The Intellectual Origins of Modern Economic Growth[1]

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1. Introduction

Economic growth was not a novelty in 1800. In a celebrated passage, Adam Smith had noted that the "annual produce of land and labor" had been growing in Britain for a long time.[2] Yet there is something distinctive in the changes that occurred in the economies of the West after the Industrial Revolution, that seem to confirm our intuition that something genuinely important had happened. To be sure, technological innovations, institutional reforms, and fresh ideas do not affect the aggregate level of economic activity abruptly: they need to diffuse from region to region, from activity to activity, cross boundaries and seas, be evaluated, adapted, and refined. Their promoters have to dislodge the entrenched, persuade the skeptic, and reassure the fearful. It is not surprising, therefore, that whatever we identify precisely as the Industrial Revolution after 1760 took its sweet time to start affecting GDP per capita in the West in earnest.[3]

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[2] Smith, *Wealth of Nations*, pp. 365-66. Modern economic historians have reached different conclusions. While none of those methods are uncontroversial, their unanimity seems to indicate that the "assumption" of modern economists such as Robert Lucas and Oded Galor that there was no economic growth before 1800 is a gross oversimplification. See for instance Clark, *Secret History*; Snooks, *New Perspectives*.

[3] There is a substantial literature that asks with Jeffrey Williamson "why was economic growth so slow during the Industrial Revolution?" although the answers tend to be dif-

Modern economic growth differs from the processes that Smith identified and that made Britain and the rest of Western Europe so much richer in 1700 than it had been in 1066. To the hard nosed scholar who insists that "it was all only a matter of degree," one response is that "in economic history degree is everything." There is a qualitative difference between an economy in which GDP per capita grows at 1.5 percent and one in it which grows at 0.2%. The other is that it was not just a matter of degree. It was qualitatively different in at least three fundamental aspects. First, growth gradually ceased to be a niche phenomenon. Before 1750 growth had been limited to relatively small areas or limited sectors, often a successful city state, a capital of a powerful monarchy, or a limited agricultural region. These niches had to spend much of their riches to protect their possessions against greedy neighbors, real-life manifestations of Mancur Olson's "roving bandits" who often killed entire flocks of golden-eggs-laying geese. After the Industrial Revolution it became a more aggregative phenomenon, with a substantial number of economies becoming members of the much-coveted "convergence club." Second, pre-1750 growth, such as it was, was dominated by institutional change, in its widest sense: law and order, the establishment of commercial relations, credit, trust, and enforceable contracts created the preconditions for wealth to expand through more efficient allocation, exchange and investment.[4] Technological change, while never quite absent, was usually too slow and too localized to assume the dominant role it was to take later. Third, pre-modern growth was normally not sustainable and remained vulnerable to set-backs and shocks, both man-made and natural. The economic glories of the Dutch Republic and Venice had melted away by 1800, just as those of early sixteenth century Spain had vanished by the death of Philip II.[5] In the late eighteenth century the relative contribution of technological progress to economic growth compared to other elements began to increase, and the institutional basis supporting this progress was transformed. The result was the Industrial Revolution. It may have been slow, it may have been not all that industrial and even less revolutionary, it may not even have been wholly British, but it was the taproot of modern economic growth.

How do we explain this change? What has been missing, so far, is a full appreciation of the importance of useful knowledge. Economic decisions are made by individuals on the basis of certain beliefs they hold and knowledge they possess. In recent years, it has once again become "kosher" if not quite de rigueur to speak of "cultural beliefs" following Avner Greif's path-breaking work on the emergence of institutions that made trade possible in stateless and even largely lawless societies.[6] Douglass North refers to shared cultural beliefs and as the "scaffolds" on which institutions are built.[7] But Greif and North are primarily interested in the

ferent from the ones given by him. See Williamson, *Why Was British Growth So Slow?*, pp. 687-712. For some suggested answers see Mokyr, *Editor's Introduction*, pp. 12-17.

[4] See Greif, *Institutions*.

[5] De Vries and Van Der Woude. *First Modern Economy;* Drelichman, *American Silver*.

[6] Greif, *Cultural beliefs;* Temin, *Is it Kosher?* pp. 267-87.

[7] See North, *Understanding the Process*.