

PRESIDENTIAL ADDRESS

The pursuit of well-being: Metrics and evidence

Anne E.C. McCants 

Massachusetts Institute of Technology, Cambridge, MA, USA
Email: amccants@mit.edu

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Abstract

The standard of living is a conceptual object of great concern to governments, social scientists, and the public. How people lived in the past is likewise of much interest to historians. There is wide (if not universal) agreement that a higher standard of living is preferable to a lower one. Congruence ends there, however, as what constitutes the appropriate measure of people's well-being is subject to a wide range of parallel, overlapping, and sometimes even conflicting opinions. How to collect the evidence necessary to calculate whatever measure we settle on, from both the contemporary world and the historical record, is equally contested. Indeed, in the case of efforts to measure well-being in the past, the evidence we might want may not exist at all. The question is too important though to settle for narrow and often misleading metrics that capture material wealth alone. Measures of our lifespan, the expansion of our mental capabilities, and our ability to feel secure and to participate in our collective governance make essential contributions. Finally, we need measures that are sensitive to the requirements for shared human sociability in different historical contexts. The insights of historians and other observers of human societies will be essential to complement the theorizing of social scientists.

Keywords: Well-being; standard of living; HDI; metrics

In a July 13, 2023 article titled “Farewell, Mark Rutte, the Tiggerish Dutch prime minister,” the *Economist* described the departing prime minister of the Netherlands, despite his impressive 13 years in the role, as not only “Bouncy, endlessly optimistic, and devoid of ideology,” but also quite likely to have his policy agenda forgotten. The article goes on to argue that being forgettable may actually be the most appealing aspect of Rutte’s long tenure: “For there are worse things for a polity than to be led by a cheerful, pragmatic and dedicated leader. . . . Mr Rutte inherited a rich, reasonably well-run country and leaves behind a rich, reasonably well-run country. He gave his compatriots a few more years of what they already had. Perhaps that is enough to justify a self-satisfied grin.” Prosperous stability, in other words, is his enduring legacy – a condition which may sound dull and uneventful but is hard to oppose for one’s own life.

Reading this account of Rutte, it is not unreasonable to see in it an apt, even if still woefully imprecise, definition of well-being as seen by the *Economist*. It incorporates only two elements – being rich and reasonably well-governed – but surely those two things alone are a great deal. After all, when one looks around the world, and certainly back into economic history, it is clear enough that for many people, indeed for the vast majority of people, riches are far from within reach. And even for the unambiguously rich, a sense of stability or security is often remarkably elusive. For riches on this earth – to evoke the Biblical image “where moth and rust destroy and where thieves break in and steal” (Matthew 6:19) – can diminish as well as increase. Or to update the metaphor somewhat, our means of making a living can be undermined by new technology or new priorities, bank reserves are susceptible to panics, stock markets can crash, aquifers and oil wells alike run dry, and we ourselves suffer wear and tear, succumb to illness, and eventually pass on. Likewise on the social and political front, history is not overfull of accounts of what we might consider to be the reasonable social relations or benevolent governance necessary for individuals to assert agency over their own lives. On the contrary, it is hard not to find self-dealing, exploitation of the vulnerable, or the oppression of the weak by the strong lurking behind nearly every corner.

All this is to say, then, that to be alive is to be confronted by a succession of challenges, and a good deal of precarity. The struggle for subsistence and family reproduction are only the most basic of the uncertain tasks we face, and they are far from the end of our worries. We are confronted daily by the changing facts of our physical environment, and by our interactions with the full spectrum of the biological world, from the very small viruses to the rather larger predators. There are also the myriad problems of dealing with other members of our own species, with whom we sometimes cooperate, but far too often conflict. We may try to maximize the former and to minimize the latter, but both of those achievements are much easier said than done.

To address these challenges humans have devised two broad strategies of response. One is the acquisition of ever more knowledge about the universe we inhabit through processes of discovery; the other is to intervene in the world through the making of tools, or what we might broadly think of as technology. All our academic disciplines as they have developed over the last few millennia are devoted to one or the other of these processes. The sciences – including their various subdivisions that are all encompassed by the broad Germanic definition of *Wissenschaft* – engage in discovery, while schools of medicine, engineering, architecture, management, and politics are in the business of building artifacts or organizations. The latter we might think of as tools or rules for living.¹ Happily, a remarkable feature of the modern university system is its general commitment to cross-pollination between the two clearly delineated realms of inquiry. Closer to home, dialogue between the processes of discovery and artifact-making (most obviously in the commitment of many members to social activism and/or contributions to policymaking) is also one of the

¹I note as an aside that theology presents a not-easily-classified case as some people understand it's purpose to be the discovery of ultimate truths, while others very strongly believe it to be just one more contributor to the building of those tools or rules for living.

- **Herodotus** (early 5th BCE) – Great divide between nomads/city dwellers
- **Thucydides** (late 5th BCE) – Documents the high cost of civil war
- **Aristotle** (4th BCE) – Climate & Geography ~ Athens is just right!
- **Ibn Khaldun** (14th c.) & **Montesquieu** (18th c.) – Climate & “the Laws”
- **Adam Smith** (1776) – Climate & the division of labor
- **Malthus** (1798) & **Ricardo** (1817) – Population & the “Iron Law of Wages”
- **Weber** (1922) & **Veblen** (1899) – Socially embedded institutions, not much climate
- **New Institutional Economics** Property rights & other “rules” with no climate at all

Figure 1. A brief record of weighty opinion on Question 2

core intellectual commitments of the Social Science History Association. In any event, these divisions of the academic endeavor seem to many people an abstraction, or even a distraction, from the urgency of the many practical challenges we face. Problems in epistemology are just not at the top of most people’s minds, if they have a place there at all. Nonetheless, they are worth thinking about; and the tension being knowing and doing lies at the heart of questions concerning the pursuit of well-being. It is this tension that I want to explore in what follows.

To this end, we might begin with two questions which are especially salient to our enterprise: (1) How do we recognize “well-being” when we see it? (2) How might we best achieve it, or more of it? It should be clear enough that the two questions are intimately related to each other. But they are also of a fundamentally different character from each other. The first is about discovery, and the second is about acting or making interventions. Furthermore, there is a long record of weighty opinion on the second question, Western highlights of which are summarized in Figure 1. Some of my own work, which I have pursued with Dan Seligson, is concentrated on that challenge.² But it is on the first question that most of my emphasis here will be placed as it is of fundamental importance, even if it is often bypassed in the rush to judgment on what action to take. It is very difficult to intervene in the world successfully if we have not first determined what exactly it is that we want our intervention to accomplish. Yet, despite the logic of defining our target first, much of the intellectual history on this subject has been devoted to understanding the how question rather than the what question. Therefore, before turning to the issue of what well-being actually is, given the weight of previous discussion about our collective human efforts to achieve it, it is worth offering a bit more texture to that discussion by way of groundwork.

