

The Edge of Quantification: Understanding Method and the Economic History of Colonialism

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Over the past few decades, a field of economic literature has concerned itself with the legacy of the colonial project in order to better understand the broader history of economic growth. Organizing this literature is a problematic of colonialism in which colonialism and its legacy are apprehended through their constituent mechanisms and narratives. In other words, a reduction of colonialism to certain analytically-defined questions constitute the motivating problems of this research—questions of flows of goods and land fertility, of costs and benefits relating to the maintenance of imperialist order, and of pre- and post-settlement human geography. Working against the coherence of this research agenda, this paper will challenge the historiography of colonialism; tempered by theory, broader scholarship of economic growth has put forward, in its relatively short history dating back to the Scottish Enlightenment, numerous intellectual narratives, the condensation of which became schools of thought attendant to their specific sociopolitical *and epistemic* contexts. Contemporary literature in the study of

economic growth, to this extent, informs itself by means of discursive patterns, challenging its own propositions and presuppositions with deference to empirical analysis, in an attempt to discover the atomistic drivers of economic growth.

To this end, then, post-nineteenth-century scholarship has acquired significant respect for the role of nuance. Statistical analysis, insofar as it is of use in the social sciences, has materialized a research agenda whose reductive propensities are respected as science. Certainly, while classical political economic literature considers detail carefully, these reductions are

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dismissed as unsubstantiated in current epistemological climates for their lack of *statistical* reasoning. For example, the history of political economy includes debates of pauperism in which habits of tea-drinking are identified as the determinant of nineteenth-century indigence.¹ While one may consider such variables as superfluous to the economic thought, those same variables may, once translated into a cogent structure of data, be awarded a degree of explanatory significance. By extension, the complex interrelations of systems (whether of the realms of

natural or social science) may be approached through a chain of regressions, the regressors of which are allowed to capture nuances as fine as

¹ Harriet Martineau, *The Hamlet*. (London: 1833), quoted in Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*. (Boston: Beacon Press, 2001), 94-95.

rates of tea-drinking. Consider discerning some marginal increase in the growth of economic activity by a measure of, say, “the stability of malaria transmissions.”² For these reasons of applicability, models of this sort play a prominent role in writing epistemically significant narratives within the literature on economic growth.

Yet, in their economic interpretations, links such as those between the activities of mosquitos and the growth of a post-colonial economy join together into an explanatory structure; through their quantification, heterogeneous conditions affecting growth are commensurable in the form of statistical models. Supposing that these data sets are well-grounded, and that the modeled relations are plausible, the *method* of such statistical approaches are seldom questioned within economics. Certainly, relationships such as those between soil fertility and pre-Colonial settlement are considered truthful predictors of patterns of European colonial establishment. But, it is perhaps by depoliticizing these variables within a chain of associations that those *a posteriori* are admitted into the realm of economic relevance. In other words, by mathematizing the conditions and effects for colonial manoeuvres, the strength of the contemporary literature in dissecting colonialism and its legacy came to rest on normative assumptions about the catholicism of empiricism, and more specifically, of statistics.

Without considering such assumptions, contemporary literature on the various effects of

European settlement in the Americas has furnished some uninteresting conclusions, within a broader canon of Western thought. The work of Easterly and Levine,³ Acemoglu, Johnson and Robinson,⁴ Engerman and Sokoloff,⁵ Glaesser, La Porta, Lopez-de-Silanes, and Schliefer,⁶ and North,⁷ to name a well-recognized cohort, have explored the importance of various types of institutions, of human capital development, of environmental conditions, and of social dynamics in economic development, and how such factors effect legacies of long-run growth. As is to be expected, such authorship is attentive to nuanced variables, either in empirical or conceptual senses. Acemoglu and Robinson, for notably, stress at length the role not of institutions in general, but of “inclusive institutions” which “foster economic activity, productivity growth, and economy prosperity.”⁸ Such institutions, they write,

are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and that enable individuals to make the choices they wish. To be inclusive, economic institutions must feature secure private property, an unbiased system of law, and a provision of public services that provides a level playing field in which people can exchange and contract.⁹

As the canon of political economic scholarship concerned with institutions describes, the ability of European settlement to migrate these institutions is critical for establishing conditions

² William Easterly and Ross Levine, “The European Origins of Economic Development.” NBER Working Paper 18162 (2012): 12.

