

The political dimension of inequality during economic development

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1/ A brief history of economic inequality as politically determined

In late 17th and 18th century Europe, thinkers of the Enlightenment developed a view of inequality as being a political phenomenon and not a purely natural one.¹ Doing this, they invented the modern notion of democracy. They were probably the first to abstract from transcendental considerations in order to question objectively the state of human affairs, and they finally paved the way to social sciences.² The first wave of (colonial) exploration of the world, and in particular of the Americas, obviously revealed to these thinkers the diversity and plurality of political institutions worldwide and led them to give a relativist account of the patterns of inequality that went with these institutions. The process of differentiation between heterogeneous and competing European nations was also making apparent that there was not a unique path of civilization traced from the Ancient Greeks or the Romans, or even a more remote past, to the present they knew. They did not agree on what could be the basic motivations of human beings in the fictional or fantasized "state of nature" preceding civilization, but most of them agreed on the idea that at that "time" *equality prevailed*.

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¹ Thomas Hobbes, *Leviathan*, 1651. John Locke, *Two Treatises of Government*, 1690. Baruch Spinoza, *Tractatus Theologico-Politicus*, 1670, and the unachieved *Tractatus Politicus*, 1677: Cf. <http://plato.stanford.edu/entries/spinoza-political/>. Jean-Jacques Rousseau, *Discours sur l'origine et les fondements de l'inégalité parmi les hommes*, 1754.

² One of the very first examples of the application of mathematics to the study of society can be found in Condorcet's study of electoral rules in 1785, and Condorcet's general project was the building of a mathematical social science: Cf. Condorcet, *Mathématique et société*, Choix de textes et commentaire par Roshdi Rashed, Paris: Hermann, 1974.

And they all saw the laws and institutions developed by mankind as contingent products of history that could degenerate or improve, and at least certainly evolve or be changed. To understand the historical and geographical diversity of political and economic institutions, they described them as *responses* to challenges and/or to opportunities that human communities had faced in the past or that had been brought by different natural environments. The main source of disagreement, that is still of actuality today, was the level of relevance vs. arbitrariness of this response, in other words whether political regimes and inequality patterns had been, at least at some point in time, the best-suited responses to new challenges that benefited to all, or else whether they could be described as the arbitrary capture of new opportunities by a lucky, or clever, or greedy, class of people, that firstly pursued its own benefit. This functional vs. structural opposition is however more a question of stance than a clear-cut divide, as adaptation is never perfect, but complete arbitrariness cannot hold either. Multiple functional optimal-responses can coexist but only one is contingently selected; the structural constraints of the selected solution then impose some arbitrary path dependency to further evolutions (even in biological evolution, see, e.g., Gould, 2002). The study of inequality must precisely address the level at which adaptive mechanisms occur: individuals, groups or societies, and the distribution of benefits among groups. Under some conditions, even a greedy elite will find its self-interest in increasing the available surplus and can find it preferable to redistribute part of it, if only to stay in power. As far as Enlightenment thinkers are concerned, the main step was to “irreligiously” question the state of existing inequalities as not necessarily being the “best of all possible worlds”, for not being the unique historical possibility. Still, putting the stance on functional response or on initial capture was not innocuous, as we shall see.³

The Enlightenment thinkers lived in a world where the political and the economic were not yet very much differentiated, and where inequality meant hierarchy (Dumont, 1977). The raise of the European bourgeoisie made that economic power could be distinct from traditional political power (aristocracy), and this progressive and incomplete separation took the form of a political competition. This competition was already in place in the England and the France that the Enlightenment thinkers knew but it was refereed by a monarch. Even after constitutional democracies were settled, the same kind of conflict carried on between old and new fractions of bourgeoisie. This conflict generated the joint expansion of political and economic liberalisms,

³ Leibniz theodicy (1710) tried to solve the problem of the existence of evil under the rule of God by this idea of "best of all possible worlds". He was mocked by Voltaire in his philosophical novel *Candide ou l'optimisme* (1759). Likewise, some functionalist explanations of inequality look very much as the “dominant classes theodicy of their own privilege” (Max Weber), that Bourdieu rather proposes to call “sociodicy” (*sociodivécé*) in its non-theological version.

some opening of social mobility opportunities as well as the emergence of socialist movements in Western Europe and North America, what Tocqueville called the "passion for equality" of democratic societies. But, combined with the European colonization of the world, it also gave rise to an ideological reaction to the Enlightenment thinkpieces, in the form of theories of natural inequalities based on race, gender, and class. At the opposite extreme of the ideological spectrum, Marx and Engels tightly linked the economic and political dimensions of inequality. However the divide set by them between economic infrastructures and political superstructure long denied any autonomy to political inequality, even if it was questioned by the second generation of Marxist thinkers (Gramsci, Korsch). Perhaps in more recent times it is Bourdieu (1989) who finally succeeded to formalize the interconnections between partially autonomous political and economic "fields", where heterogeneous agents differ by the amount and structure of social resources they hold (economic, cultural, symbolic, political).

To come back to 19th century economics, the "marginalists" (Menger, Wieser, Jevons, Walras) unified a theory of resource allocation with one of price formation: the question of distribution was referred to the latter as the problem of valuation of resource endowments held by economic agents (labor, land, capital) and used for production (Schumpeter, 1954, pp. 220-233). The further elaboration of what was going to be called neo-classical theory led to the well-known welfare theorems that put in parallel the equilibrium of exchange and production and the optimality of the distribution of individual utilities under the minimal concept of Pareto-improvement. However, first best equilibriums, as Pareto-optimal they are, were perfectly compatible with a very unequal resource endowments distribution, whose determination was left anyway outside the theory, i.e. left either to nature or to politics. With the introduction of the State action within second-best equilibriums, public economics then started to provide the rationale for State policies with distributive goals through non-lump-sum taxation and discretionary expenditures (Atkinson and Stiglitz, 1980). Until recently, these public economics of inequality worked within a both static and apolitical framework where assets' distribution, on the one hand, and redistribution policies on the other hand, were usually left exogenous.

In the 1990s, a first strand of the economic literature explored the joint determination of economic growth and assets distribution among heterogeneous agents; here the main conceptual breakthrough was to combine a microeconomic intergenerational framework for capital accumulation in imperfect credit markets with a macroeconomic equilibrium and endogenous growth framework (e.g., Aghion, Caroli and Garcia-Peñalosa, 1999). In such a setting, the poor

cannot borrow to pay the fixed cost of educating their children or starting a business, so that inequality can be very much persistent across generations, over the time of economic development. These kinds of works provide a rationale for state redistribution efforts in order to increase growth.

A second strand of literature, sometimes referred to as "new political economy" tried to make state choices endogenous by looking at the pivotal voter position (e.g., Bénabou, 1996). Today the works of Acemoglu and Robinson (2006) treat political regimes as endogenous to economic inequality, and vice-versa. They finally come back to a Marxian formalism with self-interested forward looking representative macro-agents for two or three social classes. In these models, the features of political representation and participation determine who decide for State policies that influence growth and distribution. It is more and more recognized that those two latter variables are jointly explained by historical institutions, and that political and economic institutions co-evolve, so that the link between inequality and development is an institutional one whose political dimension cannot be eschewed (e.g., North, Wallis, Weingast, 2006).