A brief history of opinion on Question 2

As long as people have been writing history, they have observed the marked differences in the belief systems, social organization, and the pursuit of subsistence

²See, especially, Seligson and McCants 2021, 2022.

and accumulation across different communities. In the West, this tradition begins with Herodotus (484–425 BCE), a man of seemingly endless curiosity with a particularly astute eye for the gulf dividing those who lived on and through their animals, constantly on the move, and those who settled into cities, which were organized around the governance of either agricultural hinterlands or maritime commerce, or both. He makes no definitive judgment on which type of society he thought was categorically better or stronger than the other, but he keenly observed the vast differences between them in how their members lived and what they each counted as success.

For his younger, but near-contemporary, Thucydides (460–400 BCE), this difference was not just interesting, but consequential. Thucydides posits that growth demands stability (or as he terms it, “quiet”) which allows for the cultivation of land, the accumulation of capital (which he understood most obviously to be the literal building of cities and their related monuments), and the pursuit of commerce. As his extended preamble case study of the Corcyraean revolt in the opening chapters of *The History of the Peloponnesian War* suggests, the worst disrupter of the quiet he thought necessary for growth is civil war. Thus, his prescription for betterment was less focused on what to do in a positive sense, than on what to avoid. His account of the brutal 27-year war between Athens and Sparta remains to this day a powerful indictment of the disruption and lawlessness engendered by states of war, especially when the conflict is between parties relatively close in geography, language, or culture to each other.

In the fourth century BCE, Aristotle offered a more general explanation for differential levels of prosperity, one not contingent on immediate historical events, and one that would resonate for centuries. He emphasized the impact of climate and its close companion, geographical situation. In a passage of *The Politics* that is often cited, Aristotle laments the “want of intelligence” among those living in a cold climate, and the absence of “spirit” among those subjected to a hot climate. The Hellenes, he thought, by the happy circumstance of living in an intermediate situation as pertains to temperature, enjoyed the benefit of being both spirited and intelligent (Book 7, Part VII). Similarly, he believed that the best city is the one “well situated” for both the cultivation of the land and access to the sea (Book 7, Part V). In combination then, climate and geography shape human character, which in turn shapes culture and gives rise to the differential situations – or political economies as we might now term it – across the world as he then knew it.

In the fourteenth century, the Tunisian diplomat and scholar Ibn Khaldun weighed in with a similar proposition. In *The Muqaddimah* he describes the world as consisting of seven climatic zones, while also making an argument for the favorability of the middle zone as the place of maximal moderation. But he also clearly articulates a theory of the influence of heat on both the body and the temperament of individuals. Building on this legacy, Montesquieu in the eighteenth century reasons his way by analogy to traverse from the effect of heat on the individual to the effect of heat on a society. In his view, climate imposes constraints on the appropriate composition of the legal system, his so-called “Spirit of the Laws.” Specifically, the laws must be fashioned to counteract the effects of climate. Furthermore, as agriculture is the dominant labor of man, he believed that anything that imposes a drag on agricultural effort will impose an outsized drag on the

economy (1748: Book XIV, Chapter 6). Finally, he argues – with sufficient imprecision that his claim is not testable – that we may distinguish climates by degrees of latitude. In their econometric exercises, modern economists often employ this general observation with great precision, to mean that climate changes in constant proportion to changes in latitude, though that formulation is inaccurate for the more than half of the global population who live in the zone of the tropics (see Seligson and McCants 2020).

Also writing in the eighteenth century, Adam Smith's exploration of the nature and causes of *The Wealth of Nations* is so capacious as to prohibit anything more than a woefully insufficient overview here. Most importantly for the discussion here, he is the author who gave us the image of the pin factory as a space where efficiency fueled by the division of labor makes everyone better off (presuming of course that more pins are preferable to fewer for the same inputs.) Thus, he argues that all things which permit, or better yet encourage, an expanded division of labor, thereby contribute to the "skill, dexterity, and judgment with which [a nation's] labour is generally applied," and on which the prosperity of the nation primarily depends (1776, Book I, Chapter i). He extends the analysis by noting that the infrastructure of waterways, roads, and marketplaces, reserves of capital ("accumulation of stock"), secure property rights, limitations on restraints against commerce, and urbanization, all take their place as necessary supports for this most consequential division of labor. To the extent that infrastructure allows for more trade, and thus finer levels of specialization, it also promotes improvements in well-being. Despite his clear emphasis on what we might call commercialization, he does not at the same time abandon the ancient and medieval emphasis on the natural features of a polity/economy. Rather, he goes on to argue that the "soil, climate, and situation" of a country – a phrasing which Smith repeats often throughout *The Wealth of Nations* – taken together set the conditions under which these other factors contribute, either more or less abundantly, to development. A "poor soil, and a bad climate" are so thoroughly understood to inhibit development that Smith considers them comparable to what he takes as another obvious burden, the one imposed by "taxes on the necessities of life" (1776, Book IV, Chapter ii).

To return to a definition of well-being and appropriate measures for it

As noted already, before we can explain differences in development, let alone encourage further development in a future reality, we first need to clearly identify them. We must determine what it is that we think constitutes the so-called "good life," and we must devise a way to measure it, either as a whole or in its constituent parts. Discourse on this issue, too, has a remarkably ancient pedigree. We might turn first to the author of the Hebrew Wisdom text known as Kohelet (or the Book of Ecclesiastes in the English-language scriptures) dating to perhaps the fifth century BCE. In Chapter 1, verse 3, our wise man poses the truly existential question: "What does man gain by all the toil at which he toils under the sun?" Yet we the reader already know the answer as he precedes his question with his answer, exclaiming: "Vanity of vanities! All is futile! (1:2)" This is not a terribly promising beginning for thinking about well-being. Indeed, explicit considerations of pleasure, fine entertainment, good wine, building projects, gardens, parks and pools, and even treasures of silver and gold

are all deemed by the teacher to be inadequate, such that “it is an unhappy business that God has given to the sons of men to be busy with” (1:13). He concludes finally that “better is a handful of quietness than two hands full of toil and a striving after wind” (4:6). Note however, that this is not the same quiet that Thucydides understood to be conducive for achieving prosperity (i.e., the absence of armed conflict so destructive of assets and discouraging to new ventures). For him, quiet is a condition upon which outcomes depend; for Kohelet, it is the desired outcome itself. Thucydides does not advocate for peace of mind for its own sake, but rather for the social quiet that permits the very pleasures and projects rejected by Kohelet to be embarked upon.³

The struggle between these two points of view is captured again in the first century BCE in a remarkable work of political economy compiled by Huan K’uan under the name, *Discourses on Salt and Iron*. In this debate about what should be appropriate government policy in regard to taxation and the management of the economy we hear from both perspectives in sequence. The so-called “Confucian Scholar” argues that the government should “Lead the people with virtue and the people will return to honest simplicity; entice the people with gain, and they will become vicious.” His opponent “the Lord Grand Secretary” offers by way of rejoinder: “provide equable marketing to make sufficient the people’s wealth” such that each could “obtain what he desired” (Gale 1931: 6–7). Already then, we find ourselves with two radically different visions for a good life on the table: one seeks virtue and simplicity, and the other desire-fulfillment and gain. To make matters worse, they are not just different, they are mutually incompatible.

