

On the “Insurmountable Difficulties, Obscurity, and Embarrassment” of Smith’s Fifth Chapter

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We have been under the necessity of suspending our progress in the perusal of the *Wealth of Nations*, on account of the insurmountable difficulties, obscurity, and embarrassment in which the reasonings of the fifth chapter are involved. It is amusing to recollect the history of one’s feelings on a matter of this kind: many years ago, when I first read the *Wealth of Nations*, the whole of the first book appeared to me as auspicious as it was interesting and new. Some time afterwards, while I lived in England, I attempted to make an abstract of Smith’s principal reasonings; but I was impeded by the doctrine of the real measure of value, and the distinction between nominal and real price: the discovery that I did not understand Smith, speedily led me to doubt whether Smith understood himself, and I thought I saw that the price of labour was the same sort of thing as the price of any other commodity; but the discussion was too hard for me, and I fled to something more agreeable because more easy.

—Francis Horner, journal entry, 24 May 1801,
Memoirs and Correspondence of Francis Horner, M. P.

The several different minor theories of value given by Adam Smith are not woven into a whole by him. The student of his views approaches his great work with a respect that amounts to awe, and it takes time to force himself to the conclusion that there is a part of the *Wealth of Nations* which, though profoundly suggestive, is not entirely consistent. The attempt, instinctively made by the commentator, to find a hidden

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consistency behind the various incompatible utterances, to discover a hypothesis upon which the contradictions may be declared apparent only, is, according to the belief of the writer, fore-doomed to complete failure.

—Albert C. Whitaker,

History and Criticism of the Labour Theory of Value

[Smith's fifth chapter] is arguably (and despite strong competition, notably from Ricardo) the most convoluted chapter ever to emerge from the pen of a great economist.

—D. P. O'Brien, *The Classical Economists*

What a melancholy irony is contained in the above complaints! The author who extolled the “beauty of a systematical arrangement of different observations connected by a few common principles” (V.i.f.25) is described by successive generations as having produced at a key point of his work a “most convoluted chapter,” composed only of “various incompatible utterances.”¹ To one who urged his students to recall, in their own “didactical writing,” that “it gives us a pleasure to see the phaenomena which we reckoned the most unaccountable all deduced from some principle (commonly a wellknown one) and all united in one chain” (Smith 1983, ii.134), reviews such as these certainly would have been painful.

“Incompatible Utterances”?

The source of these complaints was the principle, stated in the opening paragraphs of that famous chapter, that “the value of any commodity . . . to the person who possesses it . . . is equal to the quantity of labour which it enables him to purchase or command” (I.v.1). It is evident that Smith's explication of this principle gave no “pleasure” to the young Horner or to the generations of readers who followed him, judging from the chaotic state of the commentaries produced over the ensuing two centuries. One finds in those commentaries a bewildering array

1. Citations to Smith's works follow the form adopted by the Glasgow edition, indicating all relevant gradations—book, chapter, section, and paragraph—in the hope that readers familiar with the work will find helpful the identification of the larger context. In the *Lectures* (hereafter cited as *LJ* (A) to designate the report of the 1762–63 session and *LJ* (B) for that dated 1766), the page number of the original substitutes for the paragraph number. Where the individual work is not identified, the reference is to *The Wealth of Nations*.

