and market integration.

A high incidence of tropical diseases has placed additional limits on the reproduction of human and animal populations. Farm animals were relatively hard to integrate into systems of crop cultivation and mixed husbandry was the exception, not the rule. Such diseases did not only check demographic expansion; the prevalence of lethal tropical diseases, malaria in particular, was also one of the main reasons why Europeans invaded the African interior later than they did in other world regions (Curtin 1989). Studies by Weil (2014) and Alsan (2015) have offered quantitative estimates of the direct and indirect impact of respectively malaria and trypanosomiasis on African economic development. Weil has argued that the direct negative effects of malaria are not immediately evident, as the disease mainly raises child mortality and not so much morbidity later in life (Weil 2014, 90-91). Alsan has argued that tsetse made a real difference, as the disease had a negative impact on population density and pre-colonial political centralization, which has in turn constrained economic development (captured by the nighttime luminosity). I will further discuss such indirect channels in section 3.2.

Jared Diamond's *Guns, Germs and Steel* (1997) has pushed back the biogeographic explanation of current global inequality to the start of the Neolithic Revolution. Diamond argued that, in comparison to Eurasia, African agriculture has been held back by a relative paucity of wild grasses and animals suitable for domestication. The ecological heterogeneity associated with the many latitudes along the continent's vertical axis, as well as the presence of large inhospitable areas such as the Sahara Desert, have hampered the diffusion of the domesticated food crops and farm animals from the Fertile Crescent, many of which found their way into Europe, but much less so into Africa. This idea has been taken to the test by Olsson and Hibbs (2005) who confirm that initial biogeographic conditions correlate with the location and timing of transitions to sedentary agriculture and, in turn, with the development of social complexity and industrialization.

Taking all these adverse environmental conditions together it seems as if Africa has drawn virtually all the short straws. I agree with the view that Sub-Saharan African ecologies have constrained demographic expansion and agricultural intensification for a major part of the Holocene. However, there is no basis for geographic determinism. Environmental conditions may, on the whole, be slow to change, they are certainly not static. Biological globalization, technological change and (global) market dynamics have radically shifted production possibility frontiers in rural societies out- and inwards, but mostly outwards, and this has happened in Africa on numerous occasions. For instance, Diamond's vertical-axis argument ignores the fact that the desertification of the Sahara begun *long after* the Neolithic revolution (Diamond 1997, Chapter 10). While tropical climates may have hindered the southward diffusion of food crops from the Eastern Mediterranean basin, there is no evidence that domesticated animals were stopped on their way to the South. In fact, there is recent evidence suggesting that the desertification of the Sahara may have been aggravated by *overgrazing*, as

nomadic pastoralism spread widely into the Northern half of the continent before cattle entered into Europe. At that time the Sahara was richly endowed with water resources, plants and forests (Wright 2017).⁷ Indeed, environments are not stable, and this is important to keep in mind when we seek to mold environmental conditions into time-invariant independent variables.

I do concur with Diamond that Sub-Saharan Africa was not well endowed with high-caloric food crops, that is, until 1492. The single biggest transition in African agriculture occurred with the introduction of a range of previously unknown crops from the New World. Earlier introductions from Asia were certainly important too, but the arrival of food crops such as maize, manioc, sweet potatoes, tomatoes, and several types of beans, as well as a large number of commercial export crops (e.g. cocoa, rubber, tobacco, vanilla, groundnuts), fundamentally altered African agriculture from the 16th through the 20th century (Crosby jr. 2003, McCann 2005). Maize and manioc came to play a key role in the underpinning of African and Atlantic systems of slave raiding and trading (Wilks 1993, Miller 1988). The New World crops had a lasting effect on the ability of African farmers to feed expanding human populations. Modelling the demographic implications of the adoption of maize, Cherniwchan and Moreno-Cruz (2019) recently suggested that the resulting agricultural productivity gains may have stimulated both local population growth as well as the intensity of slave raiding, such that the *net* demographic effect of the Columbian exchange has been close to zero. This paper thus focuses on understanding a key transition in African history, without making a connection to the present. The modelling of transition scenarios can help to circumvent the obvious limitations of historical data, especially in periods before 1900. It wouldn't surprise me if this is one of the routes in which the AHE literature develops in the coming years along with the persistence studies wave.

The combination of tropical ecologies and the diffusion of New World crops gave African economies a specific edge in the development of commercial export crops during the so-called 'commercial revolution' of the late 18th and 19th centuries (Hopkins 1973, Law 1998, Austin 2005, Dalrymple-Smith 2020). The export of palm oil (an indigenous crop), groundnuts and gum overtook West African slave exports in total value in the 1830s, and the export crop portfolio expanded with amongst others rubber, cocoa, cotton, coffee, tea and tobacco in the colonial era (Frankema et al. 2018). A recent study by Roessler et al. (2020) addresses the long-term effects of this 'cash-crop revolution'.⁸ Using agroclimatic suitability scores and historical data on the production location of export crops they demonstrate that colonial cash crop production exhibited a large and positive long-run effect on the spatial distribution of cities, road infrastructure, nighttime luminosity and household wealth. They also show that colonial infrastructural investments related to the cash-crop booms deepened spatial economic inequalities and that these effects rival or surpass other geographic and historical drivers of African development. This paper thus shows how new paths of persistence may override older

⁷ Elsewhere I have questioned Diamond's idea that domesticated animals were crucial in the development of human diseases, as many of Africa's lethal diseases appear to stem from wild animals (Frankema 2015).

⁸ The term was popularized by John Tosh (1980).

paths of persistence. In a region where, in a very short window of time, modern infrastructure and urbanization has profoundly reconfigured the geographies of human settlement, including production and consumption patterns, the appearance of such effects makes good sense.

Indeed, the diffusion of new technology has been the key factor in overcoming many of Africa's biogeographic misfortunes. The great advances made in combatting tropical diseases reveal that poverty traps caused by hostile ecological conditions are not insurmountable (Deaton 2013, Chapter 3). Medical technologies have contributed to rapid decreases in child mortality, increases in life expectancies and rapid demographic growth that is bound to continue far into the 21st century. Jedwab and Moradi (2016) have shown how railroad infrastructure has been key in the formation of cities and has decisively reconfigured the economic geography of Africa by lifting constraints on transportation and agglomeration (see also Jedwab et al. 2017). Green revolution technologies, revolving around the adoption of improved seed varieties, offer another example of the potential to overcome malnutrition in rural areas, to further lower child mortality and to raise agricultural productivity and income, even though part of the potential remains to be reaped (Larson and Otsuka 2013, von der Goltz et al. 2020).