It will come as little surprise to a twenty-first-century audience that the quest for desire-fulfillment and gain has mostly won the contest, at least for the time being. While virtue and simplicity continue to have their venerable advocates, and even a scattering of committed practitioners, there is broad social consensus that some manifestation of the Lord Grand Secretary’s program is the goal we should be aiming for. But pleasure and gain seem still not to be enough on their own, not even for the eighteenth-century founders of utilitarianism who otherwise took up the mantle of hedonistic thinking with considerable sophistication.

If we jump approximately 1800 years forward to the 1780 publication of Jeremy Bentham’s “An Introduction to the Principles of Morals and Legislation” we find that seeking the most good for the most people is not sufficient on its own. Bentham very clearly adds to the mix an insistence on security of the type so well captured in the *Economist*’s favorable portrayal of Mark Rutte’s Dutch government. He argues that “when insecurity reaches a certain point, the fear of losing prevents us from enjoying what we possess already. The care of preserving condemns us to a thousand sad and painful precautions, which yet are always liable to fail of their end” (Bentham 1907 [1780], Part I, Chapter 10). It is insufficient to merely achieve; we must be able to have some robust level of confidence in the sustainability of our achievement.

³Thucydides’ general perspective was codified more fully by his slightly younger contemporary Aristippus of Cyrene as hedonism and then even more famously in the following century by Epicurus. Both argued that the only true good was happiness, and as a result gave primacy to activities and states that they believed would contribute to it.

Turning next to the nineteenth-century industrializing world observed by Friedrich Engels, we find on offer a self-contradictory view of the problem. In his 1845 classic, the *Condition of the Working Class in England*,⁴ he opens the text with the claim that the material position of the preindustrial worker had been (allegedly) sufficient, allowing for the cultivation of virtues that would have been considered desirable at that time. Specifically, he tells us that prior to the cataclysm of industrial production, “the workers vegetated throughout a passably comfortable existence, leading a righteous and peaceful life in all piety and probity; and their material position was far better than that of their successors” (Engels 2009 [1892]: 1). Lest we be fooled by this claim into thinking that workers really did have a high quality of life, however, we should pay close attention to the choice of verb: vegetated. Indeed, by the following page, we learn that preindustrial workers were also “intellectually dead.” This condition he considered so extreme that he deemed them “not [to be] human beings; they were merely toiling machines in the service of the few aristocrats who had guided history down to that time” (ibid.: 2). Surely, we cannot consider such a vegetative state to be one of well-being achievement, no matter how much piety or probity it may have facilitated or how comparatively grim the industrial conditions he goes on to describe would become. If we must add security to the list of desiderata alongside pleasure and gain, it seems we must add intellectual capacity as well.

Finally, I turn to Amartya Sen who offers a nicely combined perspective on both the question of what we should strive for and how we might go about doing so. In *Development as Freedom*, he makes an extended case for the inclusion of freedom in our understanding of well-being by stating the following:

Expansion of freedom is viewed, in this approach, both as the primary end and as the principal means of development. Development consists of the removal of various types of unfreedoms that leave people with little choice and little opportunity of exercising their reasoned agency. [Such that] the removal of substantial unfreedoms, it is argued here, is constitutive of development (1999:36).

The outcome, and the means to that outcome, have become one and the same. Freedom is what we seek – or at least it is among those things which we seek – while it is also a powerful agent for making the good life available to more people and more abundantly so.

This long history of varying conceptions of the good life – some compatible and additive, and others less so or even in direct conflict with each other – gives us a foundation on which to build the metrics we might actually employ as social scientists or policy agents in the social world. How can we operationalize the concepts we value? What should governments measure if they want to either know about or improve the well-being of their constituencies? If we take Adam Smith as one practical guide, we find a plausible suggestion that wealth is the “annual

⁴Originally written in German, an approved English version with a new Preface written by Engels himself appeared in 1892. The quotations cited here derive from a reprinting of that English edition and thus do not reflect literal translations from the 1845 German text.

produce of the land and labour of a society” or the production and exchange of “useful” things (Smith 1776: Book II, Chapter v).⁵ It is this kind of narrow reading of Smith’s understanding of wealth as production and/or income that has encouraged economists to argue that quality of life, living standards, development, and so forth are functionally synonymous with GDP. David Weil’s formulation is that “GDP is the economist’s rough and ready proxy for living standards” (Weil 2005: 5). Rebecca Diamond and Enrico Moretti bypass the notion of a proxy and just argue straight out that the standard of living is “the amount of market-based consumption that residents are able to afford” (Diamond and Moretti 2021: 1). While they do not also reference the concept of well-being specifically, a reasonable reading of their argument is that the one can stand in for the other. Going a step further, Robert Lucas equates even the broader concept of development with GDP. He writes, “By the problem of economic development I mean simply the problem of accounting for the observed pattern, across countries and across time, in levels and rates of growth of per capita income” (Lucas 1988: 3). Moreover, where economists have led, policymakers, journalists, and the public have followed. GDP updates are routinely treated as meaningful indicators of the standard of living, and more generally as indicative of how well people are doing, and often even of how satisfied they should be. Only the querulous beg to differ. Do they do so on reasonable grounds?

Some of GDP’s handicaps are well known if equally often ignored. It is hardly a radical argument to say that the sum of production is insufficient to account for a good deal in life that people obviously care about. For example, GDP is a metric hard-pressed to capture quality improvements in any meaningful way, especially when the prices of goods or services are falling at the same time that quality is getting better. Similarly, it struggles to adequately capture the gains embedded in entirely new types of goods or services, and it misses everything produced or exchanged outside of the market system, whether for ill such as illegal activities, or for good such as backyard vegetable gardens and cookies freshly baked at home. Most notoriously it understates the care economy by a country mile, a sector of life that accounts for no trivial part of our well-being in life.⁶ In a further oversight that would have bothered Kohelet a great deal, it has nothing to say about our time devoted to leisure, or to the contemplation of ideas, which would presumably have bothered Marx. Finally, it overvalues (that is to say, it values them positively) a great many “bads” that we would prefer not to have in any amount. For example, we would be happy to pay the minimum necessary to successfully fight crime or mitigate pollution, or even settle our more rancorous disputes.

International rankings of GDP per capita can also make for strange neighbors if well-being is actually our target. For example, take the 2023 rankings (adjusted for purchasing power parity) in which Qatar comes in above all but two countries of the OECD, and Brazil is almost edged out by Equatorial Guinea, as it had been just

⁵Smith’s primary concern, as his title indicates, was with wealth, although as will be shown below, he was also concerned with other aspects of what he thought allowed people to live with dignity. Adopting wealth as a stand-in for the full measure of well-being thus represents something of a truncated reading of Smith.