of interpretive traditions, the earliest originating with David Ricardo, Horner's more famous contemporary, who charged that Smith had confused "the quantity of labour bestowed on the production of any object" with the quite distinct notion of "the quantity [of labor] which it can command in the market: as if these were two equivalent expressions" ([1817] 1951, 14). To be sure, Ricardo's criticism lost its force a generation later when John Stuart Mill reminded his readers that Smith's notion is to be understood as simply "a measure of value." It is, indeed, nothing more than a choice to employ the wage as deflator, expressing value magnitudes in labor units. To "confound" such a measure with Ricardo's more famous concept of the labor *embodied* in an object, understood as the source which "*regulates* the general exchange value of the thing, . . . determining what that value shall be," is "to overlook the distinction between the thermometer and the fire" (Mill [1848] 1976, 568). In spite of Mill's effective metaphor, the charge of confusion lodged by Ricardo against Smith's classic work continued down to the sesquicentennial of its publication, when Douglas (1928, 88) told his audience that both the labor-embodied and the labor-commanded concepts are to be found in Smith as "two explanations of value [which] are very different in nature, yet they rub elbows with each other on almost the same pages." Indeed, echoes of this claim can still be found in those modern textbooks that continue to characterize Smith's treatment of labor command as one of two or three "theories of relative prices," all permitted to reside "side by side" in his work (see, e.g., Spiegel 1983, 248; Landreth and Colander 1994, 84).² However, Smith clearly understood the difference between a measure and a "regulator" of value. Only in that special case of the "early and rude state of society" does the labor-commanded concept correspond to labor embodied, since only in that state is labor the sole input. Although this special case has been, as Kaushil noted, "the source of all confusion on the point," it is now widely agreed that this is "a confusion for which Smith is simply not to blame at all" (1973, 63–64; see, e.g., the

2. A peculiar variation on this theme has recently arisen. In an otherwise highly suggestive analysis of the uses to which Smith put his labor-commanded measure, O'Donnell claims not that Smith confused his measure with the labor-embodied concept, but rather that he intended his measure to convey a fixed "proportionality between the labour commanded and labour embodied measure of value," not only in the "early and rude state" but throughout his analysis (1990, chap. 5). Khalil (1991), too, has advanced a similar argument. For a more complete evaluation of this alternative reading, see Hueckel 2000.

similarity in interpretations offered on this point by Meek 1956, 71 and Blaug 1997, 48–52, two authors whose own evaluations of the labor-embodied approach are widely divergent).

If the interpretative tradition begun by Ricardo has now been largely removed from view by an approaching consensus on the side of Mill's reading of labor command as a measure rather than a cause of value, there remains considerable uncertainty as to the precise nature of that measure and the use to which it was put. Was it indeed, as the common view would have it, nothing more than a rudimentary price index intended as a deflator to adjust for "purely monetary changes" (Schumpeter 1954, 188; see also Hollander 1973, 127–28)? Or is it possible that such a reading must be discarded as the product of "misguided attempts to generalise from a few unrepresentative statements by Smith" and replaced by a more subtle rendering of the labor-commanded concept as a measure of "changes in the relative value of commodities brought about by changes in the methods of production" (O'Donnell 1990, 81, 62)? Was Smith, in other words, in search of an "invariable standard of value" reminiscent of that derived by Ricardo? Or is there more yet to the concept? Are we to follow the suggestions of Myint (1948, 20–21), Meek (1956, 65), and others (e.g., O'Donnell 1990, 72; Sylos-Labini 1976, 212–13) and take Smith's choice of labor as *numéraire* as signifying an attempt to construct an objective index of potential productive capacity?³ The passage of nearly two centuries has done little to advance the modern commentaries beyond that state of confusion that drove Horner to flee "to something more agreeable because more easy." What is needed, if our own students are not to follow in the same despairing footsteps, is, of course, a "system," that "one great connecting principle" by which these disparate readings can be "all united in one chain." Contrary to Whitaker's lament, such a connecting chain does exist; but we must look beyond chapter 5 to find it, as Smith intimates when he tells us in that chapter that "in such a work as this," he "shall hereafter have occasion to make several" applications of his measure (I.v.22). When we follow up this hint we find his "con-

3. One further interpretive theme deserves mention. As Hollander pointed out (1973, 127), Smith's "particular choice of numéraire [imparts] a normative significance" to each of the applications cited here. This normative overlay creates a further problem of interpretation, since, as Blaug has observed, Smith argues as if his "labour-commanded standard provides a *positive* index of welfare" when, to modern eyes at least, a "negative index makes much better sense" (1997, 50–51; see also 1959). For a proposed solution to this problem, see Hueckel 1998.

necting principle" to be indeed a "wellknown one"—namely, Smith's attack on the "mean and malignant expedients of the mercantile system" (IV.vii.c.56). Before we can forge this connecting chain, however, we must attend to the alteration that Smith made to his measuring unit to better suit it to his purpose.