3.2 Indirect effects of African endowments

Let us return to the diagram (Figure 1). In addition to the shifting palette of direct biogeographic constraints on long-term African demographic and economic expansion, there are several indirect effects of the historical endowment structure that have received emphasis in the AEH and AHE literatures.⁹ Such indirect effects involve more complex channels of influence. I will confine the discussion to two of these channels, which I label the *factor market* channel and the *state formation* channel.

The factor market channel is primarily associated with the Nieboer-Domar thesis.¹⁰ This thesis holds that in a context of low population densities (labour scarcity) and open land frontiers (land abundance), which characterizes the majority of pre-20th century Africa, two possible institutional equilibria can arise: 1) an egalitarian social order with free farmers who add value to land by clearing and preparing it for agriculture. This equilibrium emerges where aspirant-elites fail to control the peasantry by limiting their access to land; or 2) an inegalitarian social order in which elites extract surpluses by controlling the peasantry. This situation emerges where elites succeed in limiting peasant's access to (virgin) land or in monopolizing critical agricultural inputs, skills or capital. Only by limiting the mobility of peasants can elites have the power to coerce labour and avoid paying prohibitively high market-clearing wages. Historical institutions of serfdom and slavery are key examples of such forms of labour coercion (Domar 1970, pp. 18-21).

The Nieboer-Domar thesis has been widely embraced in AEH to explain the prevalence of African slavery, as well as other labour market institutions such as human pawning, debt-

⁹ Acemoglu et al. (2001) have classified biogeographic explanations of development into 'simple' and 'sophisticated' geography hypotheses, where the latter refers to the effects of the natural environment on economic development via their influence on institutional development.

¹⁰ Domar built his thesis on ideas originally posited by the Dutch ethnologist H.J. Nieboer.

bondage and various forms of colonial labour coercion (Hopkins 1973, Iliffe 2007, Austin 2008b, van Waijenburg 2018). For a formal test of the thesis, Fenske compiled cross-sectional data on a global sample of societies from Murdock's *Ethnographic Atlas* (1967), showing that the historical nature of land rights, slavery and population density are indeed co-determined. Modern survey data for Ghana suggests that historical institutions with regards to land tenure are related to the functioning of land markets today (Fenske 2013). In a related case-study, Fenske used colonial court records showing that, up to the early 20th century, the Egba in Nigeria had imprecisely defined land rights, systems of forced labour and labour-secured lending practices. Subsequent changes in endowment structures and the introduction of tree crops led to the rise of markets for credit and the most valuable portions of land (Fenske 2012). These two papers are not only interesting for their results but also because of their varying research design. The first is an example of a persistence study, but the second analyses a historical transition in factor market institutions, revealing an important driver of historical change: altering relative factor proportions and natural endowments (i.e. tree crops) provoke processes of fundamental institutional change. These rapid shifts in factor ratios are another reason, in addition to technological change, to treat claims of long-term persistence with caution (Austin 2016, Frankema and van Waijenburg 2018).

The *state formation* channel follows a comparable line of reasoning, starting from endowments. Carneiro (1970) formulated the 'environmental circumscription thesis' to account for the historical origins of the state as a centralized political body. His thesis holds that ancient states were more likely to emerge in areas where the available agricultural land was scarce and clearly circumscribed by non-agricultural land, such as river basins, highlands and islands, than in areas without such natural boundaries. The Egyptian Nile basin surrounded by extensive desert areas offers a clear example of such a circumscribed setting, the Amazonian rain forest its antithesis. Carneiro reasoned that in the circumscribed areas, where possibilities for people to escape and sustain their original livelihoods were limited, warfare would ultimately lead to one group being subjected to another. Following defeat, tribute systems (in kind, people (slaves) or cash) would arise and support the verticality of political relations. If such processes of economic and political integration are extended to other settlements in the area, the process of state centralization gains momentum. In the rain forest, in contrast, cross-community warfare would lead to a dispersal of human settlements at distances far enough to seek refuge in isolation. In such a context vertical power structures are less likely to emerge.

Jeffery Herbst (2000) did not cite Domar, nor Carneiro, when he set out his thesis of historical state formation in Africa, but his ideas are closely related. Herbst argues that in lowly populated parts of Africa state centralization has been challenging since the marginal costs of tax collection and border defence easily exceeded expected marginal revenues. These constraints gave rise to a scattered landscape of African states and acephalous societies with fluid territorial boundaries and extensive uncontrolled hinterlands. African states, Herbst argues, prioritized control over people in the centres of power, instead of controlling clearly delineated territories which had formed the basic principle of state formation and state

competition in Europe (see Tilly 1990). The high mobility of Africans, especially among pastoral or semi-pastoral peoples, further complicated processes of state formation.

Osafo-Kwaako and Robinson (2013) have countered Herbst by arguing that contrary to the rest of the world, *within* Africa, there exists a negative correlation between population density and state centralization. Building on anthropological work by McIntosh (1999), amongst others, they contend that the critical factors of Eurasian state formation, including trade and warfare, fail to explain the rise of vertical political hierarchies in Africa. Acephalous societies in Africa could be densely populated and have horizontal authority structures. According to the authors, the social logic underpinning ancient processes of African state formation requires a deeper understanding of cultural evolution instead of plain demographics.