⁶See, in particular, the recent Presidential Address by Jane Humphries to the Economic History Association now published in the society’s journal (Humphries 2024). Not only does this oversight grossly distort our perception of the value of home production, but it also skews international comparisons between nations that are more thoroughly marketized than those which are not.

previously in 2022.⁷ As both those comparisons might suggest, the shadow of oil income looms large in the GDP calculation, regardless of whether the benefits of that income are invested wisely, distributed widely, or neither. Moreover, as the heavyweight influence of oil should remind us, GDP can be a noisy measure for many places and historical periods, subject to a good deal of volatility from one year to the next depending on circumstances: weather, armed conflict, disease environment, or even just relative price shifts, to name only the most obvious of the shocks that buffet it about. But the fundamental productive capacities of a nation are much less volatile. Indeed, one common sense understanding of being “wealthy” is precisely that you have the capacity (in reserves, physical assets, human capital, or whatnot) to weather a lean year and carry on for the next, an ability which is far from evenly distributed around the globe. All these concerns point to the narrowness of an income measure as a proxy for wealth.

Simon Kuznets, the father of national income accounting, knew this from the outset, of course. He warned the United States Congress already in a 1934 publication that “the welfare of a nation can scarcely be inferred from a measurement of national income” (1934: 7). Changes to the methods of accounting incorporated subsequently to Kuznet’s original formulation have made the mismatch between national accounts and the standard of living of individuals and households even greater. The problem is not simply one of missing or miscounted data. If we want to study a star, it is not enough for our telescope to be working accurately. It must also be pointed at the object we set out to study. The GDP telescope is not just out of focus (which on its own would make the calculation amenable to fine-tuning), but it is too often trained on the wrong part of the sky for what we want to discern. We don’t just need a more accurate telescope, we have to aim it more thoughtfully, bearing in mind the long historical discussion we have already considered about what it is that improves our lives in an uncertain world full of challenges.

What then should count as evidence for an elevated state of well-being? In 1732, Benjamin Franklin posited in his *Poor Richard’s Almanack*, “Early to bed and early to rise makes a man healthy, wealthy, and wise.” His claim presumes a desirable outcome that includes good health, riches, and a capacity for discernment. His claim is also not original. *The Book of St. Albans* made a similar claim in 1486, noting in passing its already long-established previous provenance: “As the olde englysshe prouerbe sayth in this wyse. Who soo woll ryse erly shall be holy helthy & zely” (Berners 1901 [1486]).⁸ Now, whether the causal mechanism invoked here – getting out of bed early – is a valid one or not is beside the point. What is interesting to this observer is how closely this oft-repeated representation of the good life mirrors the one employed by the United Nations in its Human Development Index (HDI). Their stated definition for HDI is that it is “a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living” (UDNP 2024). Aside from the secularizing trend from holiness in the fifteenth century, to wisdom in the

⁷The annual data produced by the IMF, the World Bank, and the CIA are all compiled annually and are readily available through Wikipedia: [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)_per_capita](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita).

⁸“Zely” in Middle English carried the meaning “of good fortune.”

eighteenth, to knowledge in the present, this combination of targets for human achievement might as well be the same thing.

Many people, even those who do not study economics, history, or even geography for that matter, carry around in their heads a rough and ready idea about the distribution of the quality of life around the world. If they were to see a map representation of UN HDI data – such as the one produced by the World Population Review in 2023,⁹ they would have a pretty good sense of where they want to live even if they did not have access to the color code or the underlying data. Indeed, even in a world with heavily enforced border controls, the dominant movement of people is from the red-tinted (poorest) regions and countries on this map to those shaded deepest green (the wealthiest). One way we could think about this map in combination with the movements of people across it is that we broadly share some notion of what it means to live well, or at least what it looks like for the average well-being of a polity to be higher rather than lower. Such a map is after all an exercise in thinking about the distribution of well-being across nations, not one between individuals or households within a nation. The two comparisons share some similar features of analysis but are conceptually quite different.

While economists don't generally cotton to the HDI, arguing that it is arbitrary and imprecise, (being a geometric mean of three different indices, each subject to different scales),¹⁰ nonetheless, if the narrowness of the GDP metric is to be overcome the UN measure of HDI is a step in the right direction. It adds to GDP a measure of the number of years of education on offer, average years of educational attainment, and average life expectancy. But is that sufficient? Amartya Sen, especially in his *Tanner Lectures on The Standard of Living*, argues vociferously for the inclusion of measures of voice, too. It is not enough, he says, to only consider “functionings” – that is, actual living conditions. We must also factor in “capabilities” – that is, the “ability to achieve.” The latter is a question of freedom, a subject he takes up even more fully in *Development as Freedom*. There he makes a strong case for the inclusion of quality of governance in any index we build to measure the standard of living.

Recent work by Leandro Prados de la Escosura does just this. In his book, *Human Development and the Path to Freedom*, he makes the case for what he calls an augmented human development index. The two key features of difference from the UN's HDI are his “non-linear transformation of [the] health and education variables and the addition of a new dimension: political and civil rights as a way of incorporating freedom of choice” (Escosura 2022: 13). He also adds an historical dimension, making historical estimates back to the last quarter of the nineteenth century with geographical coverage for an impressive 115 countries for the earliest estimates expanding to 162 for the more recent past. As already noted, many economists prefer both the simplicity and the Smithian intuition of the GDP as a stand-alone metric, and thus take issue with any kind of a composite index.¹¹ By

⁹The map can be accessed at: <https://worldpopulationreview.com/country-rankings/hdi-by-country>.

¹⁰For a relatively recent review of the economics literature, see Klugman et al. 2011.

¹¹Something of a backlash literature against the HDI has emerged recently among economists. This is not the place to engage in its many technical aspects, but two items worth reading are a review of Leandro Prados de la Escosura's book posted on the Utrecht University Economic and Social History Blog by

contrast, de la Escosura takes the index method as essential for capturing a fuller reality. Thus, much of his book is devoted to exploring the statistical properties of different indexing methods while also making the case for his chosen method of agglomeration. These details are important, but beyond the scope of my example here which is focused on what should be measured/counted, rather than the technical questions of how they should be put together *per se*.

In an effort to think more broadly about what we should target in our own historical context, I regularly ask my students what they think should go into a comprehensive measure of well-being. They offer up a long and granular list that I have summarized in Figure 2. Perhaps not surprisingly, much of their list might really be better measured at the individual level than for the polity as a collective. For example, they don't just want higher average real wages, but they hope for high job satisfaction, too. They also want good access to public parks, the freedom and opportunity to travel, and good support for mental health. Perhaps my favorite item on their list is proximity to grocery stores that sell nutritious food. They have been well-trained by the recent discourse on so-called "food deserts" and a growing campus concern about food insecurity among their fellow students, certainly both admirable preoccupations. They also list items that are quite likely to be contradictory, such as wanting a plethora of social connections, while at the same time privileging privacy. But no matter – our lives are indeed complicated! In any event, their list offers an insightful window into the hopes and aspirations of twenty-first-century college students in America, even if much of it might translate poorly into historical contexts.