The Corn-Commanded Proxy

At the same point that he promises to "hereafter . . . make several" applications of his proposed measure, Smith tells us that data constraints will make it necessary in those applications to substitute a proxy unit. Because "the current prices of labour at distant times and places can scarce ever be known with any degree of exactness," whereas "those of corn, though they have in few places been regularly recorded, are in general better known and have been more frequently taken notice of by historians and other writers," we must employ the corn price rather than the wage as deflator, expressing the result in corn rather than labor units commanded. Nevertheless, there can be no mistaking Smith's meaning: labor commanded remains the preferred unit; corn is no more than a "second-best choice" (Hollander 1973, 129n. 46)—second best, though still "the nearest approximation which can commonly be had." Corn is suited to that role because its status as "the subsistence of the labourer" yields a roughly constant conversion ratio between the proxy and the underlying labor-commanded concept: "Equal quantities of corn . . . will, at distant times, be more nearly of the same real value, or enable the possessor to purchase or command more nearly the same quantity of the labour of other people." But we are not to miss the caveat: labor's exchange rate with corn is not constant but only "more nearly" so than that with "almost any other commodity," and it is so only at "distant times," and even then "corn will not do it exactly" (I.v.15).

The limitation of the corn proxy to "distant times" is unsurprising: the corn-commanded unit cannot be substituted for the labor-commanded measure in short-run comparisons because the money wage obviously "does not fluctuate from year to year with the money price of corn, but seems to be every where accommodated, not to the temporary or occasional, but to the average or ordinary price of that necessary of life." This shortcoming poses no difficulty for the analysis of short-run phenomena, however, since, following his authorities (cf. Harris [1757–

58/1856] 1933, 395–96 and Pufendorf [1688] 1934, 697–98), Smith observed that the “durableness of metals” permitted the stock of precious metal to cumulate over so long a period, “perhaps . . . two or three thousand years,” that its magnitude is “very little affected” by increments gained over shorter periods, even those of a “half century or century together.” Consequently, the purchasing power of silver, although varying “greatly from century to century,” remains “very nearly the same” from year to year. Hence, short-run value measurements can be expressed simply in the nominal price of the commodity, since “from year to year . . . silver is a better measure than corn, because equal quantities of it will more nearly command the same quantity of labour” (I.xi.g.37, v.16–17; see viii.52–56 for the source of this short-run stability in the money wage).

Even when we limit the application of the “corn-commanded” proxy to long-run comparisons, we cannot, however, be assured of a fixed corn-labor conversion rate, because economic growth both increases the magnitude of the laborer’s real compensation (I.v.15; see also viii.21–27) and reduces the role played by corn in that compensation. Hence, because “the wealth and revenue of the country have been continually advancing . . . since the time of Henry VIII, . . . the wages of labour have been continually increasing during the same period” (I.ix.6). One consequence of those two centuries of growth was the “many other things from which the industrious poor derive an agreeable and wholesome variety of food”; and several of these, chiefly vegetables, fruits, and “the coarser manufactures of both linen and woollen cloth” have “become a good deal cheaper,” producing a further rise in the “real recompence of labour . . . during the course of the present century” (I.viii.35).⁴ Thus the substitution of the corn-commanded calculus for the preferred labor-commanded expression is complicated by the admitted instability of the conversion ratio between the two measures—a condition requiring particular care in

4. As we shall see below, Smith’s vision of the process of economic growth also involves a long-run rise in the relative price of meat. But this, apparently, does not further complicate the translation between the corn- and labor-commanded measures. At any rate, “it may indeed be doubted whether butchers meat is any where a necessary of life,” though “the most invigorating diet” does apparently require vegetables and dairy products (V.ii.k.15). Certainly, “In France, and even in Scotland, where labour is somewhat better rewarded . . . the labouring poor seldom eat butcher’s-meat.” Hence, in those countries at least, even in his own time, “the money price of labour . . . depends much more upon the average money price of corn . . . than upon that of butcher’s-meat, or of any other part of the rude produce of land” (I.xi.e.29).

interpreting the result, as when, in estimating the change in the labor-commanded value of a tod of wool between his own time and that of Edward III, Smith states his result with the qualification, "if the real recompence of labour had been the same in both periods" (I.xi.m.8). It is this modified, and qualified, form of his measure that Smith "hereafter" employs in his attack on the errors of the "mercantile system."