A last strand of present-day economic literature is also directly confronted to the political dimension of inequality: it is the axiomatic study of the very definition of inequality and social justice. This field lies at the borders between public economics, political philosophy and anthropology. On the philosophical side, it has been profoundly influenced by John Rawls (1971), whose works inspire economists like Amartya Sen (1992), John Roemer (1998) or Marc Fleurbaey (1995) for elaborating "post-welfarist" definitions of inequality. The *Theory of Justice* of Rawls is in direct line with the Enlightenment thinkers reflections about the "Social Contract" for a constitutional democracy. Those post-welfarist views on justice have in common they reject utilitarian definitions of inequality, on the basis that the latter do not respect the freedom of agents to follow their "own sense of good". They all make the crucial distinction (sometimes called "Dworkin's" cut from the name of another prominent contributor: e.g., 1981) between illegitimate inequalities stemming from inherited resource endowments or opportunity sets that agents cannot choose, and other differences and disparities for which agents are held accountable (if not responsible). However the theory says nothing about the pragmatic contents of this distinction, i.e. the concrete list of illegitimate sources of inequality, and not more about the concrete list of relevant outcomes to consider: those two lists are to be determined throughout a political process. As Amartya Sen (1992) asserts more generally, political or ideological options on distributive justice share the common ground that they define social justice by some kind of

equality, the meaningful source of differentiation between them being what they aim to equalize: in other words, the question is not "equality or inequality?" but "equality of what"? Here the normative definition of inequality becomes socially relevant once politically determined. Inequality has a political dimension, not only on positive grounds: political processes determine inequalities, but also on normative grounds, or at the level of representations: political processes also govern the concepts and criteria of inequality that are used.⁴

The remainder of this paper comes back a little bit more empirically to the issues that have been just raised about the political dimension of inequality, by focusing on the long-term of economic development or on present-day developing countries. Section 2 asks about the existing evidence on the origins of inequality, their reproduction and how they are influenced by political and institutional shocks across history. It argues that political models could have more to say on inequality evolution than purely demographic or economic models. Section 3 asks about the evidence on inequality being a hindrance to economic development, and here again suggests that a great deal of the negative impact of inequality could go through the political channel, and that political inequality *per se* can be interestingly contrasted with economic inequality *per se*, provided both are adequately measured. Section 4 concludes with some consideration to international inequalities, and sets a twofold research agenda on the politics of inequality and on political inequalities.

2/ Inequality before and after development

Origins of inequality: the demographic-economic and the political models

When trying to figure out the origin of inequality, or more precisely the factors that first presided to the generation of inequality (e.g. the need for security for Hobbes, the institution of property for Rousseau), the Enlightenment philosophers most often referred to a fictional point of human history that they thought could not be empirically studied but only conjectured.⁵

⁴ All issues are intertwined: In Piketty's model (1995) of redistributive politics, agents form heterogeneous beliefs about the way inequality is generated, drawing from their individual social mobility experience, and vote accordingly. In equilibrium, "left-wing dynasties" of agents, among whom more disadvantaged backgrounds are found, attribute less weight to individual effort relative to predetermined circumstances in the generation of inequality, and conversely for "right-wing dynasties". Multiple equilibria arise with varying steady-state redistributive choices that may characterize differences between countries (e.g., Western Europe vs. USA) or between historical periods separated by macro-shocks on beliefs.

⁵ When writing his contribution to anthropology, "Totem and Taboo" (1913), Sigmund Freud also referred to a mythological past.

Or else they took the descriptions of “primitive tribes” brought back by the European explorers of the Americas or of the coasts of Africa as telling something about humanity in the “state of nature”. Some European anthropologists of the 20th century followed this latter line of thought when trying to describe the “savage mind”, but mainly to identify the common features of the human way of thinking when confronted to a natural environment that it could not understand nor control through modern scientific knowledge or technique (e.g., Lévi-Strauss, 1962). Likewise, economists now try to analyze how for instance the notion of fairness varies with the cultural and natural environments in which the individuals are immersed; as they cannot experimentally modify this environment, they are bound to make individuals play the same abstract games and to study their responses. For instance, Henrich et al. (2001) show that the individual responses to the famous “ultimatum game” are rather homogenous within a given group.⁶ Other experiments of that kind suggest that the perceptions of fairness or of inequality can vary a lot according to societies and political cultures (e.g., Schokkaert and Devooght, 1999).

However, the responses generated by this kind of laboratory experiments can be far from the real world responses of individuals confronted to practical questions about justice and fairness on the field. And of course, they cannot be implemented in societies of the remote past. Nonetheless, archaeology today brings more and more evidence about the emergence of inequality in prehistoric human societies, through the study of the remains left by these societies and in particular the examination of their graves (Wason, 1994). This evidence reveals that inequality appeared much before what was usually thought, between 40,000 and 10,000 years ago in the Upper Palaeolithic or Late Stone Age: that is much before the spread of agriculture that characterizes the Neolithic period, even before dog domestication and the extension of sedentism during the Mesolithic, and at the same time as the migration of *Homo Sapiens* from Africa to the rest of the world. This emergence of social differentiation coincides with that of what is called by archaeologists “behavioral modernity”: the handicraft of fine tools, the first examples of figurative art, of game playing and of music, the systematic use of pigment and jewellery for self-ornamentation. Regarding narrower economics, the most important inventions were advanced techniques to stock food that allowed some surplus to be kept and accumulated; there is also evidence of long-distance barter among groups. In contrast with the Middle Palaeolithic when

⁶ In the ultimatum game, one dollar is given to a first agent who is asked to propose a share to a second agent; the latter can then reject the sharing, and in that case the dollar is lost for everybody, or else can accept, and then the proposed sharing applies.

burial is already widespread, Upper Palaeolithic graves reveal heterogeneous levels of polygamy, fertility and lineage sizes, and wealth.

As described by Brian Hayden (2008), many competing models have been proposed to explain this early emergence of inequality among peoples of hunter-gatherers, but they can be sorted in two broad categories, demographic-functionalist and political.

The first category of models describes inequality as a functional response to a variety of challenges arising from ecological shocks and demographic pressure: stress, insecurity and warfare, informational efficiency in enlarged communities, risk and uncertainty of food production and adaptation to famine crises, i.e. a Hobbesian or Malthusian story. According to these models, some naturally talented people ('chiefs') have been allowed to accumulate large food stocks, to own (or have some allocation power over) large amounts of land, to control and tax commerce, to hold large stocks of weapons and to command soldiers... in order to facilitate the coordination between agents in a new context of organic solidarity guided by division of labor, to redistribute food and other resources in times of crisis, and to ensure social order within the community and security against foreigners. In these functionalist Malthusian explanations, demographic pressure seems to be the most cited factor of change; it is also still considered as such by modern economic works about the transformation of societies at pre-industrial stages (see, e.g., Platteau, 2006).

The second alternative category of models explaining the emergence of inequality is political. According to them, some self-interested individuals managed to gain control over the labor of others using a wide variety of strategies: the institution of polygamy and of bride price, the control of exchange and trade, the monopoly over extortive raids and wars, the institution of forced labor or slavery, conspicuous consumption in rituals, ceremonials and feasts, and cults of elites' ancestors that were the first forms of religions. Brian Hayden claims that the original elites were composed of what he calls "triple A" individuals (for Avid, Aggressive and Accumulators) who managed to predatorily capture an already existing surplus, and formed the first "leisure class" as Veblen named it.⁷ This political explanation is in keeping with the works of sociologists for whom prestige, charisma and the associated symbolic violence are needed to explain the success and the reproduction of dominant social classes, even today (Veblen, Weber, Bourdieu).

⁷ Cf. Thorstein Veblen, *The Theory of the Leisure Class*, 1899.

According to Hayden, the demographic-economic model is much less able to give account of the available prehistoric evidence than the political model: whereas the former predicts that inequality should more often arise in times of crises and of lack of surplus, as a “reform” of social organization pushed by ecological threats, the latter rather predicts that the strategies of predatory individuals have more chances to succeed in times of abundance and surplus. Again according to Hayden, most observations rather fall in this combination of inequality with large surplus. Furthermore, the demographic pressure arguments does not fit with evidence on the timing of inequality apparition: if the constraints raised by demographic pressure would have been the catalytic factor for both sedentism, animals domestication and inequality, then inequality should have emerged much earlier in Africa, where human beings were already present since -250,000, than in America, where no human presence is detected before -30,000 years. This is not what is observed. Likewise, Hayden cites the cases of societies that were not exposed to demographic pressure in South-East Asia or East Africa and that still exhibited sophisticated hierarchies. In precolonial America and Africa, low Malthusian demographic pressure did not prevent the emergence of highly unequal societies and hierarchic institutions based on the control of scarce labor rather than of abundant land. Further researches, as well as more archaeological evidence, are certainly warranted that would allow building more accurate tests of the two (or more) competing hypotheses for the emergence of inequality.