A more realistic, but still dauntingly comprehensive, list has been developed by a large group of our economic history colleagues working on the OECD *How was Life?* project (OECD 2014, 2021). A team of specialists from different countries and areas of technical expertise joined up to produce an elaborate historical composite index with contributions from a wide array of measures. As can be seen in the list in Figure 3, they aim for broad comprehension while avoiding the unattainable granularity of my students' list. Where possible they make estimates dating back to 1820 although as they readily note, data quality and coverage for the nineteenth and early twentieth centuries is often low, just as it is from regions of the world that are in the lower reaches for each of their measures. Thus, data quality is biased in systematic ways presenting an issue of concern. Nonetheless, with prodigious effort they do expand from the HDI triad, adding for most regions of the world historical and contemporary estimates for real wages, human height, personal security, political institutions, environmental quality, and a measure of gender inequality. In the 2021 update, they expand their topic coverage even further to include estimates for average working hours, biodiversity development, social transfers, multidimensional measures of welfare, and multiple measures of inequality and extreme poverty. It is truly an impressive project and much to the credit of the team of

Jan Luiten van Zanden on August 8, 2022, in which van Zanden makes the case for an even fuller measure as I discuss further below. The other is a recent publication by Amendola, Gabbuti, and Vecchi (2023). For reasons that can only be stated briefly here, their critique is too narrowly focused on accounting methods to invalidate the broader point I am making about the value of including more of Sen's "functionings" than GDP can capture.

- Infant mortality/life expectancy/healthcare/mental health/ social services
- Public parks/freedom to travel/transportation/leisure/happiness
- Access to education/literacy/access to information/social mobility
- Infrastructure/good governance/'basic rights'/ stability/ security
- Reliable employment/job satisfaction
- Clean environment/water/proximity to grocery stores w. nutritious food
- Quality housing/extent of homelessness/utilities/wi-fi/privacy
- Number of social connections/family support
- High GDP per capita/GDP growth/ less inequality

Figure 2. What my students think should be included in standard of living metrics.

2014 Original Metrics:

- GDP per capita, Real Wages, Educational Attainment, Life Exp., Human Height, Personal Security, Political Institutions, Environmental Quality, and Gender Inequality.

2021 Additional Metrics:

- Working Hours
- Biodiversity Development
- Social Transfers
- Multi-dimensional measures of welfare
- Multiple measures of inequality & extreme poverty

Source: OECD, 2014 and 2021

Figure 3. Measures in the OECD *How Was Life?* project.

economic historians involved, which included five editors and many more additional authors and contributors. Ideally, if we want to understand “how life actually was” we would have information for all these categories, and more. We would also have it for all parts of the world, and with a deep enough chronology to allow us to meaningfully assess change over time. Sadly, that level of coverage is simply not possible.

Where does all this leave us? What should be included in any workable measure of the standard of living? As a matter of course, neither policymakers nor historians manage to measure, at least not in a systematic way, all, or even most of, the things that my students think factor into their quality of life. Indeed, for all practical purposes, we cannot incorporate even the more limited but still impressive list that economic historians have developed for individual countries and compiled in the

How Was Life? project. We don't have the type of data that would be necessary, nor could we even record it for every year if we wanted to because it would be so resource-intensive to collect. This suggests that as a practical matter we are in search of measures that can be assessed relatively easily if we're going to succeed in wide geographic coverage and comprehensive time series. But we don't want to favor simplicity so much that we find ourselves looking at the wrong things just because we can. As Sen has argued so memorably: "Why must we reject being vaguely right in favor of being precisely wrong?" (Sen 1987: 45).

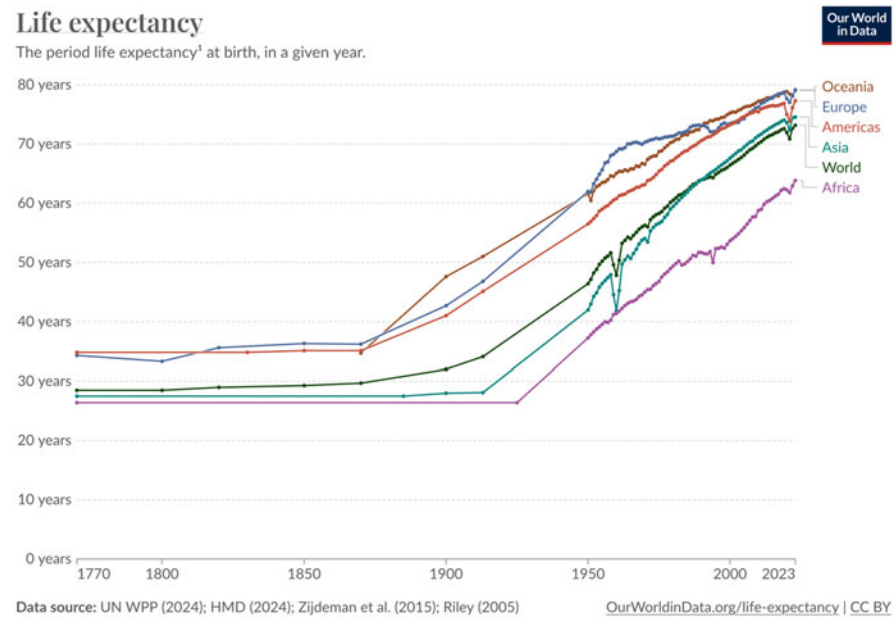
All this suggests that we should be looking for something like a Goldilocks solution, one that is not too narrow to be misleading, but not so broad as to be unmanageable. We need measures that account for the multiplicity of our lives, yet still permit straightforward analysis. They must also be historically recoverable and historically relevant. This is a tall order.

What do historians have to contribute to this debate?

As Figures 4 and 5 illustrate nicely, both life expectancy and years of education (two of the three pillars of the simplest composite measure HDI) have grown dramatically, but notably they have only done so in the relatively recent past. For most of the world the major gains have come only in the second half of the twentieth century. And even the early developers only began their move toward contemporary lifespans and high educational attainment in the late nineteenth century, well after the major processes of industrialization, technological and scientific advance, and the fall in transport costs had set in for the most advanced parts of the world. The lateness of those developments can help us to better understand Adam Smith's singular focus on the production of goods, despite what are clearly the limitations of GDP as a contemporary metric. When he was writing at the close of the eighteenth century, life expectancy at birth for his fellow countrymen (fortunate as they may have been already by then-contemporary global standards) was still under 40 years. Given that much more limited expectation of lifespan, we should not be surprised that he could not readily imagine a world in which that number would essentially double. A more immediately visible marker of progress, one that he not only had to imagine but could see emerging all around him, was for many more people to have more of the goods that made life comfortable for the duration of one's ordinary lifespan:

No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable. It is but equity, besides, that they who feed, cloathe and lodge the whole body of the people, should have such a share of the produce of their own labour as to be themselves tolerably well fed, clothed and lodged (1776, Book I, Chapter viii).