One of the reasons that a correlation between state centralization and population density may fail to show up within Africa – apart from the fact that claims to the use of accurate pre-colonial population data must be taken with a large grain of salt - is that the military and logistic technologies that supported the rise of savannah states were ineffective in the forest zones. Like the Mongol empire of the 13th century, the West African savannah states were able to bring vast lowly populated territories under control via horse and camel-back warriors that could cover large distances irrespective of seasonal weather patterns. These states could tap into the rents of long-distance trade and force major trade hubs (cities) to pay tribute with the credible threat of force in case of non-compliance. The internal cohesion of these centralized states remained fragile, and the risk of imperial overstretch was large. In the forest zones, states remained smaller, as they were mainly held together by foot soldiers whose mobility depended on the dry season. These conditions constrained the reach of armies, as well as possibilities of fiscal expansion based on elaborate systems of tax assessment (Goody 1971, Coquery-Vidrovitch 1985, Frankema 2015). But apart from the ecology-dependent mechanisms of state formation, the other question that looms large over this debate is how the anthropologist George Murdock managed, without any professional experience in Africa, to gather all the ‘historical’ data that underpins several claims of African exceptionalism.¹¹

3.3 The African slave trades

Slave raiding and trading are another ‘exceptional’ aspect of African history not because slavery as such was unique to the region, but because of its pervasive and prolonged nature: the sea-bound trades carried on until the last decade of the 19th century, and the intra-continental trades continued several decades more into the 20th century (Manning 1990, Lovejoy and Hogendorn 1993). To what extent the slave trades may be classified as an internal (Q4) or external driver (Q2) of African development is difficult to judge. It was the interplay between the internal supply of, and external demand for, slaves - as well as external demand for slave-produced commodities within Africa – that shaped the systems of slave raiding and trading for several centuries. The slave trades are also problematic to understand from an endowments point of view: why would labour scarce economies engage in large-scale export of its most valuable

¹¹ See for instance Murdock (1959) and (1967).

production factor? What is clear though, is that volatile markets and local institutional changes generated continuous reconfigurations in practices of enslavement, in trade relations with Europeans, Americans, Arabs, as well as Africans, and that the integration of slaves within African societies was also affected by the forces of external demand (Miers and Kopytoff 1977, Lovejoy 2000). These tight connections between internal and external slave trade networks should deserve particular attention in studies trying to grapple with the long-term effects of the African slave trades, as Whatley (2020) rightly observes.

What do these effects look like? I will confine the discussion to three aspects: demography, state formation and (mis)trust. Thanks to the collective effort of a large group of historians, a vast database of the trans-Atlantic slave trades has been constructed that provides a much more accurate picture of many dimensions of these trades than existed a few decades ago (Eltis et al. 1999, Klein 2010). Other parts of the external trade, such as the Indian Ocean and Red Sea trades, have not been nearly so precisely documented. The numbers of enslaved Africans shipped abroad remain guesstimates based mainly on the work by Austen (1988, 1992) and Manning (1990, 2010). Data on the volumes of internally traded and retained slaves are even harder to come by, although Austen (1979) provides estimates of the trans-Saharan trade, the most important internal trade system. The large gap between the observed and un(der)observed parts of the trade complicates efforts to pin-down the long-term effects of the African slave trades, especially in terms of its effect on the distribution of population.

The negative demographic effects of the trades at the macro level are clear. Especially in the two centuries between 1650 and 1850, the large-scale export of young men and women in their reproductive ages as well as children prior to their reproductive ages seriously reduced Africa's population growth potential, while many Eurasian populations in those days doubled in size. Not only captives that were shipped abroad, but also people who were wounded or killed in raids and long-distance travels reduced demographic growth. Starting in the late 1970s, Manning has led the research on the demographic consequences of the slave trade, by developing and refining simulation methods. He extended his models of the trans-Atlantic slave trades to the Indian Ocean and intra-African slave trade systems, using census estimates of the 1950s–1960s to project population series back in time (Manning 2010; 2014; see also Frankema and Jerven 2014).

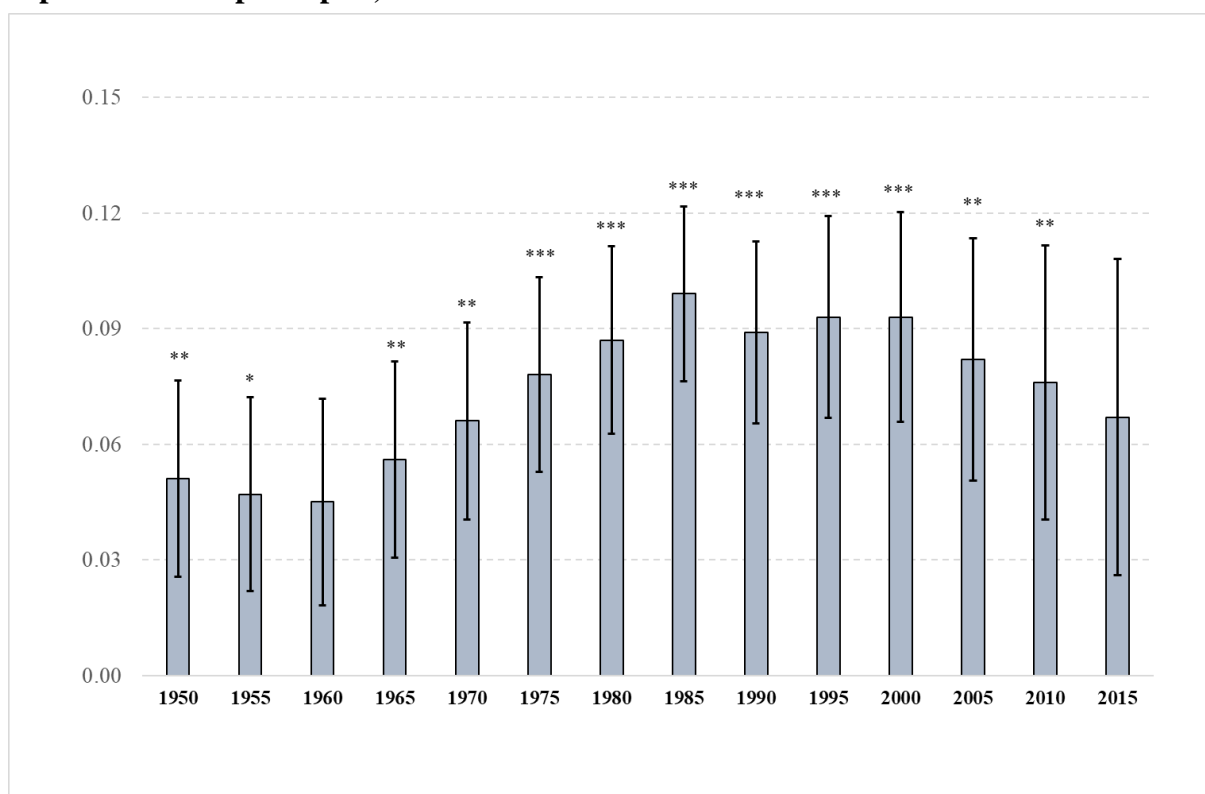
Of course, the demographic consequences of the slave trades have also had multiple indirect effects. One of these indirect effects was the undermining of local processes of state formation in areas being depopulated and the associated erosion of state institutions by endemic violence. The crumbling of the Kongo kingdom (present-day Northern Angola) and the disintegration of the Joloff empire in the Senegambia are oft-cited examples (Nunn 2008, p. 143). Whatley and Gillezeau (2011) have argued that the slave trades have spurred ethnic fragmentation in Africa. They take a stance against the view that ethnic identity is something primordial, or even primitive, and link the roots of ethnicity as a defining feature of identity to the intensification of slave raiding in the wake of external demand. These processes of fragmentation and endemic violence were stimulated by the guns-for-slaves cycle (Whatley