³ *Ibid.*

⁴ Daron Acemoglu, Simon Johnson, and James A. Robinson. “The Colonial Origins of Comparative Development: An Empirical Investigation: Reply.” *American Economic Review* 102 no. 6 (2012): 3077-3110.

⁵ Kenneth L. Sokoloff and Stanley L. Engerman, “Institutions, Factor Endowments, and Paths of Development in the New

World,” *Journal of Economic Perspectives* 14 no. 3 (2000): 217-232.

⁶ Edward Glaesser, Rafael La Porta, Florêncio Lopez-de-Silanes, and Andrei Schliefer, “Do Institutions Cause Growth?” NBER Working Paper 10568 (2004).

⁷ Douglass C. North, “Institutions,” *Journal of Economic Perspectives* 5 no. 1 (1990): 97-112.

⁸ Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. (New York: Crown Business, 2012), 75.

⁹ *Ibid.*, 74-75

for long-run economic growth, to the extent that the origins of the institutions themselves are fortuitously achieved through historical conflicts, “interrelated processes,” and “small differences” at “critical junctures.”¹⁰ Once in place, however, these institutions inform the reiterative social processes by which society reproduces and develops its economic and social customs, typifying notions of justice and equity, virtue, productive behaviour, and so on.

Yet, what weakens and renders uninteresting this problematic of growth is that it is forced to establish the institution as a social construction, and thus qualitatively, while at the same time binding the validity of the claims put forward to quantitative outcomes. Many socioeconomic models central to the literature on economic growth (standing in a relatively qualitative field, compared to those considering factors like malaria transmission rates), begin to consider rates of savings or even the accumulation of capital, and, in the extreme, the effects of certain institutions on growth; in other words, these models describe social tendencies, the effects of which may be considered economic. A salient example here might be a model of socioeconomic status as a determinant of educational attainment, the later relating to a measure of lifetime earnings. In general, institutions describe relationships between people, manifested in cogent arrangements of legal fictions or sociocultural habits that themselves have economic significance: ultimately, it is human behaviours (thus, interrelationships) to which institutions are referent. In fairness, there is some understanding of these social interrelations upon which institutions are crystallized: social capital, notably, has gained some currency as a category

of economic relations. As Neira, Vázquez, and Portela write, “social capital is the process of dynamic interaction: it is created, may increase or be destroyed, either deliberately or otherwise, and requires constant investment.”¹¹ And, like other modes of economic capital, social capital is understood to influence economic growth, such as through its relations with the accumulation of human capital.

Certainly, economics, as a social science, has furnished itself with means of evaluating social structures for their economic utilities and consequences. More specifically, the role of social capital reappears in the debate in question, concerning the effects of imperialist practices on long-run growth. Yet, the economist must ask: to what or to whom are attributed these effects? Such a question is raised by the presentation of networks of social relations within the compact notion of elements of social capital: as implied above, the concreteness of the institution as an economic category habitually obfuscates the human interaction from which it has been distilled, such that the institution is often treated independently of its immanent social composition.

With minimal response to these considerations, contemporary economics has seen a precipitation of cost-benefit studies¹² and empirical investigations that rewrite the sociocultural history of Northern European imperialist globalization according to a problematic whose one *analytic* definition of the institution is an economic rather than a sociological one.¹³ Indeed, this method focuses economic history in terms of categorically-defined (hence, homogenized) groups, the discernable microeconomic or political customs

¹⁰ *Ibid.*

¹¹ Isabel Neira, Emilia Vázquez, and Marta Portela, “An Empirical Analysis of Social Capital and Economic Growth in Europe (1980-2000),” *Social Indicators Research* 92 no. 1 (2009), 116.

¹² see Patrick K. O’Brien, “The Costs and Benefits of British Imperialism 1846-1914,” *Past and Present* 120 no. 1 (1988): 163-200.