It is not surprising then that this vision for the good life involves meeting everyone's basic needs and adding to that as much as possible the comforts of respectability generated by the productive powers of the nation.



1. Period life expectancy: Period life expectancy is a metric that summarizes death rates across all age groups in one particular year. For a given year, it represents the average lifespan for a hypothetical group of people, if they experienced the same age-specific death rates throughout their whole lives as the age-specific death rates seen in that particular year. Learn more in our articles: "Life expectancy" – What does this actually mean? and Period versus cohort measures: what's the difference?

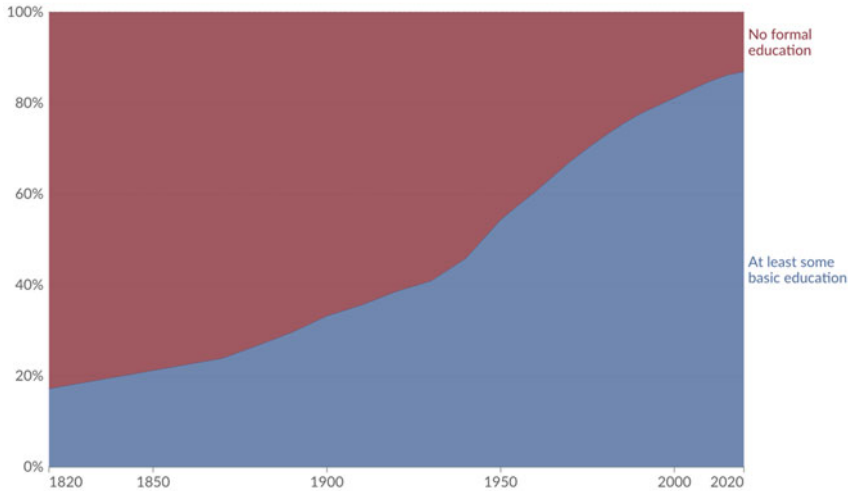
Figure 4. Changing global life expectancy.
Source: <https://ourworldindata.org/life-expectancy>.

Still, we must ask: which goods, and how many of them, are the ones necessary in order to be “tolerably well fed, clothed and lodged?” An adequate operationalization of the word “tolerably” – just as it presumably would be for another notoriously slippery word, “beauty” – lies in the eye of the beholder. E.P. Thompson, famously and more than a little sarcastically, wrote in *The Making of the English Working Class* that “the benefits of economic progress” consisted of little more than “more potatoes, a few articles of cotton clothing for his [the worker’s] family, soap and candles, some tea and sugar, and a great many articles in the Economic History Review” (1966, 318). From the vantage point of the second half of the twentieth century, such a paltry smattering of goods seemed not nearly enough.

We find a very different perspective if we turn our attention to *John Hopkins’s Notions on Political Economy*, written by Jane Marcet in 1833. She was a self-taught chemist and a popularizer of new discoveries in science as well as the ideas of Smith, Malthus, and Ricardo. Her *Conversations* for women and her “Fairy Stories” about political economy were designed to be accessible to those who were mostly excluded from much formal education. If her educational project were to be a successful one, her examples would have to resonate with laborers and their ilk. So, when her character, Honest John the farm laborer, encounters a fairy who empathizes with his frustration about the wide gulf between the trappings of the rich and the poor, she is clearly speaking to her audience. Upon being granted one wish to address his ills, John opts to have all luxuries in the world removed so that the rich can never

Share of the world's population with formal basic education

Share of people aged 15 or older who received some formal primary¹, secondary², or tertiary³ education.



Data source: World Bank (2024); van Zanden, J. et al. (2014); Wittgenstein Centre (2024)

OurWorldinData.org/global-education | CC BY

- 1. Primary education:** Primary education (International Standard Classification of Education Level 1) aims to impart fundamental literacy and numeracy skills while providing a solid foundation in key knowledge areas and personal and social development, serving as preparation for lower-secondary education with a focus on basic-level learning and minimal specialization.
- 2. Secondary education:** Secondary education (International Standard Classification of Education Level 2 and 3) completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.
- 3. Tertiary education:** Tertiary education (International Standard Classification of Education Level 5 to 8) expands upon secondary education by offering specialized learning activities in various fields. It targets advanced levels of complexity and specialization, encompassing both academic and advanced vocational or professional education.

Figure 5. Changing global levels of educational attainment.

Source: <https://ourworldindata.org/global-education>.

oppress him again by way of contrast. Despite his self-satisfaction with his decision, this is the moment in the tale at which real trouble begins. Marcet goes on, saying that “His wife however did not receive him with equal satisfaction; for, on having gone to dress herself (it being Sunday) in her best cotton gown, she beheld it changed to a homely stuff; and her China tea-pot, given her by her landlord’s wife, and on which she set no small store, though the handle was broken, was converted into crockery ware” (Marcet 1833: 7). Furthermore, as if to add insult to injury, he finds that his pipe is no longer supplied with tobacco, and in the due course of time, first his sons, then his neighbors, and finally himself, too, no longer have employment. Having learned his lesson by the end of the story, John sets out to “prove that the poor were gainers, not losers, by luxuries” (1833: 12).

Now, whether Marcet’s theory about “the rich and the poor hav[ing] but one and the same interest” is valid or not is a question beyond the scope of this essay to ponder (1833: 14). What is immediately relevant to the project at hand is to take note of the items about which John’s long-suffering wife is most remorseful to lose: her cotton gown, and her porcelain teapot, despite its broken handle. John’s pipe tobacco is understood to be a real loss as well. The kinds of commodities that fill out

Thompson's meager list turn out to be the very things that made the lives of the working poor considerably more tolerable, or so John comes to realize once he no longer has them. Whether or not we are inclined to find Marcet too sentimental, or Thompson too cynical, it seems safe to conjecture that the expectations gap between Marcet's world of the early nineteenth century and Thompson's of the mid-to-latter twentieth century is a wide one. Household items that postindustrial historians take for granted, or even think of as trifling, seem to have carried more importance when there was a less abundant world of goods overall.

When it comes to what exactly it is that contributes to a person's well-being, it seems then that we might be chasing a moving target. Historical and social context are going to matter a great deal. As with so many aspects of his deep understanding of human behavior, Smith seems to have anticipated exactly Thompson's angle of critique. For Smith argues explicitly that what is "tolerable" is always dependent upon social context:

By necessities I understand, not only the commodities which are indispensably necessary for the support of life, but *whatever the custom of the country renders it indecent for creditable people*, even of the lowest order, to be without. A linen shirt, for example, is, strictly speaking, not a necessary of life. The Greeks and Romans lived, I suppose, very comfortably, though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty, which, it is presumed, nobody can well fall into without extreme bad conduct (1776, Book V, Chapter ii, emphasis mine).