Disentangling between a demo-economic and a political foundation of inequality is indeed much harder in later periods. As already argued in the introduction, these two models are even to some extent compatible across time: like in Rousseau’s or Rawls’ social contracts, inequalities may provide skilled individuals for the necessary incentives to contribute to the common good, whereas at the same time too large political inequalities pave the way for predatory capture. Hayden contends that the ambitions of leaders not only led them to increase inequality and reproduction for their benefit but also to push for an increase in production and surplus; he even suggests that it is such a sociopolitical dynamic that spurred the Neolithic Revolution in the Middle-East (Hayden, 2008, p.117).⁸ In Mesopotomia and Egypt, the very first densely populated and urbanized regions of the world, the boom in population density came together with a series of innovations that not only increased the potentials for exchange and economic growth and the need for elaborate state institutions; it also widened the span of political strategies and of power technologies that were available to the elites, allowing them to control larger and larger amounts

⁸ Likewise, through the institution of slavery, powerful big slave-owners in precolonial West Africa could overcome the absence of free labor markets and were able to seize new economic opportunities at the beginning of the colonial period, before the abolition (Austin, 2009).

of labor. The construction of temples and mausoleums dedicated to their mythological ancestors and to their dynasties, of large palaces and first cities, as well as the attachment of a cast of priests and lettered people, contributed to their prestige (Toynbee, Bairoch). At the same time transportation infrastructures as well as sophisticated military forces allowed them either to control and tax trade, or to undertake imperial conquests. As the concept of ‘maximal inequality’ by Milanovic, Lindert and Williamson (2007) illustrates well, the larger the total surplus is, the larger is the amount of resources that a tiny elite can extort above the minimum subsistence level. However, these latter authors’ estimates suggest that elites in Imperial Ancient Rome (14 AD) or Byzantium (1000 AD) succeeded in getting the highest share that was affordable given the existing surplus (actual Gini index of inequality equaled potential maximum Gini), whereas in wealthier present-day societies, the “inequality extraction ratio” is lower: some kind of democratization of the surplus occurred.⁹

Reproduction of inequalities in the long-run

Whatever was the prehistoric origin of inequality, whether demo-economic or political, inequality has this property of self-reproducing across generations through a variety of mechanisms, so that inequality between individuals at a given time persists over the long-run between lineages. Here again, a variety of competing models provide different rationales for this reproduction and its consequences (for a review, see also: Piketty, 2000).

At one extreme of the spectrum, one finds some socio-biological arguments according to which inequality is the result of a long-standing adaptive process of natural selection that sorted genetically talented lineages at the top and low ability lineages at the bottom of the social scale. Modern knowledge in human genetics does not lend much credit to these eugenic arguments, even in disciplines that are akin to the consideration of genetic processes in the development of human societies, like evolutionary psychology or anthropology. Given the high frequency of changes faced by human societies during the course of history, it is debatable that very long-run Darwinian natural selection can play a role in selecting socially efficient individual genetic traits.¹⁰

⁹ USA, Sweden, Malaysia, China, and even Brazil and South-Africa, two of the most unequal societies today. Interestingly enough, the poorest countries of Sub-Saharan Africa they consider (Congo Democratic Republic, Nigeria, Tanzania) compare with pre-industrial societies of the past (Rome and Byzantium, but also 17th to 19th century Old Castille, Nueva España, China, India, Brazil, but not England...) under that angle.

¹⁰ See also Sahlins (1976), for an anthropological critique; and James J. Heckman for a critique of the empirical contents of the book from R. J. Herrnstein and C. Murray (*The Bell Curve: Intelligence and Class Structure in American Life*,

It is probably more defensible that, in early times, communities who developed performing cultural values had more *collective* reproductive success than other human groups, where intergenerational transmission of values and preferences among families played a role. Since Darwin, the emergence of altruism in animal species is often attributed to the selective advantage it provides to the groups that develop this trait. Among the human kind, social norms for the limitation of inequality can be traced back to the reproductive success of communities having developed altruism, cooperation and hence increased social cohesion. This is how Bowles, Boyd, Gintis and Fehr (2005) describe reciprocal solidarity (i.e. solidarity with punishment of free-riders) as a neurologically hardwired behavioral trait selected by long-lasting evolution. Note that intergenerational transmission from individual parents to individual children is no longer required here: only transmission of socially efficient values within groups is needed; likewise in strictly-speaking biological evolution, selection does not only apply to individual organisms, but also to species or even clades (Gould, 2002). Regarding the more recent past, the economic historian Gregory Clark (2007) claims that the intergenerational transmission of individual preferences for saving and labor effort played the great role in the Industrial Revolution of Western Europe: During centuries that preceded the take-off, the higher fertility of economically-successful individuals would have generated a structural downward social mobility and the spreading of economically efficient cultural traits among the majority of the population.¹¹ The higher fertility of members of the upper social classes is indeed a common feature of many pre-modern societies, whereas differential fertility is more often U-curved or even downward sloping in many countries today (see, e.g., Skirbekk, 2008). Combined with upward sloping differential mortality, differential fertility indeed participates in the long-run forces that may reshape economic inequality. These demographic forces are however more complex than it may seem, they not only involve differential reproductive success, but also the level of population growth and of age structure changes, as well as most importantly rules of marriages and of inheritance, and finally the level of social mobility (see, e.g., Lam, 1997).

Another evaluation of intergenerational transmission sees it as a counterpart for other benefits. For instance, some cross-sectional level of inequality can be deemed functional to maximize poverty reduction, as the possibility is opened in Rawls' conception of justice as fairness. Societies may then find legitimate to pay the cost of some longitudinal inequality. Or

New York: The Free Press), i.e. of sociobiological arguments in the context of present-day US inequalities: Cf. J. Heckman. "Cracked Bell", *Reason*, 1995. <http://www.reason.com/news/show/29636.html>.

¹¹ Clarks' views are very much debated. See the reviews of Robert Allen, *Journal of Economic Literature*, 46(4): 946-73, 2008 and of Kenneth Pomeranz, *American Historical Review*, 113:775-779, June 2008.

else, some degree of conservative intergenerational transmission of cultural traits could be required to achieve some efficient level of stability in institutions; from that standpoint, putting social reproduction upside down could be deemed dangerous, as some consequences of the Bolshevik Russian Revolution - at least its Stalinist phase, or of the Chinese Cultural Revolution may suggest. The prioritization of freedom and human rights in the lexicographic order of Rawls' theory of justice also urges to protect some degree of individual and familial privacy, whose cost can be some unavoidable degree of intergenerational transmission and hence reproduction. However, here again the benefits and the costs of intergenerational reproduction may very much depend on the speed of changes that a given society has to face; with a high frequency of changes in the ecological or historical environment, it is dubious that a high intergenerational correlation of social position makes an efficient adaptive mechanism, as it increases inertia and lowers the allocative flexibility of society. In ancient societies but also in present-day societies everywhere, privileges attached to inheritable rank, ascribed cast discrimination, nepotism and restricted access to jobs and charges are very difficult to rationalize except as deadweight costs, even on narrow-minded economic grounds. As we shall see in the next section, influential economists now characterize intergenerational reproduction not only as the main explanation for the persistence of cross-sectional inequality over time, but also as a major source of inefficiency with respect to capital accumulation, innovation, and economic growth.