¹³ Acemoglu and Robinson, *Why Nations Fail*.

of which are considered primarily in terms of the institutions which condition their behaviours. In effect, this produces a commensuration of imperialist violence and oppression with flows of goods and growths in economic output. For example, many economic historians view settlers as the embodiment of “British legal tradition” and “growth-enhancing financial systems,”¹⁴ or indigenous populations as unfortunately incapable of resisting disease. The latter example illustrates the above point precisely: the violence of disease propagation is abstracted to a mortality figure that may enter into an equation with other economic variables.¹⁵ Indeed, as Easterly and Levine write,

Europeans brought growth-promoting characteristics—institutions, human capital, connections with international markets, and cultural norms—that diffused to the rest of the population over generations. This result deemphasizes the importance of Europeans per se and instead emphasizes the impact of what Europeans brought to economies during colonization.¹⁶

Admittedly, there is a certain degree of utility in these approaches, in that European settlement figures, physical and social capital investments, and indigenous mortality data are all quantifiable (at least conceptually), and thus may be objects of statistical analysis. Yet, these quantifications repel an understanding of the social lives (and thus the institutional significance) of slaves in productive agriculture, the colonial governor in managing settler society, and the common-stock in directing investment, to name a few examples. By such quantifications, the social capital-importing enterprise of colonial settlement is illustrated through its attendant economic

benefits and costs. In other words, the economic effects of inclusive institutions, such as property rights and centralized governance, are captured only as vague residuals, often as the result of cross-country comparisons. Though efforts are made to homogenize the data for comparison, the measurement of residuals may ultimately be considered as a lacuna in the conventions of economic methodology.

Now, to say that the theories derived from quantitative analysis of social arrangements is uninteresting is to reflect, merely, on the fact that such a basis is the elderly foundation of inquiry in the field of economics. This is not to discredit the often helpful conclusions offered by such quantitative analyses, but to identify a weakness within contemporary economics, which prevents the discovery of a well-packaged answer to the question of wealth. Consider, as an example, that these methods have shown that the presence of fertile land leads, via the attraction of European settlers, to the establishment of inclusive European institutions and to a legacy of robust economic growth. Apparently, it may be that the presence of precious metals is an insignificant determinant of European settlement and its attendant consequences, controlling for the fertility of land.¹⁷ The ability to cultivate food, an obvious material condition for rudimentary settlement, appears to have greater effect than the richness of mineral deposits on long-term growth, via some chain of influences. Yet, these conclusions no more endogenize the inclusive institutional arrangements as a driver of growth than the neoclassical model of economic growth did of technical change.

This position is worth developing further. It seems popularly admissible, in our intellectual setting, to claim that the colonial project did not

¹⁴ Glaeser, La Porta, Lopez-de-Silanes, and Schliefer, “Do Institutions Cause Growth,” quoted in Easterly and Levine, “European Origins,” 2012, 12.

¹⁵ see Easterly and Levine, “European Origins.”

¹⁶ Easterly and Levine, “European Origins,” 5.

¹⁷ *Ibid.*, 15.

furnish per se the preconditions for the Great Divergence; rather, European wealth originated in the freedoms unleashed upon its society by the establishment of specific political and economic institutions. With similar convenience, however, Harrod and Domar¹⁸ presented rates of savings as the fundamental determinant of economic growth; then, for Solow, it was capital accumulation on which extensive economic growth depended,¹⁹ while the only unconditional motor of improvements in per-capita income was technical change. Yet, in fairness, it is often the case that both models are taught as obsolete insofar as their foundational assumptions are unrealistic, ultimately impeding the endogenization of the only long-run growth driver within the parameters of the model.

It is the latter obstacle that contemporary scholars of colonialism and growth face in working an account of the atoms of human social behaviour into a coherent, tenable model of economic growth. For example, the work of McCloskey, synchronous with the emergence of modern growth theory, attempts to identify the rhetorical (that is, ideological) underpinnings of the Great Divergence, cutting deeper into the social relations described by the institutions themselves.²⁰ Yet, waiving the importance of institutions, capital accumulation, or soil conditions, is seen as a frustrating enterprise in contemporary economic circles; one recalls (from above) Martineau's attribution of pauperism to tea-drinking in a similar light. Orthodox econometrics, presently, is hardly endowed with a methodological arsenal directly capable of deconstructing and evaluating the claim that patterns of growth are products of rhetoric.

It should not be mistaken that the centrality of institutions and social capital in modern growth theory is already reflective of the fact that productivity growth, questions of distribution, and the powers of institutions exist in both material *and social* contexts. This claim does not push a necessarily Marxian conception of productive relationships, but a relocation of economics as a *social* science—a “serious and systematic inquiry” into human life.²¹ That economics has identified, in rank with other disciplines, constructions of human sociality by which individual economic behaviours are governed is a great achievement. While the claims furnished by an institution-driven theory of growth are not entirely apolitical, the proposed benefits of inclusive institutions align with certain (social, as well as constitutional) notions of justice. Here, what is missing from Acemoglu and Robinson's theory, as with Solow's model, is a *methodological* mechanism (as opposed to a conceptual one) to endogenize the modeled motor of growth. Such a mechanism may better relate the presence of trust, or democracy, with economic growth—but it will do so at the expense of the hegemony of Western empiricism, and will unsettle economics' definitive conclusion that the colonial project, with its attendant externalities, led to good outcomes.

