

archaeological excavations which reveal high levels of specialization and correspondingly high levels of exchange. There is just enough documentation to demonstrate that the exchange was organized through markets. The contention that the new interpretations reflect academic opportunism in a neoclassical *zeitgeist* is untenable. The real question is not whether the economy of classical antiquity was a market economy, but what kind of market economy it was. The fundamental issue raised by Boldizzoni's tract concerns the legitimacy of typologies as an expository device for historical narrative. Be they economic or sociological, typologies are static: they compress long periods of time into a single instant. We do not, for example, have a typological model for the European or American economies of the 1960s and another for the 2000s, but they are surely different in ways not captured by putting them in a box labelled "market economy." The same is true of economies in the past, which evolved in response to specific opportunities and constraints that were themselves changing in time.

Boldizzoni gives a useful warning against certain tendencies which, if they were to achieve dominance in teaching and controlling academic promotions, could have catastrophic effects on the practice of economic history. Current evidence suggests that the danger is much exaggerated. As a methodological proposition, criticism of cliometrics as inherently ahistorical is off target. The culprit is not economics, but economics dressed up as typology. Like good economics, good economic history exploits the logic of individual (and collective) intentionality as they are conditioned by the particularity of time and place. The difficulty of doing this successfully can hardly be exaggerated. As a recent Nobel Laureate in economics has observed, "One of the great difficulties in economic analysis is the process of going from abstract analysis to thinking about the economy. That is, how does one use what one has learned from abstract analysis. The easy way out is to take the model literally. Sometimes this seems to be what is meant by taking a model seriously. To me, taking a model seriously means putting in the effort to think through what lessons from the model one wants to take along when thinking about the economy" (Peter Diamond, *On Time*. Cambridge: Cambridge University Press, 1994, p. 7). Most of Boldizzoni's examples of bad economic history are also examples of bad economics. There are no shortcuts to good work. The merit of this book is to remind us of that sad truth.

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*The Changing Body: Health, Nutrition, and Human Development in the Western World Since 1700*. By Roderick Floud, Robert W. Fogel, Bernard Harris, and Sok Chul Hong. Cambridge: Cambridge University Press and NBER, 2011. Pp. xxvi, 431. \$90.00, hardcover.  
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The standard of living debate, which investigates whether the working class benefited from the Industrial Revolution, has produced a large body of literature related to the long-run dynamics of wages, GDP, and, more recently, heights. This last concern, has motivated, at least in part, a more accurate study of how the human body has been transformed over the last three hundred centuries—via what we might call "technophysio evolution." The present book goes one step farther as it tries to expand this concept to link the development of human bodies and economic growth, or, to use the authors' words, to link "nutrition status" and "standard of living."

Two elements are at the heart of the theory of this technophysio evolution. First, there is a positive relationship between economic conditions during childhood and body size. Second, there is a positive relationship between body size and work capacity. If you add to that a generational perspective, you get a virtuous cycle: as a given generation is better fed, it can work more, both in quantity (number of hours and intensity of work) and in quality (better cognitive skills) and, as a result, it increases not only its own standard of living but also that of the next generation. Therefore, the next generation will have a higher body size which, in turn, will allow it to work more, increasing its own standard of living and that of the next generation, “and so on, *ad infinitum*” (p. 39, italics in the original).

This process is, in some way, the exact opposite to the Malthusian trap: instead of being caught in a vicious circle where every increase in the standard of living is wiped out by population growth in the next generation, here each generation benefits from the economic advances of its predecessors. How does this happen? The process works through various channels that influence the nutrition status—“the energy which has been used for growth once the demands of body maintenance, resistance to disease, play, and work have been satisfied” (p. 11)—during childhood and even within the womb. Therefore, one key contribution of the book is to recognize and assess the importance of cohort effects in exploring the long-term evolution of health. It also convincingly shows that poverty does not only result in higher mortality, as in a Malthusian world, but also in stunted and wasted bodies: body size is itself a variable of adjustment in the equilibrium between resources and population. In other words, “subsistence is not located at the edge of a nutritional cliff, beyond which lies demographic disaster. Rather than one level of subsistence, there are numerous levels at which a population and a food supply can be in equilibrium, in the sense that they can be indefinitely sustained. However, some levels will have smaller people and higher normal (noncrisis) mortality than others” (p. 124).

The whole process is then almost purely mechanical (the authors themselves refer to thermodynamics) and, as a result, it tends to set aside some important factors explaining both how to get into the virtuous circle and how to stay within it. One obvious limitation is that most collective organizations are left out of the picture. For instance, it is not clear that people started to work more hours simply because they had the physical capacity to do so; it may well be that other mechanisms induced them to do so. Of course, the authors often mention these other contributing factors (for example, the role of the state in opposing famines in Europe), but the whole picture tends to minimize, certainly more than is necessary, the role of institutional change in the global evolution of health and mortality, and, as a result, in the economic development. Education for instance, which would play a decisive role in most endogenous growth models, is rather neglected. The authors argue that taller individuals (better nourished) have a higher cognitive ability. What remains unclear however is to which extent this cognitive ability can develop without an efficient schooling system (an implicit idea seems to be that, if everyone is well-fed, and so has a high cognitive ability, an efficient schooling system will surely be designed but they never push the argument that far). So being well-fed is a condition for many things related to economic development to happen, but it seems to be merely a necessary condition and not a sufficient one.

This is all the more important when going back to the standard of living debate and the long-term predictions of the book. It has to do with both the spatial and temporal extension of the technophysio evolution. There are little doubts now that, on a long-term basis, the working class in the Western World benefited from the

economic development. There is much less evidence that the lower class as a whole—the Chinese, South American, or Indian workers that have replaced European *lumpenproletariat*—have benefited from it. On the other hand, as the authors recognize, the level of economic inequality has direct implications for the health and nutritional status of the whole population. Inequality is now rising in most of the Western World which may somehow stop the virtuous technophysio process and, in the long run, even reverse it. The key question is thus to what extent is the changing body a human experience or one that is peculiar to the West during last three centuries. To answer this question, more is needed than simply computations of calories input and output.

Thus, the one major criticism of this fine piece of work is that the authors may be guilty of excessive optimism that is more or less implicit throughout the book and comes to a head in the final chapter. But that should not prevent readers from taking advantage of what is probably the most comprehensive survey of health and human development currently available. This is a clear and well-written book that not only complements but elegantly summarizes previous work by these four authors—all of them being leading authorities in the field.

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