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How useful is anthropometric history?

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How useful is anthropometric history? Some reflections on Paul Hohenberg's recent presidential address to the American Economic History Association

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Abstract: In his recent presidential address to the American Economic History Association, Paul Hohenberg argued that anthropometric history does not meet his criteria for useful research in the field of economic history. He considers research useful if (a) it “helps shape one of our underlying disciplines”; b) it contributes “to clear—even fresh—thinking about current, policy-related issues or on-going scholarly debates about the historical past”; and c) it “penetrates the fuzzy realm of identity-shaping popular discourse”. I argue briefly that only a superficial reading of the literature would lead to the conclusion that anthropometric history has not been useful.

Paul Hohenberg proposes three criteria to judge the usefulness of research in economic history: a) it “helps shape one of our underlying disciplines”; b) it contributes “to clear—even fresh—thinking about current, policy-related issues or on-going scholarly debates about the historical past”; and c) it “penetrates the fuzzy realm of identity-shaping popular discourse” (Hohenberg, 2008). He cavalierly dismisses anthropometric history thus: “Though they [anthropometrics] open up exciting possibilities for overturning long-held views, it is unclear that they can live up to that anticipation. The use of heights to measure living standards appears quite solid, but where it leads to conclusions at odds with

accepted patterns the latter have tended to prevail against the apparent new evidence.”

I would like to present a dissenting view. I believe that the achievements of anthropometric history during the past quarter century do, indeed, meet all of the above (rather idiosyncratic) criteria for usefulness. Anthropometric history has had a noticeable influence on several sub-disciplines of economics. In stark contrast to Hohenberg’s thinking on the matter, Richard Steckel suggests that “It is heartening that economists are integrated into the field and no longer need to explain their methods in papers accepted by general-interest economics journals. “ For example, labor economists have begun to explore seriously the linkages between height and wages in order to analyze why taller workers earn more than their shorter counterparts. Is it discrimination, health, intelligence, self esteem, or a combination of these factors that is behind the association (Case and Paxson 2008a,b; Persico et al., 2004)? Exploring the distribution of income through the use of biological indicators is another novel approach used in anthropometric methodology (Deaton 2007), as is the analysis of early determinants of later economic performance (Behrman and Rosenzweig, 2004). As Case and Paxson (2008) put it, “Recent research has paid particular attention to height as a marker of a child’s early environment.” In development economics height has been used often as an indicator of malnutrition, as a proxy variable for human capital, and as a window on the role of health in development (Schultz 2002, 2003a,b). These developments had a synergistic relationship to anthropometric history and many of the cited papers acknowledge the contributions of anthropometric history to the recent interest in the topic (Deaton, 2007); the Nobel Prize committee itself cited Robert Fogel’s work on physical stature in the press release announcing that he had won the Prize in Economic Science (The Royal Swedish Academy of Sciences, 1993). The fact that a journal devoted to the field of anthropometrics has been created is sufficient evidence that there is a growing realization of the extent to which economic and biological processes are intertwined.¹

Hohenberg's second criterion of usefulness pertains to its contribution to “thinking about current, policy-related issues”. Here, too, anthropometric history has made notable inroads. The finding

that after having held the world height record for two and a half centuries Americans lost it after World War II to Western and Northern Europeans received considerable attention in the print media around the globe, from the Toronto Star to the Times of India by way of most major newspapers in the US and UK, such as *The New York Times*, the *Chicago Tribune*, and the *Washington Post*, among others (Komlos and Lauderdale, 2007). *The New Yorker* published a feature article about it.² It was reported on NBC's Today and on ABC's Nightline, it was featured on the Jon Daily show,³ and both NPR and the BBC devoted a segment to it. The list could be expanded considerably.⁴ Hence, I would argue that anthropometric history has indeed informed the public-policy debate on the American diet as well as on its health system.⁵