Then, in less conservative approaches, a large share of intergenerational reproduction is seen as a heavy social inefficiency, as it results from the efforts made by dominant groups to preserve their offspring's position by any means, whatever their merits, or from the difficulties encountered by the poorest families to raise their own under good enough conditions, even the most talented ones. The former fact is less extensively studied than the latter, as is particularly emphasized by Erikson and Goldthorpe (1992) in their seminal book on social mobility over time in Western countries. This does not mean that the sources of the low upward mobility of the disadvantaged are empirically well identified, even in social contexts where a great deal of data is available. Regarding this very difficult empirical issue, the economic literature more and more acknowledges that intergenerational transmission of economic and human capital (bequests and education) does not tell the whole story, and that the transmission of preferences and values, among which the 'capacity to aspire' (or to avoid discouragement), carry a heavy weight. For breaking the vicious circle of statistical discrimination - where initially disadvantaged individual agents end up behaving against their collective interest, nationwide political movements and symbolic revolutions, like the Civil Rights in USA, Gandhism in India, or Feminism in many

places, deserve as much consideration as more focused educational or labor market policies (see also Piketty, 1998 and 2000).

History matters: Political and institutional shocks

International and historical quantitative data indeed show that country-level inequality is highly persistent across time, if only because of intergenerational reproduction. They also suggest that significant breaks in inequality stem from major political and institutional changes, including wars. It is a symptom of our times that all recent changes have increased inequality: the Reagan's and Thatcher's deregulation in USA and UK, the collapse of communist systems in Eastern Europe and Russia, or the opening and liberalization of the Chinese economy. In the opposite direction, longer term evidence gathered on the evolution of top incomes for 22 countries by Atkinson, Piketty and Saez (2009) reveals the dramatic impact of the two World Wars, combined with the 1930s Great Depression: the share of top capital incomes collapsed and never recovered in the post-war period. This impact is all the more pronounced for combatant countries, but also holds for many non-combatants. Likewise, for Portugal, the decolonization wars and the loss of African colonies in 1974 generated this kind of break in inequality. Aside to top incomes, more usual income inequality measurements as well as social mobility tables derived from household surveys reveal a great deal of heterogeneity between countries. Among Western countries, a wide gap separates Sweden or Denmark from Italy, United Kingdom and United States, with the rest of continental Europe standing in between (Lefranc, Pistolesi, Trannoy, 2008). These differences all have to do with the historically produced political differentiation of national states, from liberal Anglo-Saxon to social democratic Scandinavian states, through "conservative-corporatist" continental Europe.

The fact that historical breaks and national idiosyncrasies matter so much invalidates Simon Kuznets' original hypothesis about the gradual effect of economic development on economic inequality (Piketty, 2007). Kuznets original papers (see, e.g., 1955) used historical data on USA, UK and Germany. He argued that the shift of the labor force from low productivity sectors to high productivity sectors should generate an inverted-U curve for income inequality, with inequality raising in a first stage and then declining as the majority of the population works in industry or capitalistic services. Regarding this latter stage, all the numbers at hand show that inequalities of income, education or health are far more important within the low-income countries than within the high-income. Yet, here again one finds a lot of regional and national idiosyncrasies: Among the developing world, Asian and Mediterranean countries are

characterized by a much lower inequality level than Sub-Saharan Africa or Latin America. This explains why, for a time, when Sub-Saharan Africa income inequality data was not yet available and when Asia was far below the income level of Latin America, the cross-country evidence seemed to corroborate the Kuznets curve, even with some qualifications (Anand and Kanbur, 1993): The first upward sloping part of the inverted-U relied upon the contrast between Indonesia and Brazil, whereas the second downward sloping part relied on Brazil being compared with Germany. Since the mid-1990s, however, much richer datasets from the World Bank (Deininger and Squire, 1996) and the United Nations (UNU/WIDER Inequality Database) have led to the blurring and vanishing of the Kuznets curve, at least in its cross-sectional version: the poorest Sub-Saharan Africa countries appeared as much unequal as a standard Latin American country, whereas some Asian growth performers caught up with Latin American income levels but not inequality levels (Li, Squire and Zou, 1998). At least these datasets revealed that inequality is by no means a "luxury" that the poorest countries in the world could not afford, or a "disease" reserved only to the richest areas. Cogneau (2007) even argues that Sub-Saharan Africa holds the world record of inequality, due to the unique combination of between-country and within-country income gaps.

In the end, the analysis of today's between-countries differences in inequality puts in clear light the political dimension. Rather than to GDP per capita or to demography, an important share of these differences may be correlated with the history of national states construction and action: public education and health, land distribution and land property regulations, regional and territorial policies, wage scales, fiscal redistribution and social protection systems. They also probably involve national idiosyncratic social norms about acceptable gaps in earnings or in wealth (Atkinson, 1999). Of course, for all these elements history matters, like for instance the deep print left by European colonization.¹² For instance, Engerman and Sokoloff (2002) argue that factor endowments determined divergent paths of inequality and development between the Northern and Southern parts of the American continent: in 17th and 18th centuries growing sugarcane, coffee or cotton was very profitable in the South or the Caribbean islands, thanks to European markets demand, but colonization founded highly unequal societies and states based on large plantations and slave labor; in the Northern part, the settlement of European small wheat producers and cattle breeders determined a much more equal society where universal

¹² Here I focus on developing countries. The prints left by the World Wars and the Great Depression, the fall of the Berlin Wall and the failure of communist regimes, have already been mentioned above. Regarding developed countries again, in a much more distant past, some historical and economic works argue that Black Plague in 14th century Europe has ended feudalism and serfdom, as well as launched a sustained increase in real wages in North-western countries (see, e.g., Allen, 2001; Voigtländer and Voth, 2007).

suffrage was granted much more earlier. In India, Banerjee and Iyer (2005) show that the British ruler's choice to delegate tax collection and land distribution to a local landlord in some districts determined them to lower development more than one century later: less agricultural investment and productivity, more land inequality, less education and more criminality. Likewise, Huillery (2009) provides quantitative evidence that colonial administrators early policy choices (1910-1930) in each district of French Western Africa (*Afrique Occidentale Française*) still explain differences in development between regions as observed in the 1990s, i.e. more than 60 years later. Bossuroy and Cogneau (2008) and Cogneau and Mesplé-Somps (2008) compare three former French colonies (Côte d'Ivoire, Guinea and Madagascar) with two former British colonies (Ghana and Uganda) in Sub-Saharan Africa; they argue that contrasted French and British colonial policies in the two fields of education and of regional development explain observed differences in social mobility and income inequality between the two groups of countries. Cogneau (2007) provides an even wider discussion of the historical roots of high inequality in Africa.

3/ Inequality as a hindrance to development

Economic inequality and constraints on growth

On the theoretical side, the raising consideration for markets incompleteness, returns to scale and collective externalities gave birth during the 1990s to a new generation of models whereby the potential for growth is always constrained by persistent and ever returning inequality (see, e.g., for one of the most sophisticated achievements: Banerjee and Newman, 1993). For most of them, low-mobility or inequality traps were generated by the combination of intergenerational transmission, returns to scale or fixed cost of investment, and credit, insurance or labor markets imperfections, like in the early seminal paper of Loury (1981). Those new "endogenous growth and inequality models" contrasted with the conclusions derived from an earlier literature in which investment hence growth derived from the overall saving rate in the economy and in which there could be a trade-off between higher growth and lower inequality, like in Kaldor's (1955) argument about savings from profits versus savings from labor earnings.¹³ These models were

¹³ Stiglitz (1969) adaptation of Solow's growth model to a context with heterogeneous initial capital endowments (but still a fixed and homogenous saving rate) provided another rationale for the Kuznets curve, with inequalities first increasing and then decreasing during transitional dynamics towards the steady-state. Bourguignon (1981) extension of this Stiglitz model to convex savings (saving rate increasing with income), in keeping with Kaldor's initial idea, gives rise to two equilibrium paths, among which the most unequal Pareto-dominates.

complemented on the empirical side by a wave of cross-country regressions that correlated initial inequalities (as observed in the 1960s) with subsequent growth (1960-90), thus reversing the Kuznets causality. More serious and refined econometrics however led to the same conclusion of non-robustness as for the Kuznets curve (see; e.g., Banerjee and Duflo, 2003): The idiosyncratic growth performance of countries like South-Korea and Taiwan, who had implemented large land redistribution and public education programs under the political threat of communism, could not be subsumed in a universal law of inequality and growth.