In other words, what is missing from growth economics is a sociology of economic institutions. McCloskey evidences at length the fact that the origins of industrial society do not lie within the realm of the quantifiable, but in social artifacts furnished by the Scottish Enlightenment.²² It is not material conditions alone which provide the basis for what

¹⁸ R. F. Harrod, “An Essay in Dynamic Theory,” *The Economic Journal* 49 no. 193 (1939): 14–33.

¹⁹ Robert M. Solow, “A Contribution to the Theory of Economic Growth,” *The Quarterly Journal of Economics* 70 no. 1 (1956): 65–94.

²⁰ Deirdre McCloskey, *Bourgeois Dignity: Why Economics Can't Explain the Industrial Revolution*. (manuscript, University of Chicago, 2009).

²¹ *Ibid.*, 14.

²² *Ibid.*, 174

McCloskey calls the “Bourgeois Revaluation.”²³ To this extent, economics must be considerate of sociological methodology if it wishes to produce a tenable theory of the origins of growth—in which the social foundations of institutions may enter into an equation with welfare, income, or some other economic standard. For economics to venture such a long distance from its epistemological homeland, McCloskey argues, is an impossibility;²⁴ for these reasons, her practice is beyond orthodox economics, and inspires some frustration for those who defer to a formal model for adjudicating economic problems. Referring to the Great Divergence, she writes: “economics explains how the rising tide expressed itself, channeled into this inlet, mixing with that river upstream, lapping the heights of that dock. But the tide itself had other causes. ... Talk and ideas caused the Industrial Revolution.”²⁵ Yet, the mutual coincidence of the economic and social sphere was once a central assumption: Marx understood that capital and its attendant institutions are categories of the social relations in which they operate.²⁶

Certainly, many kernels of Marxian economics—indeed of most classical political economy—lie outside the present-day boundaries of knowledge apportioned by orthodox economics and its empirical tools. To point this out is not to say that contemporary economics must abandon its numeracy and its rigour in favor of philosophical substantiation. Merely, it is an illustration that knowledge adapts itself as needed. Similarly, if institutions may presently focus development economics and economic history, then the rhetorical fundamentals on which they were composed may do so tomorrow. Further, the compactness of a contemporary growth theory may itself be mirrored in an intellectual pattern of coherent

concepts, disseminated in literature such as McCloskey’s.

But what of the question of economic growth and the legacies of the colonial project? As this paper has suggested, a defensible answer must inform itself by venturing beyond the realm of economics. But, in doing so—in subjecting not just colonialism, but the epistemic framework by which colonialism is valued—economics becomes vulnerable to conceptions of value that differ from the canonical definitions developed through the course of modernity. By distancing itself from a reflexive, critical sociology, the Western economic tradition defends its own epistemic colonial legacy when asked *cui bono*. The literature referenced in this paper, with impressive coherence, evidences this well; the migration of growth-promoting institutions, of knowledge, and of capital furnished much of the colonized world with its means of self-betterment, while the colonizer carried on with the production of such goods, continuing its trend of intensive growth, innovation, and enrichment. But, with what homogenizing assumptions of human nature does western economics evaluate the colonial project? By whose “talk and ideas”²⁷ did the Western world propel itself into modernity? Such are the questions raised by a political sociology of historic economic relations: without responding to these questions, canonical contemporary theory may expound neither institution, fortuitous Enlightenment, nor capital as motors of growth, within and across human geographies. In other words, that the effects of institutions are measured in quantitative forms external to the social relations themselves is cause for reconsidering the ideological foundations on which such measurements are made. Without doing so, it is erroneous to attempt a defensible apology of Northern

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*, 7.

²⁶ Karl Marx, *Capital*, vol. 1, trans. Ben Fowkes. (London: Penguin Books).

²⁷ Dierdre McCloskey, *Bourgeois Dignity*, 7.