2018). Obikili (2016) has used anthropological data to show that villages and towns of ethnic groups affected by slave raiding for the export trade were politically more fragmented, and that this fragmentation continues to influence political institutions today. He finds that in Nigeria and Tanzania, areas with higher levels of precolonial political fragmentation have a higher incidence of bribery at present.

By focussing on export slavery the AHE scholarship on the topic has remained fairly one-sided, however. The internal slave trades, which almost certainly intensified along with the ocean-bound trades, have been largely neglected. Apart from the drain overseas, the intensification of slave trading *also* led to intra-African shifts in human resources. Female slaves were more often integrated into local societies than male slaves, partly for reproductive purposes, or for sale into the trade with North Africa, Arabia and the Persian Gulf, where demand for female slaves was higher (Lovejoy 2000, p. 64-67). Various West African states such as Asante, Dahomey and Oyo that specialized in slave raiding, or controlled considerable parts of the trade, did this by amassing and centralizing (fiscal) and human resources to extend their military capacity. Such processes underpinned state formation in the coastal rainforest. In the West African savannah the absorption of slaves was also a key feature in the rise of the 19th century Jihadist empires (Lovejoy 2016). In East Africa, the majority of slaves were retained within Africa throughout the 19th century, causing notable spatial shifts in economic activity from the interior to the coast (Cooper 1974, Sheriff 1987). It is, therefore, not so clear what the net effects of the slave trades on state centralization have been and the historical counterfactual is absent.

Nunn's (2008) study of the long-term effects of the slave trades argues that present-day African countries that include heavily raided areas are poorer today than those that stayed outside the main arteries of raiding and trading (or were on the receiving end). While it has become one of the best cited works in AHE, this study is not a textbook example of robust evidence for long-term persistent effects of the African slave trades. The core regression model reveals a strong association between slave exports per area and per capita income levels in 2000. Figure 2, shows a replication of the core model on a time-series of GDP per capita from 1950 and 2015 including all control variables. This replication exercise reveals how instable the main regression coefficient is in a dynamic framework: the leading regression variable, which is specified as the log of slave exports normalized by land area, rises from 1960 up to 1985, then reaches a plateau, to fall rapidly after 2000, while standard errors rise. The statistical significance of the regression coefficient is also highly volatile.

Figure 2: Regression coefficients, robust standard errors and p-values (in stars) of slave exports on GDP per capita, 1950-2015.



Source: Replication of Nunn's regression model (2008, Table III, column 5, p. 155), using GDP per capita series 1950-2015 from the *Maddison Project Database, version 2020*. Missing values for Somalia imputed from Maddison 2010. Note: See Frankema and van Waijenburg (2011) for the original version of this argument.

This replication underpins a crucial point of historical dynamics: how sure can we be of persistent long-term effects if we do not establish that such effects actually persist *over the course of time*? The slave trades have been an integral part of many African societies for centuries, generating a plethora of local experiences, leaving smaller and larger but in all cases highly varied imprints. That the slave trades have had long-term effects is beyond doubt, but it is rather implausible that these long-term effects are so straightforward that they show up in GDP per capita of countries that did not even exist at the time the slaves were exported.¹² It is far more likely, that the effects of the slave trades consisted of *multiple paths* that have interacted with multiple patterns of social change over time. The instability of the estimated regression points to the ever-present undercurrents of Heraclitus' river. Historical dynamics were not only at work during the centuries-spanning era of the slave trades, they were also operating in the period of decolonization, post-colonial crisis and (partial) recovery since the 1950s. This begs the question to what extent the effects, as well as the outcomes, of these trades can be meaningfully cast into a single dependent and independent variable.

¹² Note that the colonial borders of these countries may also have been affected by these trades.

The follow-up study by Nunn and Wantchekon (2011) focuses on a potential mechanism and is based on sub-national data. The core finding is that levels of individual mistrust among people whose ancestors were heavily affected by the slave trade appear to be higher than among those whose ancestors have been less exposed. This result may be considered as one of the transmission channels via which export slavery has generated long-term economic underperformance. The idea is also potentially compatible with the dynamics shown in figure 2. The major slave exporting areas started to experience a set-back precisely in the period that the power vacuums of decolonization and early nation-state formation led to intensive political conflict, with severely negative economic consequences. In that case, the effects of the slave trades were *interacting* with historical processes that unfolded later in time and subsided accordingly. But the trend in figure 2 may also just reflect spurious correlation or alternative forms of historical interaction. Perhaps the major slave exporting regions have retained more open economies after abolition and were hit particularly severely by the depression in commodity prices in the 1970s to the 1990s?

The take-home message here is that forces of persistence never carve out their path through history in isolation. Instead of relegating relevant historical dynamics to the realm of control variables, it seems worthwhile to bring such dynamics to the fore. After all, *history also matters when the stars do not shine*.

3.4 Colonial institutions

The *Colonial Origins* paper by Acemoglu et al. (2001) became the best cited study in historical economics (Cioni et al. 2021, p. x). The idea that high rates of settler mortality due to tropical diseases incentivized European powers to impose ‘extractive institutions’ at arm’s length, and that these colonial institutions, in turn, have led to persistently weak systems of property rights and rule of law today, gained enormous traction. Contrary to what new generations of economists seem to believe, “AJR” were certainly *not* the first to argue that areas with a high incidence of tropical diseases, such as malaria, yellow fever and tsetse, were less attractive to European settlers than areas with temperate climates where such diseases did not exist. Yet, the paper also caught attention because of its bold thesis, its sweeping global scope, as a critical intervention in the ‘geography *versus* institutions’ debate and because of its revolutionary identification strategy, in which settler mortality rates were used as an *instrumental variable* for the type of institutions established in European colonies. Indeed, this study put the second revolution in economic history on the radar once and for all.