There are no thermodynamics of growth and inequality. This does not mean that the many theoretical mechanisms that were studied in the past do not capture part of the reality. The Kuznets-like consequence of structural change on inequality, the Kaldor-like trade-off between inequality and saving-led growth are credible stories that may hold sometimes somewhere and to some extent. This is also the case with inequality traps stemming from education or fixed cost investment finance in informationally asymmetric credit markets, or else deriving from market size constraints to domestic industrialization, or else again from spatial segregation. Furthermore, if all these potential mechanisms are empirically credible, there is no reason why they could not be mixed together in the real world. So that, in the end, the main issue becomes the empirical identification of the existence and magnitude of each of the foundational assumptions of these models. This is probably where this part of the economic science stands today: plenty of theories, need for facts.

Inequality has indeed many additional reasons to be a hindrance to growth, most of which being highly context-specific as well as having a political dimension. For instance, the "sugar daddy" effect in the HIV/AIDS epidemiology, i.e. sexual relationships between relatively rich old men and poor young women, is certainly correlated to the magnitude of income inequality in Eastern or Southern Africa where shares as high as 20 percents of the adult population are infected. As some sugar daddies may also hold political power, it may be difficult to promote prevention campaigns that would inform young women on the risk incurred and urge them to refuse unsafe sex even within a venal relationship.

Other example, inequality may play a role in ethnic clientelism whereby 'big men' buy votes or political support from poor members of the same ethnic group through direct transfers or job positions (e.g., Robinson and Torvik, 2005). Likewise and more generally, the political voice of the poor may heavily depend on the gap in education and earnings between the bottom and the top of the social pyramid. Even in an electoral democracy context, this may prevent the

emergence of a pro-poor left-wing political party (instead of a political field structured by ethnic-based parties) that would promote less dualist health systems, early alert and fight against famines, or simply protect agricultural incomes, and break the vicious circle of low growth and self-sustained inequality.

But, as we can see, we have already left thermodynamics and have entered in another category of social mechanisms where political voice inequality plays its role.

Political and economic inequality: theoretical aspects

Alongside to the production of "growth and inequality models", economic theoreticians also regarded this kind of issues. In fact, the causality running from inequality to growth was first given a political economy interpretation, according to which too much inequality led to growth adverse taxation levels and transfers (Alesina and Rodrik, 1994; Persson and Tabellini, 1994). The first economic models of that kind made tax decisions endogenous by looking at the median voter preferred policy: the higher inequality, the further the median voter is from average income. More sophisticated models considered a pivotal voter instead of a median voter, in order to take into account a voter franchise, or, in a more democratic setting, the correlation of income or education with political voice (see, e.g., Bénabou, 2000). Bourguignon and Verdier (2000) built up a framework whereby oligarchies might refrain from educating the people in order to avoid increasing democratic participation that would bind policies against their interest (or purely throw them away).

Acemoglu and Robinson (2006) finally propose a whole bunch of theoretical models involving two or three social classes (high-skill elite, middle class or low-skilled elite, and a majority of poor) whereby political transitions and economic policies are made endogenous to economic variables like macroeconomic recessions, rents from natural resources or high fiscal potential, as well as to the level of assets inequality. In essence, the political elite is challenged by groups without *de jure* political powers, and makes or not political concessions depending on the economic stakes and costs involved. Political transitions to democracy can happen through a gradual extension of the voter franchise or else from a sudden radical revolution: the threat of the latter can induce the elite to grant the former. Democratic transitions can also be reversed by coups mounted by the elite. Ongoing works along the same lines introduce *de facto* political strategies, like lobbying or vote-buying, and supplement the basic models with additional actors like the military or the bureaucracy and the corresponding political techniques: crude political

repression to prevent democratic revolutions, or patronage rents given to civil servants. To my knowledge, those kinds of models systematically predict that initial asset inequality decreases the likelihood of transitions to democracy, and makes democracies more vulnerable to coups; once established, democracy consolidates over time by decreasing income inequality through fiscal redistribution. So that these models mainly increase the number of political channels through which initial inequality can be a hindrance to development. As acknowledged by Acemoglu himself (2006), these models have some grey areas: in particular, they do not model explicitly how political coalitions form and who exactly the "elite" are composed of, and they relatedly do not model capital accumulation hence assets inequality. I would add that they rely on rather *ad hoc* assumptions about the behavior of macro-representative agents and the economic and political contexts. Hence, their empirical validation is still limited to the replication of stylized facts based on the selective reading of individual countries experience, similar to Avner Greif's "analytical narratives" (2005) although even more loosely linked to detailed historical facts. On country panel data, Acemoglu, Johnson, Robinson, and Yared (2007) only show that income growth cannot account for transitions to democracy ("the modernization hypothesis"), and rather that the long-run propensity to become democratic is correlated with the determinants and the features of the colonial experience of former European colonies (settler mortality in the 19th century and population density estimates for 1500 AD). Probably another drawback of that kind of models and of their empirical validation, from a political science viewpoint, is the very definition of "democracy" and the ensuing quantitative measurement of it. Finally, from the standpoint of international relations, the foreign political support received from powerful nations (USA, France...) by entrenched predatory elites also plays its part in the persistence of oligarchic or corrupt governments.

Political and economic inequality: empirical studies

Micro-empirical works on political inequality and its economic consequences are still not many.

A first strand of works rather addresses the *politics of inequality*, that is the conditions for the emergence and success of political organizations with universalist anti-poverty, rather than clientelist, ethnic or religious platforms. Even if political parties are historical constructs and as such always carry some regional or religious linkages or preferences, at the margin electoral success may depend on other factors: In Ghana's two-party system, cross-sectional constituencies

votes are very much ethnically colored, however this did not prevent the country to experience two peaceful power shifts, as changes in votes shares are more correlated to non-ethnic determinants (Bossuoy, 2009). However, vote-buying, and even direct individualized political violence, are still usual practices in many places. Likewise, more collective systems of rewards and punishment of aggregate local votes, through public goods allocation or social transfers are also observed (Diaz-Cayeros, Magaloni, and Weingast, 2003, on Mexico; Moser, 2008, on Madagascar). Nonetheless, Baland and Robinson (2008) show that the introduction of secret ballots in 1958 Chile allowed breaking with the political patron-client relationship between landlords and their employees (*inquilinos*); after the reform, localities with more pervasive patron-client relationships no longer exhibited a much stronger support for the right-wing parties associated with the landed oligarchy.

In some instances, Gramscian cultural hegemony is not overwhelming¹⁴, whether in Africa with ethnic clientelism or in Latin America with paternalistic patronage. Likewise, information on government practice and corruption audits on the one hand, mandates and repeated eligibility limitations on the other hand can put effective constraints on executive power (see, e.g., Ferraz and Finan, 2008, on Brazil). It remains that even in consolidated democracies, variants of Marxian people's opium and false consciousness can still carry their weight: Roemer, Lee and Van der Straeten (2007) studies of US, Danish and French political fields argues that racism and xenophobia mitigate the redistributive contents of left-wing parties platforms; in the example of France, right-wing parties attract xenophobic low-income voters by putting the stance on restrictive migratory policies and left-wing parties are bound to try reaching high-income liberal voters by shifting their income redistribution stance to the right.