By the early nineteenth century, it seems, cotton clothing, pipes, and tea wares were among the essential accompaniments of working-class life in England, and thus not to be dismissed lightly. Not only did they contribute comfort, but they served as the public-facing markers of one's character. Whether fair or not – or even accurate or not – clothing and other accessories are read as culturally significant evidence of behavior. It is in that capacity that even when they are not strictly necessary for the preservation of life, their absence might still inhibit the sociability which is necessary for survival.

This section began by asking what historians might contribute to the larger debate about finding appropriate metrics for understanding well-being. It now seems that one very important contribution will lie in the assessment of the commodities (or services, states of being, time use, or whatever it is that happens to carry social value) whose distribution will be essential to interrogate for any given time or place, or social context. We cannot expect this list to remain static, so we will have to investigate its various items as they shift across time and location. To help make this challenge clear I offer just one example from my own work centered in the Early Modern Low Countries of how historians might search for the type of evidence necessary to track what we can usefully think of as a shifting "credibility platform."

Research I have conducted over the past two decades on the possessions left at death by affiliates of the Amsterdam Municipal Orphanage between 1740 and 1805

provides a core part of the evidentiary base for what follows. Importantly, the households affiliated with the orphanage were overwhelmingly drawn from the lower ranks of citizen laborers, such that this population falls almost exclusively below the level of the least well-off individuals who were probated by notaries and are the more typical subjects of historical investigations reliant on notarial records. To the extent that we can link the orphanage households with their appearance in other records, especially the tax register of 1742 or evidence concerning the housing and rental market in the city, we know that they were drawn primarily from the bottom three deciles of the wealth distribution of the Amsterdam citizenry. Moreover, the overwhelming majority of them lived in just one room or a cellar as indicated in the inventories themselves. With data recently compiled by Bas Spliet from the Amsterdam notarial records, it is now possible for the first time to develop a combined sample that covers the full range of the wealth spectrum of the metropolitan population (see Spliet and McCants 2024).

Table 1 reports some summary data collected from both the Notarial and orphanage probate inventories for two sample periods between 1730 and 1782. The notarial inventories are heavily concentrated into the top three socioeconomic status groups, denoted here from A, the wealthiest, to C, middling shopkeepers, craftsmen, and the like. The orphanage inventories supply essentially all the cases in the bottom two groups denoted as D and E. They also contribute just over half of the inventories in the combined group C. Happily for the integrity of the combined sample, a few of the orphanage affiliates even meet the value floor of total movables to contribute to Classes A and B, allowing the two samples to be at least minimally integrated at both ends of the social spectrum. The fact that the two populations overlap so strongly in Class C gives us particular confidence in the usefulness of the combined data for providing a meaningful view into the consumption habits of Amsterdam's citizen population as a whole. For calibration of the guilder values at stake here, the cost of a standard modest urban burial during these same decades, 28 *f.* (guilders), has been marked. This indicates that a sizable majority of the orphanage inventories contained movable assets of such a modest value that they could not even cover the cost of the decedent's burial. Yet as I have shown in much greater detail in my previously published work, even in extremely poor households we find a robust participation in the burgeoning eighteenth-century material culture of new dish wares, especially Delftware, and to a lesser extent imported porcelain, as well as the goods required for the preparation and/or consumption of new colonial groceries (McCants 2007a, 2007b, 2008).

Across the full sample of the orphanage inventories slightly more than half of them reveal at least one item associated with the consumption of tea and coffee, a participation that persists across time, even in the face of the significantly deteriorating economic conditions of the latter eighteenth century, characterized as it was by rapidly rising food prices, and more limited employment prospects. Moreover, and significantly, the inventories also reveal that of the more than 200 orphanage households that left unredeemed pawnshop tickets at the time of death, not even one of them had anything identified as porcelain out at pawn. This is especially remarkable given the relatively high individual values attributed by the orphanage bookkeeper to such items when found in the inventories themselves. Of

Table 1. Possessions and socioeconomic status in Amsterdam, 1730–1782

Class	Value floor of total movables	N	% from orphanage	Mean % of assets in movables	% owning porcelain	% owning earthenware (delftware)
A	1,224 <i>f.</i>	84	6	30.1	90.5	92.9
B	356 <i>f.</i>	94	15	54.5	81.9	83.0
C	60 <i>f.</i>	129	65	81.3	62.0	84.5
D	15 <i>f.</i>	57	98	98.3	22.8	59.6
E	0 <i>f.</i>	68	100	100	1.5	3.2

Source: Spliet and McCants 2024.

Note: For reference, a “middling” standard burial package cost 28 *f.* (guilders) in the mid-eighteenth century in Amsterdam.

the 123 households that had outstanding pawns at the time of their death, but for which none of them were items associated with tea or coffee consumption, 81 percent of those households could have done so based on the presence of such goods in their inventories. As was the case for Honest John’s wife, items made of porcelain, as well as tea and coffee wares, appear to have been too important for the maintenance of social credibility to have been lost to the pawnshop. One suspects that Adam Smith would have understood this kind of consumer behavior perfectly well. Deirdre McCloskey has talked about such attitudes as part of what allowed “ordinary people to have a go” in the Dutch Republic in the early modern period (McCloskey 2016). Sen might also identify such choices as part of the larger capacity, the freedom to choose, that he insists is both essential to our well-being, and indeed helps to bring it into reality. Somehow all these types of considerations need to factor into our understanding of well-being, too.

Conclusion

Where does this leave us then? If we briefly return to Ecclesiastes, we might consider the possibility that perhaps we simply cannot really know what it is that makes a life worth living. After all, in that text the teacher concludes, “For who knows what is good for a person in life, during the few and meaningless days they pass through like a shadow?” (Chapter 6, verse 12).

But I do think that we can do better than simply throw our hands up in the air with no hope of an answer to this endlessly important question. We may not know everything we want to, but we nonetheless know a lot. What I have in mind is nicely captured by a memorable family scene featuring my father, then at the age of 88, and my grandson at one-and-a-half. They are sitting at the kitchen table laughing, having just shared a bright red sleeve of McDonalds French fries. It is only the gift of a very long life that allows these two people to even be together, separated as they are by a considerable gap of 87 years. Second, the scene demonstrates the joy associated with the development of the human mind. Not only had they been eating the French fries, but they had first counted them so that they could be divided, and then as they

were eaten, the number available was counted backward until they were all gone. (Somewhat improbably, it was the toddler doing most of the counting.) Generally, this kind of activity goes by the name of math, which it turns out is a skill not just useful for promoting GDP growth, but in this moment provided pure fun for the toddler, and one suspects for my father, too. Education is certainly an input into development, but it also contributes importantly to well-being for its own sake.

Finally, the scene I am recounting is an example of the profound value of a shared sociability. Thompson might not have had much appreciation for the potatoes from which the fries were made, and my students would definitely object that McDonald's does not offer nutritious food for anyone. But nonetheless, those fries, in their iconic red box, are an immediately recognizable sign of a common sociability that when shared with another person makes a significant, even if very hard to measure, contribution to well-being.