Interestingly, the authors framed their paper as evidence of how institutions rule over geography in explaining present-day distribution of income across the globe, while the core narrative basically follows the ‘sophisticated geography’ argument they seek to reject: internal biogeographic conditions (Q1) shape colonial institutions (Q3), and colonial institutions shape present-day institutions (Q4). It is also interesting to note that the proposed global relationship, as Acemoglu and Robinson admitted in *Why Nations Fail* (2012), fails to hold for Africa as

such.¹³ In Africa's *settler colonies* the degree of extraction, in the form of systematic labour repression, racial discrimination, regressive taxation and land alienation, was (far) more intense than in colonies where Europeans hardly settled, especially those where African producers remained dominant in agricultural export sectors, many of which had originated in the era prior to colonization. In most of the *peasant export colonies* real wages were higher, taxes were less regressive and, in some cases, foreign land ownership was even prohibited (Bowden et al. 2008, Austin 2008a, Frankema 2011, Frankema and van Waijenburg 2012). Nevertheless, AJR 2001 has been extremely influential in staging the debate on colonial legacies in Africa and have inspired a vast number of follow-up studies.

One of these wider debates concerns the question to what extent colonial institutions have been shaped by the identity of the colonizer and specific metropolitan policy goals, and to what extent these were dictated by local African conditions, including the agency of Africans to co-design (in)formal institutions.¹⁴ Such questions have, amongst others, been explored with respect to legal origins (Lange 2004), colonial investments (Huillery 2009, 2011) and the supply of (missionary) education (Bolt and Bezemer 2009, Gallego and Woodberry 2010, Nunn 2010, Cogneau and Moradi 2014, Dupraz 2019). Revisionist studies have highlighted how missionary movements have been misrepresented as a 'European' or 'colonial' legacy, as various scholars have ignored the momentous importance of the *Africanization* of the mission in terms of initiative, labour input, spatial diffusion and the maintenance of mission schools (Frankema 2012, Meier zu Selhausen 2019, Jedwab et al. 2019). Questions regarding the role and interaction of endogenous and exogenous forces also play a major role in studies on the development of colonial fiscal regimes: how extensive was the political control of colonial regimes, and what were the countervailing powers or conditions that limited the arm of the state? (Gardner 2012, Frankema and van Waijenburg 2014). Put differently, how does Cooper's conceptualization of the colonial state as a 'gatekeeper state' relate to Young's view of *Bula Matari*, the 'absolutist' state that crushes rocks? (Young 1994, Cooper 2002, see also Kirk-Greene 1980)

Another strand of literature has engaged with the long-term effects of the artificial state borders established by colonial powers and the effects these borders had on the political amalgamation of different ethnic groups, as well as the splitting apart of ethnic homelands. The seminal study by Easterly and Levine (1997) in which ethnic diversity in a global sample is linked to a range of contemporary economic and political indicators, including schooling, political stability, financial development, foreign exchange markets, government deficits, and infrastructure, did not see Africa's ethnic heterogeneity as a result of the Scramble, but rather as a deeper social condition. In later studies these borders came to the fore (Englebert et al.

¹³ In *Why Nations Fail* Acemoglu and Robinson modified their original account, arguing that the settler colonies of Africa, and especially South Africa, were characterized by dual institutional structures: inclusive institutions were exclusively reserved for European settlers, while exclusive institutions applied to indigenous peoples (2012, pp. 258-271).

¹⁴ This debate is also of central importance in the literature on the American economic divergence. See, for instance, North et al. 2000, Engerman and Sokoloff 2005, Mahoney 2010; see Elliott 2006 for a brilliant historical synthesis.

2002). Alesina et al. (2011) constructed new variables to measure the artificiality of borders and concluded that these were negatively related with GDP per capita in a global sample of countries. Michalopoulos and Papaioannou (2016) explored within-country variation in ethnic partitioning, conflict and public goods, revealing that individuals who self-identify with partitioned ethnicities have fewer household assets, poorer access to utilities, and worse educational outcomes as compared to respondents from ethnic groups that were not split by a border.¹⁵ In a regression discontinuity analysis of the border regions Côte d'Ivoire is sharing with Mali, Ghana and Guinea, Cogneau et al. (2015) have argued against the idea that predetermined geographical and historical conditions were decisive. Their study suggests that reversible post-colonial policies with respect to cash-crop farming (cocoa and coffee) explain a great deal of the discontinuities in consumption and nutrition observed in border regions, which points to an ongoing process of national integration. I will get back to the pressing question of how history overtakes history in history in section 4.

3.5 Indigenous institutions and cultural roots

The final category of theories pertains to the role of indigenous institutions in long-term African development (Q4 in Figure 1). The dominant research question focuses on the link between indigenous institutions, formal and informal, and African poverty, or related vices such as political conflict, violence or entrepreneurial disincentives.

Africa's fragmented landscape of centralized polities and acephalous societies in pre-colonial times has been the main point of departure for a series of persistence studies that have emphasized how weak state centralization has led to present-day underdevelopment. On a global scale, 'state antiquity' has been shown to positively correlate with present-day income levels, and since Africa does not have a strong legacy of antique states it is now poor (Bockstette et al. 2002; Putterman and Weil 2010). Gennaioli and Rainer (2007) have used the Murdock atlas to argue that state centralization is positively correlated with cross-country differences in school attainment, literacy, paved roads and immunizations. Englebert (2000) has argued that modern states in Africa which inherited their legitimacy from a pre-colonial predecessor have fared better than those that emerged from a colonial blueprint. Michalopoulos and Papaioannou (2013) have shown that the complexity and hierarchical structure of pre-colonial ethnic institutions correlates with current nightlight density, which they use as a proxy for local (i.e. sub-national) economic development.¹⁶ Huillery (2009) has pointed out that the parts of French West Africa that had more centralized states in pre-colonial times offered more resistance to French conquest and received less investments after the establishment of French control.