Mercantilism and the Problem of the Price Relative

Because that system "represents national wealth as consisting in the abundance, and national poverty in the scarcity of gold and silver" (I.xi.n.1), it had given rise to the "popular notion" that inflation is an inevitable consequence (and therefore a reliable indicator) of growing national wealth: "As the quantity of silver naturally increases in every country with the increase of wealth, so its value diminishes as its quantity increases." It was that "popular notion" that was to be attacked as "altogether groundless" (I.xi.e.30; see also IV.i.1–2). However, in marshaling his attack, Smith was confronted with the very problem that had troubled his own teachers and that was to continue to bedevil his classical heirs—namely, the difficulty "of locating the source of variations in the ratios of exchange between goods" (Blaug 1997, 95). Two generations after Smith, John Stuart Mill still found the problem worthy of comment: "A coat may exchange for less bread this year than last, if the harvest has been bad, but for more glass or iron, if a tax has been taken off those commodities, or an improvement made in their manufacture. Has the value of the coat, under these circumstances, fallen or risen? It is impossible to say." However, we can "say" when "the cause in which the disturbance of exchange values originated was something directly affecting the coat itself, and not the bread or the glass" ([1848] 1976, 438). The "popular notion" that Smith opposed confounded these sources of variation in price ratios: changes in the purchasing power of silver over other commodities could arise either from nominal shocks (those "directly affecting the [silver] itself") or from real changes (those "directly affecting" the other commodities). Smith required a means of isolating the one from the other.

The solution to his problem rests on the peculiar characteristics ascribed to the market for corn. Consequently, the "hereafter" promised in chapter 5 arrives in chapter 11, "Of the Rent of Land," and more par-

ticularly in the long “Digression concerning the Variations in the Value of Silver” contained in that chapter. As others have observed (O’Donnell 1990, 76–80; Brewer 1995; Kleer 1996, 338), these pages are no digression at all but rather contain the empirical support for Smith’s assault on the mercantilist claims.

A Growth Index with Fixed Money Stock

The evidence of the “Digression” is organized into three periods, the first running from the mid-fourteenth century to “about 1570”; the second being the “period of about seventy years” to around 1640, when the “discovery of the abundant mines of America” made itself felt on the world’s price level; and the third carrying the story down to Smith’s own time. Only in the second of these does the ratio nature of price present a problem, for only in this period were the worldwide stocks of both the monetary metals and corn rising together. By 1640 even “the most fertile [mines] in America had time sufficient to produce their full effect” (I.xi.g.22); prior to 1570, it was “natural to suppose . . . that the greater part of the mines which then supplied the European market with silver might be a good deal exhausted” (I.xi.e.14).

Where a fixed stock of metal permits him to avoid the complication of the price ratio, Smith’s attack exposes to ridicule the inconsistency of the popular view with the fundamental and well-known principles governing value. The fatal flaw in their argument, he tells his opponents, is its failure to properly understand the effect of economic growth on the demand for the monetary metals. In particular, the argument fails to recognize what Say would later make famous—that increasing “production increases not only the supply of goods in the markets but normally also the demand for them” (Schumpeter 1954, 616). To be sure, Smith gave that principle a characteristic twist with his famous pronouncement that the demand for “food is limited in every man by the narrow capacity of the human stomach [while] . . . the desire of the conveniencies and ornaments of building, dress, equipage, and household furniture, seems to have no limit or certain boundary.” Consequently, “those . . . who have the command of more food than they themselves can consume, are always willing to exchange the surplus, or, what is the same thing, the price

of it, for gratifications of this other kind" (I.xi.c.7; see also c.36).⁵ Hence, with economic growth the demand for all other goods (including the money commodity) necessarily rises relative to that for food; and in the absence of the discovery of new mines, this rising demand will be associated with a declining, not a rising, silver price of food:

The increasing abundance of food, in consequence of increasing improvement and cultivation, must necessarily increase the demand

5. When it is necessary to disaggregate the broader class of "food" commodities, the argument is typically stated in terms of the quantity of *corn* available to exchange for the other food commodity under consideration, usually "butcher's-meat" (as at I.xi.i.3 and I.2), but occasionally rice (I.xi.b.37, g.28) and fish (I.xi.m.15).