A second strand of works directly addresses the issue of *political inequalities* through the lenses of the elite capture of public good. On a panel dataset of Indian villages, Rosenzweig and Foster (2003) show that local electoral democracy favors the interests of the landless poor in terms of public goods allocation (roads rather than irrigation), whereas the impact of fiscal decentralization is Lanjouw and Özler (2008) document the elite capture of decentralized investment projects in Ecuador: in the communities where income inequality is higher, holding fixed the level of poverty or average income, project choice is less in line with the needs of the poorest. In these two references, political inequality is however equated with economic inequality, as no alternative

¹⁴ This argument was first raised by J. Bradford DeLong on his blog's discussion of Baland and Robinson results: http://delong.typepad.com/sdj/2005/04/james_robinson_.html

measurement is available.¹⁵ Banerjee and Somanathan (2006) provide indirect suggestive evidence for the impact of disadvantaged groups political mobilization on the equalization in many public facilities between parliamentary constituencies in rural India over the 1970s and 1980s: Constituencies with a higher share of Scheduled-castes (disadvantaged castes in the Indian Constitution) managed to catch up with higher rank constituencies (for instance, with an over average share of Brahmins), at the same time as a major political party under Scheduled Caste leadership (BSP) managed to challenge the Indian National Congress Party in India's most populous states. In the meantime, neither Scheduled Tribes nor the Muslim minority succeeded in getting a higher share in public goods allocation; Tribal parties only had limited success and the constitutional reservation of constituencies to Scheduled Tribes members mainly benefited to the dominant Congress Party. Likewise, Pande (2003) finds that mandated political representation through political reservation has increased the transfers received by Scheduled Castes but not Scheduled Tribes.

Acemoglu, Bautista, Querubín and Robinson (2008) develop a direct measurement of political inequality by computing the ratio of the number of different individuals in power over the number of appointments during a long enough period of time; this measurement is implemented at the municipality level within the district of Cundinamarca around Bogota (Colombia) between 1875 and 1895. Looking at medium-term (1937) and long-term (1993) municipalities' development outcomes like school enrolment, adult literacy and urbanization, they contrast the impact of this original political inequality measurement with that of traditional landholdings' inequality (Gini index of land values) extracted from cadastral data for the same period. Strikingly enough, they find that past political inequality, as roughly measured as it is, has a large negative impact on the outcomes they consider, whereas land inequality has instead a positive impact. They also find evidence that the politically powerful (appointed mayors) were able to amass greater wealth, either by acquiring more land or by increasing the value of their land. They interpret their results as revealing that in "weakly institutionalized polities", economic inequality may counterbalance political inequality, provided that economic elites and political elites do not overlap much (in the Colombian context, they find that an average 7% of rich landowners and politicians are both): major landowners would be able to prevent predatory politicians from

¹⁵ In fact, Araujo et al. (2008) use the poverty mapping technique whereby census data is matched with survey data and local income inequality is extrapolated from the income predictors available in the census like age, education, etc. This kind of extrapolation has a number of drawbacks: statistical ones (see A. Tarozzi and A. Deaton, 2008: http://www.princeton.edu/~deaton/downloads/20080301SmallAreas_FINAL.pdf) but also interpretative ones: are we analyzing the impact of income inequality or of the inequality of some of the predictors, for instance education, or a more complex combination of income and education that would stand for symbolic/political inequalities rather than economic inequalities?

capturing too much of the total product. Even if this interpretation has still to be assessed, this latter example fairly illustrates the risk of drawing too quick conclusions about the correlation between political and economic inequality on the one hand, and about the impact of inequality on development on the other hand.¹⁶

Measuring the political dimension of inequality

It also suggests that more efforts should be devoted to the independent conceptualization and measurement of political inequalities, whether on the supply-side (concentration of power like in the case just addressed) or on the demand side (inequality of political voice and participation). This would allow also studying the overlapping of the economic and political dimensions of inequality, at each level of the social pyramid. Such a study would finally rejoin some Enlightenment thinkers' focus on the separation of powers, and on checks and balances, from Blaise Pascal to Montesquieu.¹⁷ It would also echo Bourdieu's (1989) emphasis on the conflicts of interest within elites, i.e. between fractions of upper social classes characterized by different structures of economic and social resources: landlords, capital owners, highly educated, etc. According to him, when this conflict translates in a fight for political legitimacy, the voice and the claims of dominated classes can be better heard, and "true universalism" can achieve some progress. Dezalay and Garth (2002) shed light on this kind of "palace wars", sometimes confined to the rivalry of a few dynastic families, in the new Latin American political context opened by the collapse of military dictatorships.

Last, this Blaise Pascal line of thought also leads to the American philosopher Michael Walzer (1983) own theory of distributive justice as "pluralism", presented as an alternative to Rawl's "justice as fairness" (e.g., Cogneau, 2006). The building of a proper axiomatic for social and political pluralism would probably deserve some theoretical efforts, alongside to the great deal which is already devoted to the equality of opportunity (Roemer, 1998) or capability (Sen, 1992) concepts. However, when building new definitions for inequality or some of its dimensions, or

¹⁶ It seems to me that an alternative migration story could give account of the same correlations between inequality and development outcomes, and hence would deserve some scrutiny: urbanizing districts with more schools that are also able to attract wealthier and more educated migrants and have at the same time more competitive politics (migration of educated increases competition) and more land inequality (when compared to less dynamic rural municipalities that wealthy migrants leave).

¹⁷ Pascal, *Pensées*, around 1650. Montesquieu, *De l'esprit des lois*, 1748. Pascal had his own notion of tyranny built around the confusion of virtues: "La tyrannie est de vouloir avoir par une voie ce qu'on ne peut avoir que par une autre. [...] Ainsi ces discours sont faux, et tyranniques: je suis beau, donc on doit me craindre, je suis fort, donc on doit m'aimer, je suis... ", *Pensées*, Fragment Sel. 91.

when further elaborating old ones, the more empirical issue of measurement should not be forgotten. Here again, at least in economics, too much concepts cohabit with too little implementation. Axiomatic refinement becomes byzantine discussion or scholastic ratiocination when it does not deliver a feasible and implementable measurement. Regarding society (or nature), one may ask how long a concept or a theory should survive without empirical contents; a concept that cannot be measured is like a theoretical proposition that cannot be empirically identified: they are void. Then, the construction of good social facts not only involves good concepts and good axioms, but also accurate measurements of variables and relevant sampling and counting of individuals. This statistical issue is all the more important in the study of inequality. As was the case in the past - and as I hope to have shown in what precedes, the positive understanding of the inequality and development nexus will have a chance to progress only if more high quality and innovative data is collected and/or gathered on the various dimensions of inequality and development outcomes: assets, health, social networks and inclusion, and of course political voice and participation. In comparison with means, inequality measurement involves higher order moments of variables that are much more sensitive to measurement errors and extreme values: this is why data quality is so much important; sample inference is also more difficult, whether for indexes, percentiles or distribution curve coordinates (see, e.g., Cowell and Flachaire, 2007). Besides, as usual survey data does not reach either the extreme-top (richest or most powerful) or the extreme-bottom (poorest or least included) of the social scale, specific data collection must be designed, like in Piketty (2007) for top-incomes. Last but not least, the econometric identification of causality on distributions, rather than only on expectations (average treatment effects), is still at its beginning.