No doubt, processes of state formation are deeply intertwined with processes of long-term economic development and Africa is no exception in this regard. Yet, how exactly the

¹⁵ There is much more work done by political scientists on the nexus between ethnicity, conflict and public goods provision, for which I refer to the survey by Michalopoulos and Papaioannou (2020).

¹⁶ For critique on the use of nightlight as a proxy for regional income, see Cogneau and Dupraz 2014, Bickenbach et al. 2016. See also Chen and Nordhaus for the original warning that luminosity data have high measurement error and cannot be used in all settings (2011, p. 8594).

remnants of pre-colonial states interacted with newly imposed institutions of the colonial state, and whether these interactions are sufficiently patterned to allow for generalizations, remains an unresolved question.

Changing the focus from political institutions to institutions governing social relations, Africa is also often portrayed as a world in itself. Polygamous households, for instance, are largely confined to a so-called ‘polygamy belt’ stretching from present-day Senegal through to Tanzania. Polygamy has, amongst others, been associated with the crowding out of productive investment (Tertilt 2005) and underinvestment in girls’ education (Edlund and Lagerlöf 2006). Fenske (2015) has made an important point, one that is not very often made in the persistence literature, by showing how polygamy in Africa is on the decline. In his words, the decline of polygamy in Africa reveals “an evolution of marriage markets *as dramatic as* [Italics are mine] the rise in divorce in the United States or the decline of arranged marriage in Japan over the same period.” He argued that colonial and missionary education have contributed substantially to the erosion of the values underpinning the institution. But apart from the causes, it is worth stressing that we observe no persistence here, but rather rapid institutional change.

The insight that institutions are mutable has wider relevance for a booming literature at the intersection of anthropology, psychology and economics that emphasizes cultural evolution as a key factor in long-term economic development. One of the leading ideas in this literature is that in tight kinship systems effective cooperation occurs within cohesive in-groups, while outsiders are treated a-priori with distrust (Enke 2019). The emergence of the nuclear family - or the loosening of such tightly knit kinship structures - has come along with moral systems that value trust and cooperation beyond the interpersonal level. The priority given to impersonal pro-sociality over interpersonal relationships, has, in turn, been considered a key condition for the emergence of well-functioning (factor) markets. An important notion in this literature is that these interactions between kinship ties, economic needs and moral systems are amplified over time because they are self-reinforcing. This underpins explanations for the widening of global income gaps (Enke 2019).¹⁷

An important cluster of arguments for the African context revolves around the role of sharing norms and redistributive pressures. Platteau (2014) provides an overview of the causes and consequences of redistributive norms in lineage-based societies in Sub-Saharan Africa (see also Platteau 2009). He explains how the pressure of sharing norms and gift giving practices undermines economic incentives and how specific sanctions, such as witchcraft accusations, reinforce beliefs in, and practices of, redistribution. In moral systems where witch beliefs play a role, economic fortune is generally considered as a result of luck, if not predatory behaviour, rather than the result of personal effort, risk taking or talent. The less fortunate channel their envy, anger and hatred through accusations or physical attacks on the more socially mobile

¹⁷ Ideas about the role of kinship ties, trust and impersonal institutions are far from new. The autonomous individual as the cornerstone of market-based societies is a classic Weberian/Marxian notion, and theories connecting tribalism, lineage-based or collectivist-oriented societies, marriage patterns and gender roles to the functioning of economic systems have a long tradition in anthropology and heterodox economics (e.g. Evans-Pritchard 1940, Polanyi 1944, Boserup 1970, Goody 1971).

members in the community. Withstanding such social pressures is costly and thus impedes entrepreneurship and the unfolding of human talents. Gershman (2016) has empirically tested the connection between witchcraft beliefs and trust, revealing that the erosion of social capital as a result of ‘witch beliefs’ is not an exclusively ‘African’ phenomenon: Europeans whose parents were born in countries with widespread witchcraft beliefs also turn out to be less trusting.

Goldstein and Udry (2008) conducted a micro-economic study linking political institutions to productivity, showing that in Akwapim (Ghana) people’s position in the local political hierarchy is positively related with the security of their land tenure rights. More secure tenure leads to more investment in land fertility and higher output, which in turn, reinforces the individual’s position in the political hierarchy. Acemoglu and Robinson (2014) explore the effect of constraints on chiefs’ power on economic outcomes in Sierra Leone. In the colonial era, chiefs were selected from a ruling family that was formally recognized by the British colonial government. Chiefs ruling in chiefdoms with fewer ruling families faced less political competition and display significantly worse development outcomes today. A possible mechanism is that in such chiefdoms the security of property rights over land is weaker, as the powerful chief is subjected to fewer checks and balances.

Such connections between historical state institutions and present-day informal norms are also made in the work by Lowes et al. (2017) on the former Kuba Kingdom (Central Africa). The 17th century Kuba Kingdom exhibited a range of centralized institutional arrangements including an unwritten constitution, a separation of political powers, an army, police force, and judiciary, and a tax system that allowed for public goods provision. The authors find that people living within the area of the former Kuba Kingdom display weaker norms of rule following and a greater propensity to cheat for material gain than persons living just outside that territory. Their interpretation is that socially desirable behaviour enforced by formal institutions tends to lower parental propensity to teach children the values of rule-following behaviour. This argument goes against a larger strand of literature, partly alluded to above, that associates historical state centralization with superior development outcomes.

3.6 Summing up

What started with a debate on the relative importance of geography *versus* institutions in long-term economic development underpinned by cross-country regressions, has evolved into an expanding research frontier using fine-grained micro-data to explore the historical drivers and mechanisms of comparative development trajectories. The juxtaposition of geography with institutions has now been largely substituted for deeper explorations into the linkages between natural endowments and institutional design. This switch from contrast to connection has been a major improvement. After all, questions of the type ‘what is more important for a car to drive, the engine or the fuel?’ are much less relevant than questions of the type ‘how do engines and fuel work together to move a car?’.

What should receive more emphasis, however, is the basic historical logic that biogeographic conditions have a much greater bearing on long-term economic development in the context of pre-industrial technologies and high costs of long-distance trade and communication, while institutions may start to “rule” in societies that are increasingly exposed to industrial technology, science, urbanization, globalization and digitization. This means that supposedly persistent causal mechanisms are in fact context and time-dependent: biogeographic conditions that have constrained African population growth in one era, may evaporate in the next. Indigenous institutions that have worked well in the context of pre-industrial societies, may hamper growth in the 20th century. Such aspects of time- and context-dependence are not taken into account in the literally *decontextualized* research designs of most persistence studies.