The suggestion that the income elasticity of demand for food was zero or nearly so was not unique to Smith. As the Glasgow editors of *The Wealth of Nations* point out (181n. 9), his fellow countryman, Sir James Steuart, held a similar view, though he employed it for a quite different purpose (1767, 144).

The editors also point to an earlier application of the principle in Smith's *Lectures on Jurisprudence*, but there it buttresses a conclusion directly opposed to that drawn in *The Wealth of Nations*. In the *Lectures*, Smith was at pains to assure his hearers that although it may seem that the rich man consumes a larger share of the nation's produce than does the poor man, this is a matter of appearance only. Not only is it true that the rich man "has not a larger stomach than any ordinary plowman," but even in his clothing, while certainly of a "greater variety" than his workman, he nevertheless "does not consume so much as an ordinary plowman." This equality of consumption becomes apparent when we consider their respective lifetime consumption patterns: the rich man "never exposes [his clothes] to be spoiled by the weather or rubbed and torn by hard labour;" and after he is finished with them, they are still fit for use by others, "whereas the plowman who has his cloaths continually exposed to all sorts of destruction wears considerably more" (*LJ* (A), iii.135–36). This appeal in the *Lectures* to consumption levels determined more by our common human condition than by income differences points forward to the famous passage in *The Theory of Moral Sentiments*, where we read that "the rich only select from the heap what is most precious and agreeable. They consume little more than the poor" (IV.i.10). In *The Wealth of Nations*, however, where the argument requires that nonfood items exhibit the greater income elasticity of demand, we are told that when we "compare the spacious palace and great wardrobe of the one, with the hovel and the few rags of the other, [we] will be sensible that the difference between their cloathing, lodging and household furniture, is almost as great in quantity as it is in quality" (I.xi.c.7). Apparently, the differentially lower "wear and tear" imposed on their possessions by the rich is no longer considered sufficient to bring their consumption into equality with that of the poor. Nevertheless, when the argument requires it, Smith does not scruple to appeal to that very differential. In book 2, chapter 3, which emphasizes the quality of durability in the definition of capital, we are told that the "man of fortune" whose "expence had been chiefly in durable commodities" follows a "mode of expence [that] is more favourable . . . to the opulence of an individual . . . [as it is] likewise to that of a nation" because "the houses, the furniture, the cloathing of the rich, in a little time, become useful to the inferior and middling ranks of people" who purchase those goods "when their superiors grow weary of them" (paras. 38–39).

for every part of the produce of land which is not food, and which can be applied either to use or to ornament. In the whole progress of improvement, it might therefore be expected, there should be only one variation in the comparative values of those two different sorts of produce. . . . As art and industry advance, the materials of cloathing and lodging, the useful fossils and minerals of the earth, the precious metals and the precious stones should gradually come to be more and more in demand, should gradually exchange for a greater and a greater quantity of food, or in other words, should gradually become dearer and dearer. (I.xi.d.1; see also i.3)⁶

It is true that a nation's stock of precious metals will naturally rise with economic growth. With greater output, "a greater quantity of coin becomes necessary in order to circulate a greater quantity of commodities; and the people, as they can afford it, as they have more commodities to give for it, will naturally purchase a greater and a greater quantity of plate." But to suggest that the gold price of food will rise as a result of this inflow of metal is tantamount to the ridiculous claim that luxury goods decline in relative price as wealth rises: "As statuaries and painters are not likely to be worse rewarded in times of wealth and prosperity, than in times of poverty and depression, so gold and silver are not likely to be worse paid for" (I.xi.e.33; see also m.18–19 and II.iii.24). Contrary to the opinion "of the greater part of those who have written upon the prices of commodities in antient times," low food prices signify wealth, not poverty (I.xi.e.15; cf. Hume [1752] 1970, 43). Metal will "naturally exchange for a greater quantity of subsistence in a rich than in a poor country, in a country which abounds with subsistence, than in one which is but indifferently supplied with it." This, and the high cost of transporting metals over great distances, explains why China, a