Europe's colonial project by means of a Northern European epistemological framework. Economics makes advances in this elderly direction, in the form of cost-benefit analyses and theories of knowledge spillovers, by failing to account for the immaterial costs immiserated yeoman and subaltern indigenous populations—treated as unfortunate externalities of an otherwise advantageous process. It does so because the ruinous cultural consequences of enclosure and proletarianization, of rape and genocide, or of slavery, are largely incongruent with quantitative representations insofar as these repressions are epistemological, cultural, spiritual—not merely economic. In a similar vein, the spaces of economic analyses are partitioned and understood according to imperialist political lines; the national units by which we often measure the legacies of settler-colonial relations are, in themselves, constructions of imported politics. It is not merely the measurements, but the subject itself which is misidentified as an depoliticized economic agent, whose social natures are assumed to be homologous (and thus comparable) with those forged within the Scottish Enlightenment.

Of course, even in recent history attempts have been made to negotiate a figure, and hence quantify, colonial damages—consider Jamaica's recent demand for billions of British pounds.²⁸ However, such valuations often rely on an analytic of utility or welfare, or of national product. Against these metrics, it becomes easy to locate the origins of Western wealth outside of systems of exploitation—most growth theorists, beginning with Arthur Lewis,²⁹ expound the demureness of technology, capital, or knowledge externalities.³⁰ Yet, as discussed, it

is by means of their social functions that such institutions (defined loosely) accomplish their legacies of growth or oppression—and it is the social function that must be properly centered when evaluating histories of growth. When we speak of the emergence of a structure of growth-promoting institutions, then, we are speaking of the forcible expropriation of the English commons, of ancestral traditions, of ties of kinship, or of social arrangements without sovereignty.

Now, whether or not this yields a long-term benefit is still contested insofar as such debate extends beyond fields of western economics. The possibility that such valuations are, in fact, tractable across disciplines and modes of thought is by no means eliminated. However, that economics announces, by means of its own native epistemologies, that such a long-term benefit exists *objectively* fails to account for the contingency of their own problematic—especially considering the nature of colonial violence was, in part, epistemological. By extension, economics often sanitizes this discourse by selective endogenization, reducing the legacy of colonialism into isolable relations, such as between settlement patterns and rates of malaria transmission. In doing so, its *methodology* becomes politicized, constituting in itself an act of oppression. For, without consideration of the social heterogeneity of the societies under its lens, economics will fail—not only to yield models in which growth mechanisms are truly endogenous, but to defend itself as a *social* science.

Ironically, the canonical literature makes a gesture at this conclusion, noting that the referent of income and welfare is not necessarily

²⁸ Rowena Mason, "Jamaica calls for Britain to pay billions of pounds in reparations for slavery," *The Guardian*, 29 September 2015. <http://www.theguardian.com/world/2015/sep/29/jamaica-calls-britain-pay-billions-pounds-reparations-slavery>.

²⁹ see Frank Strain, "Rostow/Harrod-Domar/Lewis Models." Lecture, Economic Growth and Technical Change, Sackville, NB, September, 2015.

³⁰ *Ibid.*

coincident. But, this is merely to acknowledge the loose ends of orthodox literature, and attempt to make harmonious otherwise incompatible theories—a union of “Bourgeois Revaluation” and knowledge spill-overs, or the coupling of talk, ideas, and institutions. But such a union has been attempted in the long history of the literature on economic growth. Polanyi, for instance, is attendant to the social dislocation rendered over the four hundred years’ narrative of industrialization, while still acknowledging the quantifiable ways in which a society may eventually enjoy the fruits of the market.³¹ Similarly, literature on moral economy,³² stateless society,³³ and other economic anthropological topics present theories of institutions that properly locate the social relations of which they are manifestations.

Then, presenting a model of economic growth in which the factors of growth—the social relations between people operating within material environments—are endogenized is equivalent to redrawing economics within a coherent body of social sciences, reflexive and inclusive in its epistemology. Without such an analytical form, neither cost-benefit analysis, chain of regressions, not eloquent theory of institutions will offer a universal conclusion as to the process by which the rich became rich. And so, it is not merely the conditions by which western society diverged from its historical stagnation that economic history must locate, but society itself.

³¹ Polanyi, *The Great Transformation*.

³² see e.g. E. P. Thompson “The Moral Economy of the English Crowd in the Eighteenth Century,” *Past and Present*, 1 (1971).

³³ see e.g. James C. Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. (New Haven: Yale University Press, 2009).