4/ Politics of inequality and political inequalities during development

When development is defined as emancipation or as the extension of freedom, it means almost by definition reduction of inequality, at least on the opportunities axis: in Sen's words, being "poor" is always in some sense "relatively speaking" (see also, Ravallion and Chen, 2009). Besides, given the intergenerational link between parental outcomes and children opportunities, the equalization of children freedom also requires raw inequality reduction in outcomes or resources among parents (see, e.g., Cogneau, 2006). Up to some point, the same is also true for international inequality or "countries opportunities", where geographical handicaps or national past history have the same metaphoric status for countries as parental background has for individuals. This is where development aid provision should play a redistributive function in a

well-organized society of nations (Cogneau and Naudet, 2007). However, for this society of nations to progress, a lot of political prerequisites are to be met: for instance, as a next step already envisioned, the voice of poor nations should be increased in multilateral organizations. Pure cosmopolitanism or Sen's grand universalism, i.e. extended reciprocal solidarity between world citizens, are however limited by nations' sovereignty: development aid flows are between States, not between individuals. Norbert Elias (1939) thought that modern national States could be soon overcome by larger integration units, like for instance the European Community; however, and perhaps for the best, we are still very far from the foundation of a World Leviathan. In fact, many national States are not yet definitely consolidated, and it is unclear whether this historical step can be skipped. In many instances, a great deal of this State consolidation, if it ever happens, will require States be able to have a more legitimate action in favor of equality and development.

I argued in this paper that European Enlightenment thinkers were right in putting forward the political dimension of inequality, rather than referring to "natural differences" (in gender, race or class) and to "natural institutions" that would set inequality at its optimal level, as some others did after them in the 19th or 20th centuries. I show that:

1. Inequality has good chances to have appeared in human societies through political processes involving surplus capture by self-interested elites, rather than through a purely functional Pareto-improving response to demographic and economic challenges.

2. Once installed, inequality is highly persistent due to intergenerational transmission and institutional inertia. As far as we know from historical evidence, only far reaching political changes succeed in generating significant variations in inequality. These political changes involve wide-ranging reforms of State action, strong shifts in ideologies, and daring social movements; this is why they have many times followed big shocks like wars.

3. Hence, there are no thermodynamics of inequality and development. Among the arguments that make inequality a hindrance to economic development, the political ones are among the most convincing, and empirical evidence shows that changes in *de jure* and *de facto* political inequality are strategic for sustained poverty reduction.

4. The Enlightenment emphasis on separation of powers finds here a great echo. If the overlap between political inequality and economic inequality is too large, change is much less likely to occur. The conflict between divided elites is one of the best chances for the interests of the poor to progress.

Therefore, the study of inequality and development implies giving a lot of attention to their political dimensions:

5. First, to the politics of inequality: inequality or poverty reduction have few chances to ever be inscribed on the political agenda in the absence of political parties, syndicates or other organizations with pro-poor or redistributive political platforms.

6. Second, to political inequalities, i.e. how inequality in de facto political power leads to unequal outcomes: credible commitments must be obtained from politicians and elite capture must be limited for universalist platforms to be implemented and have effective impact.

On top of that, political innovation and surprise is perhaps what should be really called "development", as Schumpeter (2005) would have argued.¹⁸

¹⁸ In this unpublished paper written in 1934, Schumpeter's charismatic ideology of cultural and intellectual innovations led him to reject the notion of development as a materialistic and evolutionist unfolding process, as well as the Leibniz principle of sufficient reason when applied to human history.

References

- Acemoglu, D., 2006. "Modeling Inefficient Economic Institutions", in R. Blundell, W. Newey and T. Persson (eds), *Advances in Economic Theory, Proceedings of the 2005 World Congress*, Cambridge, UK: Cambridge University Press.
- Acemoglu, D., and J. Robinson, 2006. *Economic Origins of Dictatorship and Democracy*, Cambridge University Press.
- Acemoglu, D., M.A. Bautista, P. Querubín and J.A. Robinson, 2008. "Economic and Political Inequality in Development: The Case of Cundinamarca, Colombia", in E. Helpman (ed), *Institutions and Economic Performance*, Cambridge, MA: Harvard University Press.
- Acemoglu, D., S. Johnson, J. Robinson, and P. Yared, 2007. "Reevaluating the Modernization Hypothesis", unpublished paper, MIT.
- Aghion, P., E. Caroli, C. García-Peñalosa, 1999. "Inequality and Economic Growth: The Perspective of New Growth Theories", *Journal of Economic Literature*, 47(4): 1615-1660.
- Alesina, A., and D. Rodrik, 1994. "Distributive Politics and Economic Growth", *Quarterly Journal of Economics*, 104: 465-490.
- Allen, R. C., 2001. "The Great Divergence in European Wages and Prices from the Middle Ages to the First World War", *Explorations in Economic History*, 38: 411-417.
- Anand, S., Kanbur S.M.R., 1993. The Kuznets Process and the Inequality-Development Relationship, *Journal of Development Economics*, 40: 25-40.
- Araujo, M.C., F.H.G. Ferreira, P. Lanjouw and B. Özler, 2008. "Local Inequality and Project Choice: Theory and Evidence from Ecuador", *Journal of Public Economics*, 92(5-6): 1022-46.
- Atkinson, A.B., 1999. "Equity Issues in a Globalizing World: The Experience of OECD Countries", in Tanzi V., K. Chu and S. Gupta (eds), *Economic Policy and Equity*, Washington, DC: International Monetary Fund.
- Atkinson, A. B., J. Stiglitz, 1980. *Lectures on Public Economics*, London, UK: Mc Graw-Hill International Editions.
- Atkinson, A. B., T. Piketty, and E. Saez, 2009. "Top incomes in the long run of history", in *Top Incomes: A Global Perspective*, chapter 13, forthcoming.
- Austin, G., 2009. "Coercion and Markets: Integrating Economic and Social Explanations of Slavery in Precolonial West Africa, c. 1450-1900", draft paper, forthcoming in *Market, Slaves and States in West Africa*, Cambridge University Press.
- Baland, J.-M., and J. A. Robinson. 2008. "Land and Power: Theory and Evidence from Chile", *American Economic Review*, 98(5): 1737-65.
- Banerjee, A.V., and E. Duflo, 2003. "Inequality and Growth: What Can the Data Say?", NBER WP 7793.
- Banerjee, A.V., and L. Iyer, 2005. "History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India", *American Economic Review*, 95(4): 1190-1213.
- Banerjee, A.V., Newman A.F., 1993. "Occupational Choice and the Process of Development", *Journal of Political Economy*, 101, 274-299.
- Banerjee, A. V., and R. Somanathan, 2007. "The Political Economy of Public Goods: Some Evidence From India", *Journal of Development Economics*, 82(2): 287-314.
- Bénabou, R., 2000. "Unequal Societies: Income Distribution and the Social Contract", *American Economic Review*, 90(1): 96-129.
- Bossuroy, T., 2009. "Ethnicity and Election Outcomes in Ghana", in *Four Essays on the Dynamics of Social and Power Structures in Africa*, PhD thesis, EHESS, Paris.
- Bossuroy, T. and D. Cogneau, 2008. "Social Mobility and Colonial Legacy in Five African Countries",

unpublished, DIAL & PSE, Paris.

Bourdieu, P., 1989. *La Noblesse d'Etat - Grandes écoles et esprit de corps*, Paris: Minuit.

Bourguignon, F., 1981. "Pareto Superiority of Unequalitarian Equilibria in Stiglitz' Model of Wealth Distribution with Convex Saving Function", *Econometrica*, 49(6): 1469-1475.

Bourguignon, F. and T. Verdier, 2000. "Oligarchy, Democracy, Inequality and Growth", *Journal of Development Economics*, 62(2): 285-314

Bowles, S., R. Boyd, E. Fehr and H. Gintis, 2005. *The Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life*, Cambridge, MA: MIT Press.

Clark, G., 2007. *A Farewell to Alms. A Brief Economic History of the World*. Princeton, NJ: Princeton University Press.

Cogneau, D., 2006. "Equality of opportunity and other equity principles in the context of developing countries", in Kochendorfer-Lucius G. and B. Pleskovic (eds), *Equity and Development*, InWent / World Bank Berlin workshop series, World Bank publications, Washington DC, pp. 53-68.

Cogneau, D., 2007. *L'Afrique des inégalités : où conduit l'histoire*, op. Cepremap 4, Paris : Presses de l'ENS.