Next, Hohenberg casts doubt on the idea that the sub-discipline has contributed to the “on-going scholarly debates about the historical past.” In fact, anthropometric history has done just that, by, for example, revealing the “inadequacies of GNP as a welfare measure” (Steckel, 1995, 2008). In contrast, to GNP “average height... is sensitive not only to the level of income but the distribution of income” (Steckel 1995). It enabled us to document the rise in inequality and the negative externalities that accrue to the biological living standard during major economic transformations such as the Industrial Revolution and the onset of modern economic growth in the 19th century⁶ (Komlos 1989, 1998). Thanks to anthropometric history we now understand much better the importance of the propinquity to nutrients for biological well-being before the advent of the transportation revolution (Komlos 1987). The method has enabled us to gain unique and invaluable insights into the living standards of such varied sub-populations as the aristocracy, slaves, women, children, indentured servants, self-sufficient peasants, and convicts, for all of whom no comparable economic data are extant (Steckel 1986; Nicholas and Oxley, 1993; Baten and Murray, 2000). Richard Steckel has counted 325 publications on stature alone since 1995 and offers an extensive list of additional contributions that include “biological welfare during economic and political crises; ...the welfare of women relative to men in the contemporary world; the fetal origins hypothesis; and inequality in the developing world. The approach

has also expanded within economic history to consider the consequences of empire for colonials; the health of populations lacking traditional measures of social performance; ...and very long-term trends in health. Much has also been learned about socioeconomic aspects of inequality, the welfare implications of industrialization, and socioeconomic determinants of stature (2009, p. 16).

We come to Hohenberg's third and final criterion: Does anthropometric history “penetrate the fuzzy realm of identity-shaping popular discourse.”? Admittedly, this is a difficult one to meet, and Hohenberg provides little in the way of guidance. Nonetheless, I do think that one can safely say that anthropometric history has made a contribution in this regard, seeing as how Paul Krugman wrote an opinion piece about it in *The New York Times* (2007). As the many blogs prompted by the article indicate, readers had to confront the disconcerting finding that Americans are not the first in the world in all dimensions of life.⁷

In addition, Hohenberg argues that economic historians have three “unique contributions to make”: in the analysis of space (geography), of time (the long run), and of demography. Well, anthropometric history has emphasized all these aspects from its very inception. It was arguably the first to be able to compare with any degree of accuracy spatial patterns in nutritional status (Margo and Steckel, 1983); it can be credited with an extensive time series of height estimates, from the 17th century to today (Komlos et al., 2003); and it has intensified an overall awareness of the relationship between nutrition and demographic processes (Komlos 1985). Thus, anthropometric history seems to meet Hohenberg’s definition in this regard as well.

Instead of hastily accepting Hohenberg's conception of usefulness in scientific inquiry we should recall the hostile reception given to so many of the scholars of the past – who were working initially outside of the received paradigm -- by contemporary scientists, and the long time that it took for their ideas to become mainstream. Frankly, I myself do not accept Hohenberg’s framework at all. In fact, I maintain not only that anthropometric history is useful but that it is arguably one of the few

major achievements of the second wave of cliometrics, -- i.e., the post-slavery, post-railroad era --, when certain ideas in the field of economic history that had once been considered revolutionary became normal science.

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¹ <http://www.ees.elsevier.com/ehb/>

² http://www.newyorker.com/archive/2004/04/05/040405fa_fact

³ Jon Daily show:

<http://www.thedailyshow.com/video/index.jhtml?videoId=89047&title=stature-of-liberty>

⁴ An extended list can be found on my home page <http://www.lrz-muenchen.de/~u5152ak/webserver/webdata/>.

⁵ Hohenberg continues by suggesting that “because the past and present are inextricably linked, we may as well ...accept and take advantage of the linkage. The core of my {his} argument is that through interaction with current concerns economic history can shed light on both the past and the present and so prove particularly useful.” Well, this is exactly what anthropometric history is doing.

⁶ For a thorough overview see Cuff (2005).

⁷ <http://economistsview.typepad.com/economistsview/2008/05/coming-up-short.html>;
<http://select.nytimes.com/2007/06/15/opinion/15krugman.html?scp=1&sq=Krugman%20June%2015%202007&st=cse> ; <http://krugman.blogs.nytimes.com/2007/06/19/lack-of-growth-sets-us-back/>