Taking stock of the other axis, the internal *versus* external forces, a different problem comes to the fore: the bias in historical sources produced by foreigners (i.e. non-Africans) underpins Eurocentric conceptions of long-term African development. The AHE literature on missionary schooling has come a long way to acknowledge that the spread of Christianity and associated public goods such as schooling and health care have been as much an ‘African’ as a ‘colonial’ undertaking. Studies on the long-term effects of the African slave trades have focussed almost exclusively on export slavery in the context of European demand, but have largely ignored the effects of internal slave mobilization on long-term institutional development and shifts in human resources and political gravity. The problem of finding a good balance between internal and external forces entails another aspect that I will highlight in the next section: historical explanations of African poverty overlook the possible impact on African economies of the outside world in the post-colonial era, an era in which external forces may have actually started to matter even more, not less.

4. Why Africa is not *that* poor

Africa is poor because of erratic rainfall, infertile soils and its vertical continental axis, because of tsetse, ethnic fragmentation and the slave trades. Africa is poor because of indirect rule, weak pre-colonial state centralization and artificial states, because of extractive (or exclusive?) colonial institutions, because of polygamy, witch beliefs, pervasive mistrust and persistent sharing norms. According to some, Africa was predestined to be poor even long before the Neolithic revolution, at the time our ancestors wandered out of Africa, leaving a region behind with exceptional genetic heterogeneity (Ahsraf and Galor 2013). If all of this is true then, for sure, the hydra of poverty will never be defeated. But can all of these historical legacies be active at the same time? Are we gaping into a trap of overdetermination, or unresolved contradiction? What is going on here?

If history is only thought to matter when it shows up in models of long-term persistence, and if such models are a gateway to publishing in the top-field economics journals, then the incentives are pretty clear, and economists more than any other scholarly tribe believe in

incentives. The rewards to showing *significant* correlates are high. Why would one care much about the millions of estimated *insignificant* relationships ending up in the trash bin? Damned those instances of historical change that got in my way!! What happens to the conception of long-term African development if one systematically disregards the insignificant correlations, in order to selectively distil the significant ones?¹⁸

But it is not only a pre-occupation with persistence, it is also the framing of the narratives in which the results are shared with academic and public audiences. Easterly and Levine (1997) set the tone with their account of Africa's "growth tragedy". Bertocchi and Canova (2002, p. 1851) sought to explore "the disastrous economic performance of Africa", which in their view "represents one of the most challenging puzzles of growth theory". Bloom et al. (1998, p. 207) set themselves the task to explain why Sub-Saharan Africa "has been the world's poorest and also its most slowly growing region [...] since the Industrial Revolution".¹⁹ Alesina et al. (2011, p. 246) investigated the roots of Africa's economic "tragedy" and refer to other studies accounting for the region's economic and political "failures". There are many problems with framing Africa as a basket case, but the most important is that it doesn't survive a simple reality check. Africa is not *that* poor.

Wealth and poverty are relative and subjective terms. They shift along with the norms, benchmarks, and mirrors that we adopt to assess trajectories of comparative development. What do these mirrors tell us? The *global economic mirror* tells us that Africa has clearly fallen behind the Western world, as did all other regions in the world at some point during the past millennium. However, *within* the Global South, Sub-Saharan Africa has certainly *not* been the poorest region since the Industrial Revolution. As Table 1 shows, until the 1970s, the three largest economies of Asia in terms of population size, China, India and Indonesia, were at least as poor as Sub-Saharan Africa in terms of average income per head of the population. Long-run GDP per capita series reveal that the South-South divergence occurred in the past half century, when large parts of Africa plunged into a prolonged depression from the 1970s to 1990s, while many Asian economies joined the convergence club. This pattern of recurrent African growth is corroborated by empirical historical research on human stature, real wages, reconstructed social tables and commodity trades (Jerven 2010, Moradi 2009, Cogneau and Rouanet 2011, Frankema and van Waijenburg 2012, Juif and Frankema 2017, Bolt and Hillbom, 2016, Federico and Tena 2017, Frankema et al. 2018).

¹⁸ See Sala-I-Martin (1997) for the original argument in relation to the empirical growth literature. See also Lamoreaux (2015), p. 1255.

¹⁹ Allen even took it a step further by claiming, without any evidence, that Sub-Saharan Africa has been "the poorest region of the world in 1500" and has "remained so" until the present (2011, p. 91).

Table 1: GDP per capita in Sub-Saharan Africa, China, India and Indonesia, 1870-2018 (2011 US\$)

	1870	1900	1920	1950	1970	2000	2018
China	945	972		799	1,398	4,730	13,102
India	850	955	1,012	987	1,384	2,753	6,806
Indonesia	810	1,151	1,409	1,280	1,882	5,384	11,852
Sub-Saharan Africa	800	850	950	1,323	1,958	1,981	3,532

Source: Maddison Project Database 2020; see for alternative series for British Africa, displaying similar trends, Broadberry and Gardner 2019.

Let us throw some blankets over the mirrors of other world regions in order to focus exclusively on Africa's *longitudinal mirror*. What do we see? Well, it is very hard to miss the reflections of profound social and economic change, including broad-based and unprecedented improvements in human welfare. These improvements, it must be noted, have come along with increasing personal and spatial income inequalities, but African societies are certainly not unique in this regard (Chancel et al. 2019, Roessler et al. 2020). Of course, these improvements are no reason to swap Afro-pessimism for Afro-euphoria, if only because there are so many different stories of progress and retrogression, growth and decline, joy and trauma. My point is not that Africa is rich, my point is that we are looking at societies *in flux*.

The total Sub-Saharan African population has expanded from ca. 110 million in 1900 to ca. 1,100 million in 2020, which is a ten-fold increase in 120 years.²⁰ This demographic transition, the mother of all transitions, has turned a range of economic and institutional equilibria on its head. The labour scarce continent has become the labour abundant continent. The rural landscape of yesteryear is now dotted with vast urban sprawls. Social systems, including marriage, kinship ties, communal relations, are being reconfigured with dazzling speed. The demographic revolution itself has been driven by major improvements in human health, decreasing child mortality, increasing life-expectancies and successful strides against endemic tropical diseases, despite important setbacks such as the HIV/AIDS epidemic and the current COVID-19 pandemic.