Cogneau D. and J.-D. Naudet, 2007. "Who deserves aid? Equality of opportunity, international aid and poverty reduction", *World Development*, 35(1): 104-120.

Cogneau, D., & S. Mesplé-Soms, 2008. "Inequality of Opportunity for Income in Five Countries of Africa", in Bishop J. and B. Zheng., *Research on Economic Inequality*, vol. 16, Emerald, pp.99-128.

Cowell, F. A., and E. Flachaire, 2007. "Income distribution and inequality measurement: The problem of extreme values," *Journal of Econometrics*, 141(2): 1044-1072.

Deininger K., and L. Squire, 1996. "A New Data Set Measuring Income Inequality", *The World Bank Economic Review*, 10(3): 565-591.

Dezalay, Y., and B. G. Garth, 2002. *The Internationalization of Palace Wars: Lawyers, Economists, and the Contest to Transform Latin American States*, Chicago, IL: University of Chicago Press.

Diaz-Cayeros, A., B. Magaloni, and B. Weingast, 2003. "Tragic Brilliance: Equilibrium Hegemony and Democratization in Mexico", unpublished, Stanford University.

Dumont, L., 1977. *Homo aequalis : genèse et épanouissement de l'idéologie économique*, Paris : Gallimard.

Dworkin, R., 1981. "What is Equality? Part II: Equality of Resources." *Philosophy and Public Affairs*, 10: 283-345.

Engerman, S. L., and K. L. Sokoloff, 2002. "Factor Endowments, Inequality and Paths of Development Among New World Economies", NBER WP 9259.

Erikson, R., and J. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.

Elias, N., 1939 (revised 1991). *The Society of Individuals*. Oxford, UK: Blackwell.

Ferraz, F., and F. Finan, 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes", *Quarterly Journal of Economics*, 123(2): 703-745.

Fleurbaey, M., 1995. "Equal opportunity or equal social outcome?", *Economics and Philosophy*, 11: 25-55.

Greif A., 2006. *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*, Cambridge, MA: Cambridge University Press.

Goody, J., 1977. *Production and Reproduction. A Comparative Study of the Domestic Domain*. Cambridge: Cambridge University Press.

Gould, S. J., 2002. *The Structure of Evolutionary Theory*, Cambridge, MA: Harvard University Press.

Hayden, B., 2008. *L'homme et l'inégalité - L'invention de la hiérarchie durant la Préhistoire*, Paris: CNRS éditions.

- Henrich, J., R. Boyd, S. Bowles, et alii, 2001. "Cooperation, Reciprocity and Punishment in Fifteen Small-Scale Societies", *American Economic Review Papers and Proceedings*.
- Huillery, E., 2009. "Colonisation and Development in the Former West Africa: the Long-Term Impact of the Colonial Public Policy", *American Economic Journal: Applied Economics*, forthcoming.
- Kaldor, N., 1955. "Alternative Theories of Distribution", *Review of Economic Studies*, 23(2), 94-100.
- Kuznets, S., 1955. "Economic Growth and Income Inequality", *American Economic Review*, 45(1):1-28.
- Lam, D., 1997. "Demographic Variables and Economic Inequality", in: M. R. Rosenzweig & Stark, O. (ed.), *Handbook of Population and Family Economics*, edition 1, volume 1, chapter 18, pages 1015-1059, Elsevier.
- Lefranc, A., N. Pistoiesi, and A. Trannoy, 2008. "Inequality Of Opportunities Vs. Inequality Of Outcomes: Are Western Societies All Alike?," *Review of Income and Wealth*, 54(4): 513-546.
- Lévi-Strauss, C., 1962. *La pensée sauvage*, Paris: Plon.
- Li H., L. Squire L. and H. Zou, 1998. "Explaining International and Intertemporal Variations in Income Inequality", *Economic Journal*, 108: 26-43.
- Loury, G., 1981. "Intergenerational Transfers and the Distribution of Earnings", *Econometrica*, 49: 843-867.
- Milanovic, B., P. H. Lindert, and J. G. Williamson, 2007. "Measuring Ancient Inequality," NBER Working Papers 13550.
- Moser, C., 2008. "Poverty Reduction, Patronage, or Vote Buying? The Allocation of Public Goods and the 2001 Election in Madagascar", *Economic Development and Cultural Change*, 57:137-162.
- North, D., J. J. Wallis and B. Weingast, 2006. "A Conceptual Framework for Interpreting Recorded Human History", NBER WP 12795, Cambridge, MA.
- Pande, R., 2003. "Can Mandated Political Representation Provide Disadvantaged Minorities Policy Influence? Theory and Evidence from India", *American Economic Review*, 93(4): 1132-1151.
- Persson, T. and G. Tabellini, 1994. "Is Inequality Harmful for Growth?", *American Economic Review*, 84(3): 600-620.
- Piketty, T., 1995. "Social mobility and redistributive politics", *Quarterly Journal of Economics*, 110(3): 551-584.
- Piketty, T., 1998. "Self-fulfilling beliefs about social status", *Journal of Public Economics*, 70(1): 115-132.
- Piketty, T. 2000. "Theories of Intergenerational Mobility", in A.B. Atkinson and F. Bourguignon, eds., *Handbook of Income Distribution*, volume I. Amsterdam: North-Holland.
- Piketty, T., 2007. "Top incomes over the twentieth century: a summary of main findings [chap. 1] », In : *Top incomes over the twentieth century : a contrast between continental european and english-speaking countries*, Oxford : Oxford University Press, 2007, p. 1-17.
- Platteau, J.-P., 2006. *Institutions, social norms and development*, London: Routledge.
- Ravallion, M., and S. Chen, 2009. "Weakly relative poverty", *Policy Research Working Paper 4844*, The World Bank, Washington DC.
- Rawls, J. 1971. *A Theory of Justice*. Cambridge, MA: Harvard University Press.
- Robinson, J., and R. Torvik, 2005. "White Elephants", *Journal of Public Economics*, 89(2-3): 197-210
- Roemer, J., 1998. *Equality of Opportunity*. Cambridge, MA: Harvard University Press.
- Roemer, J., W. Lee and K. Van der Straeten, 2007. *Racism, xenophobia and redistribution, A study of multi-issue politics in advanced democracies*, Cambridge, MA: Harvard University Press.
- Rosenzweig, M. and A. Foster, 2003. "Democratization, Decentralization, and the Distribution of Local Public Goods in a Poor Rural Economy", BREAD Working Paper No. 010.
- Sahlins, M. D., 1976. *The Use and Abuse of Biology - An Anthropological Critique of Sociobiology*, University of Michigan Press.

- Schumpeter, J., 1954. *Histoire de l'analyse économique*, tome III, Paris: Gallimard, trad. fr. 1983.
- Schumpeter, J., 2005. "Development", *Journal of Economic Literature*, 43(1): 108-120.
- Sen, A. 1992. *Inequality Reexamined*, Cambridge, MA: Harvard University Press.
- Skirbekk, V., 2008. "Fertility trends by social status", *Demographic Research*, volume 18, article 5, 145-180.
- Schokkaert, E., and K. Devooght. 1999. "Responsibility-Sensitive Fair Compensation in Different Cultures." Catholic University of Leuven Discussion Paper No. DARP 46, Leuven, Belgium.
- Stiglitz, J., 1969. "Distribution of Income and Wealth Among Individuals", *Econometrica*, 37(3):382-397.
- Voigtländer, N., and H.-J. Voth, 2007. "The Three Horsemen of Growth: Plague, War and Urbanization in Early Modern Europe", unpublished, University Pompeu Fabra.
- Walzer, M., 1983. *Spheres of Justice*, New-York: Basic Books.
- Wason, P. K., 1994. *The Archaeology of Rank*, Cambridge, UK: Cambridge University Press.