To conclude then. We need metrics of well-being that are multifaceted and amenable to quantitative measurement and comparison. Perhaps something like HDI fits the bill, arbitrary as it might be. Even more preferably we would add some measure of governance quality and security to it as best we can. But we should not overlook the critical contribution of the need for credible sociability to promote human flourishing. All of the following examples are part of the evidence that we must marshal if we are to fully comprehend the pursuit of well-being: people's long, and cross-cultural resistance to sumptuary legislation; or their insistence on providing more expensive weddings or funeral rites for their kin than either economists or historians think they can afford; or their desire for political voice, even when it seems they so often speak against their own material interests. This evidence will have less precision than calculations of GDP, or even HDI-like metrics, but it is of no less importance for all that in the telling of our human story.

Acknowledgments. The author wishes to acknowledge the deep influence of Prof. Jan DeVries in turning her historical focus to a broad range of issues associated with the standard of living. More recently, scholarly collaboration with Dan Seligson has raised new questions and opened new methods, both of which have contributed considerably to this work. Errors, of course, remain my own.

References

- Amendola, Nicola, Giacomo Gabbuti, and Giovanni Vecchi** (2023) "On some problems of using the Human Development Index in economic history." *European Review of Economic History* 27 (4): 477–505.
- Aristotle** (1920) *The Politics*. Oxford: Oxford University Press.
- Bentham, Jeremy** (1907, [1780]) "An Introduction to the Principles of Morals and Legislation." <http://fs2.american.edu/dfagel/www/Philosophers/Bentham/principlesofMoralsAndLegislation.pdf> (accessed January 19, 2025).
- Bible** (n.d.) Revised Standard Version, National Council of Churches of Christ in America. Accessed online: <https://www.biblegateway.com/versions/Revised-Standard-Version-RSV-Bible/> (accessed January 19, 2025).
- Berners, Juliana** (1901 [1486]) *The Book of St. Albans: Containing Treatises on Hawking, Hunting and Cote Armour*. With an Introduction by William Blades. London: Elliot Stock.
- Diamond, Rebecca, and Enrico Moretti** (2021) "Where is Standard of Living the Highest? Local Prices and the Geography of Consumption." NBER Working Paper: <https://www.nber.org/papers/w29533>

- Economist** (2023) "Farewell, Mark Rutte." *The Economist*, July 13, 2023: 43. <https://www.economist.com/europe/2023/07/13/farewell-mark-rutte-the-tiggerish-dutch-prime-minister> (accessed November 18, 2023).
- Engels, Friedrich** (2009 [1892]) *Condition of the Working Class in England*. New York: Penguin Classics.
- Escosura, Leandro Prados de la** (2022) *Human Development and the Path to Freedom*. Cambridge: Cambridge University Press.
- Gale, Esson McDowell** (1931) *Discourses on Salt and Iron: A Debate on State Control of Commerce and Industry in Ancient China*, (Chapters I–XIX translated from the Chinese of Huan K'uan with introduction and notes.) Leiden: Brill.
- Humphries, Jane** (2024) "Careworn: the economic history of caring labor." *The Journal of Economic History*. **84** (2): 319–351. <https://doi.org/10.1017/S0022050724000147>
- Klugman, Jeni, Francisco Rodríguez, and Hyung-Jin Choi** (2011) "The HDI 2010: new controversies, old critiques." *The Journal of Economic Inequality* **9**: 249–288.
- Kuznets, Simon** (1934) *National Income, 1929–32*. Cambridge: National Bureau of Economic Research.
- Lucas, Robert** (1988) "On the mechanics of economic development." *Journal of Monetary Economics* **22** (1): 3–42.
- Marcet, Jane** (1833) "The rich and the poor: A fairy tale," in John Hopkins *Notions on Political Economy* (5–14). London: Longman, Rees, Orme, Brown, Green, and Longman.
- McCants, Anne EC** (2007a) "Exotic goods, popular consumption, and the standard of living: thinking about globalization in the early modern world." *Journal of World History*, **18** (4): 433–462.
- (2007b) "Goods at pawn: the overlapping worlds of material Possessions and family finance in early modern Amsterdam." *Social Science History*. **31** (2): 213–238.
- (2008) "Poor consumers as global consumers: the diffusion of tea and coffee drinking in the eighteenth century." *The Economic History Review*. **61**: 172–200.
- McCloskey, Deirdre N.** (2016) *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World*. Chicago: University of Chicago Press.
- Montesquieu, Baron de Charles de Secondat** (1748) *D'Esprit des lois*. Gutenberg Ebook. <https://www.gutenberg.org/ebooks/27573> (accessed January 19, 2025).
- Organisation for Economic Co-operation and Development (OECD)** (2014) *How Was Life: Global Well-being Since 1820*. Paris: OECD.
- OECD** (2021) *How Was Life? Volume II: New Perspectives on Well-being and Global Inequality since 1820*. Paris: OECD.
- Seligson, Daniel, and Anne McCants** (2020) "What Reversal?" Working paper available upon request.
- (2021) "Coevolving Institutions and the Paradox of Informal Constraints." *Journal of Institutional Economics*. **17** (3): 359–378. <https://hdl.handle.net/1721.1/135530>
- (2022) "Polygamy, the commodification of women, and underdevelopment." *Social Science History*. **46** (1): 1–34. <https://doi.org/10.1017/ssh.2021.23>
- Sen, Amartya** (1987) *Tanner Lectures on The Standard of Living*. Cambridge: Cambridge University Press.
- (1999) *Development as Freedom*. New York: Knopf.
- Smith, Adam** (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Gutenberg Ebook. <https://www.gutenberg.org/files/3300/3300-h/3300-h.htm> (accessed January 19, 2025).
- Spliet, Bas, and Anne McCants** (2024) "The cost of the consumer revolution: fashion, prices and inequality in Amsterdam (1630–1805)." Working paper available upon request.
- Thompson, E. P.** (1966) *The Making of the English Working Class*. London: Vintage.
- Thucydides** (2021) *The History of the Peloponnesian War*. Gutenberg Ebook. <https://www.gutenberg.org/files/7142/7142-h/7142-h.htm> (accessed January 19, 2025).
- United Nations Development Program** (2024) "Human Development Reports." <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI> (accessed January 19, 2025).
- Weil, David** (2005) *Economic Growth*. Hoboken, NJ: Prentice Hall.
- van Zanden, Jan Luiten** (2022) "A silly debate? Leandro Prados de la Escosura's contribution to the 'beyond GDP' debate." <https://esh.sites.uu.nl/2022/08/26/a-silly-debate-leandro-prados-de-la-escosuras-contribution-to-the-beyond-gdp-debate/> (accessed January 19, 2025).

Anne E.C. McCants is the Ann F. Friedlaender Professor of History and Director of the Concourse Program at MIT. She is the author of *Civic Charity in a Golden Age* and numerous articles on the standard of living, material culture, and historical demography in the Dutch Republic and Early Modern Europe. She is the editor of the *Journal of Interdisciplinary History*.