To counter the deeply ingrained pessimism about African population growth, it is worth emphasizing that the ten-fold increase in population has come along with a quadrupling of per capita GDP from ca. \$850 in 1900 to ca. \$3,500 today (Table 1). Of course, the error margins of both historical as well as contemporary GDP estimates are large, but they will have to be enormous to sustain the claim that African poverty today is the same as it was 120 years ago. How does the image of the 'stagnant' African economies that 'fail' to grow relate to a ten-fold population increase times a four-times rise in per capita income, that is, a 40-fold expansion of the Sub-Saharan African economy since 1900? Just try to visualize the swelling of Heraclitus'

²⁰ The 1900 estimate is from Frankema and Jerven (2014); the 2020 estimate from the UN (2020).

river! Again, this is not to say that all of the change is for the better, but to make a case for exploring dynamics instead of stasis if we want to understand long-term African development.

Add to this the ongoing revolutions in communication, transportation, electrification, and mass education. All of these keys to productivity growth have been expanding at a faster pace than African populations have. The percentage shares of people connected to the grid (or generating electricity with solar panels) have grown, cell phones and internet are everywhere, travel times have fallen, and the majority of African children now goes to school. Educated and skilled labour have become so abundant that it has allowed for a dramatic fall in skill premiums (Frankema and van Waijenburg 2019). A recent map drawn by Smits et al. (2020) compares the *subnational human development index data* for Africa of the year 2000 and 2018. During this period, the figures for nearly all of the 546 regions reveal a marked improvement in living conditions. The few exceptions are regions in Libya, Somalia and South Sudan for understandable reasons.

This 40-fold expansion of the Sub-Saharan African economy in the past 120 years has generated major shifts in the geography of human settlement, as well as a partial ossification of centres of economic activity that have deepened the spatial economic inequalities in the sub-continent. It is not at all surprising that micro-data reveal correlations between railways and cities, cash-crop areas and nightlight density, or colonial investments and household wealth. As Voth (2021) put it ‘*Overwhelmingly, both the cultural universe and the built environment we inhabit was created before our time*’. Yet, for Africa, perhaps more than for any other world region, much of these built environments, and the cultural universes that encapsulate these spaces, are of comparatively recent date. What is presented as persistence are often the settlements of recent revolutionary change.

To readers who remain sceptical of the long-term effects of Africa’s demographic transition: this is not just a matter of many more poor people, or swelling younger generations without perspective. It is *also* a matter of ten times as many human brains interacting at much higher levels of intensity. It is *also* a matter of a vastly growing pool of human talents, creativity and ingenuity, which increasingly surface because of steady progress in health and education, as well as unrelenting personal efforts to seek betterment, day in, day out. Africa is poor, but it is not *that* poor.

How do we reconcile persistence with change in constructing narratives of long-term African development? The research designs of persistence studies are unsuitable to tackle this question as they are inherently imbalanced: they put all the weight on deep historical forces, but treat contemporary historical developments as weightless. As long as the black box of time-fixed effects remains closed, this imbalance will persist. To give one example, persistence studies have done much to bring the external world into accounts of *deep* history, as I have shown above. But why is the external world absent in the episodes of recurrent growth in post-independence Africa? The effects of on-going globalization, technology diffusion, the Cold War, the debt crisis, the SAPs, the Asian renaissance, the rise of China? Where are they? Well, the historical forces that have *co-determined* economic development in the post-independence

era have been relegated to the realm of control variables, mostly left unspecified in time-fixed effects. As long as this box stays closed, we can forget about the possibility to seriously engage with questions of opportunity, or ‘scope for action’, as Banerjee and Duflo (2014) have put it.

To assess the opportunities of African economies, instead of staring blind on their constraints, we need to better understand how the river of Heraclitus bends and flows. The first-order question in this regard is a classic one, namely, what it means to be economically ‘behind’ in the context of a rapidly changing global economic order (Gerschenkron 1962, Austin 2016, Frankema and van Waijenburg 2018). How does the Asian miracle, and in particular the rise of China, shift the parameters of African economic development? To what extent does the Asian renaissance close the windows of opportunity for labour-intensive industrialization in Africa? To what extent do foreign capital investments pouring into the region hamper or stimulate economic diversification in Africa? What type of policies, neo-liberal or neo-protectionist, would be best suited to stimulate diversification? What can be expected from the newly established African free trade area? Closely linked with these questions of external competition and investment, there are questions of internal capacity: industrial technologies are widely available, capital is cheap, domestic consumer markets are growing, what is it that impedes large-scale adoption? Are African labour forces sufficiently educated to kickstart industrialization? Historical perspectives are indispensable to formulate and sharpen the key questions of present-day economic opportunity in Africa. Yet, if history is reduced to a collection of legacies, economic historians cannot assume that role.

Epilogue

A few years ago I attended a conference where a paper was presented on corruption in Africa. Not a persistence study, but a time-invariant RCT. The trial was set up in such a way that it allowed ‘us’, the audience, to observe “stealing” by African chiefs from public resources provided by the researchers. During the presentation a colleague sitting next to me whispered in my ear: “Why, Ewout, do you think they are always playing these games in African villages?”. I was taken aback by the question, shook my head and turned my face, curious to hear the answer, “...because if you play such games in Russia or the US they will cost you a fortune!”. Smothered laughter. (S)he then added “...I bet they do not have the research budget for that!”. A joke, of course, but a biting one. Our community is often led to believe that the historical narratives we construct are formed by evidence from regression analyses and academic exchanges about identification strategies, endogeneity issues and robustness checks. This is only partly the case. The narratives we construct are also the outcome of personal priors, conceptual stretching, data-driven problem development, and many other implicit selection processes that we leave unquestioned. Once you start thinking about these questions, many emerge. I wonder, for instance, why witchcraft in Africa is always portrayed as an aspect of ‘traditional’ belief systems, while the mass chanting of “lock her up!” is seen as an aberration

of 'modern' democratic politics. Historical research is not value-free. We need to discuss these sensitive issues more frequently and it would be a step forward if the top-field economics journals create space for such conversations.

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