6. It has been said that Thomas Malthus is "the economist amongst Smith's immediate successors to whom the importance of the problem of making valid comparisons through time was most apparent, [making] his remarks therefore . . . a valuable commentary upon Adam Smith's intentions [regarding the labor-commanded unit]" (Robertson and Taylor 1957, 196n. 3). Although Malthus's commentary can be very helpful, it nevertheless must be treated with great care, for his interpretation was, naturally, heavily influenced by the complications created by the "Ricardo effect," a problem of which Smith's rendition is entirely innocent. Thus, although Smith saw the effect of growth to be a gradual *rise* in the value of silver, Malthus concluded that, because silver production employs a higher capital-labor ratio than that found in corn, the effect of growth in reducing the rate of profit must cause "metallic money . . . [to] regularly *fall* in value in the progress of cultivation and population" ([1823] 1986, 201, emphasis added; see also 211–12).

“much richer country than any part of Europe,” exhibits lower food prices than those found in Europe (I.xi.e.34; see also g.28, i.2, n.1).

Here then is the context we are to bring to the evidence reported in the “Digression,” where we learn that “from about the middle of the fourteenth to the beginning of the sixteenth century, what was reckoned the . . . ordinary or average price of wheat, seems to have sunk gradually [by] about one-half” and to have remained at that lower level “till about 1570” (I.xi.e.8). The “greater part of those who have written upon the prices of commodities in antient times” (including the authority from whom Smith draws his own data—Fleetwood [1745] 1969) have been led by the “popular notion” to misread their evidence: the acknowledged advance of European civilization produced, up to the discovery of the American mines, a falling, not a rising, silver price of corn.⁷

Rent and the Growth Index with a Rising Money Stock

But what are we to make of the subsequent period? How are we to confront the claim of the “popular notion” in those periods when the world’s stock of precious metals has “by some accident . . . increase[d] for many years together in a greater proportion than the demand,” causing those metals “gradually [to] become cheaper and cheaper; or, in other words, the average money price of corn . . . , in spite of all improvements gradually [to] become dearer and dearer” (I.xi.d.5)? With the quantities of both metal and corn rising together, their exchange rate obviously cannot serve as an indicator of economic growth. An alternative index is required, one that permits us to isolate the “source of variations” in exchange ratios. Like any good professor, Smith anticipates his students’ objection to so irksome a task: it is the erosion of money’s purchasing power over commodities that matters in times of inflation; “to ascertain whether this change be owing to a rise in the value of those goods, or to a fall in the value of silver, is only to establish a vain and useless distinction, which can be of no sort of service to the man who has only a certain quantity of silver to go to market with, or a certain fixed revenue in money” (I.xi.n.8). But to

7. Ironically, Smith may have painted for his Glasgow students some dozen years earlier a picture of price trends identical to that which he sought to refute in *The Wealth of Nations*, though the explanation of those trends given upon that earlier occasion in no way agreed with that “popular notion” he was to attack later. See *LJ* (A), vi.134, but cf. *LJ* (B), 254.

establish such a distinction is not to labor in vain; indeed, “it may be of some use to the publick by affording an easy proof of the prosperous condition of the country” (I.xi.n.9). That “proof” is to be seen in the movement of the meat-wheat exchange ratio, for, contrary to the “popular notion,”

as the low value of gold and silver . . . is no proof of the wealth and flourishing state of the country where it takes place; so neither is their high value, or the low money price either of goods in general, or of corn in particular, any proof of its poverty and barbarism. But . . . *the low money price of some particular sorts of goods, such as cattle, poultry, game of all kinds, &c. in proportion to that of corn, is a most decisive one.* . . . From the high or low money price either of goods in general, or of corn in particular, we can infer only that the mines which at that time happened to supply the commercial world with gold and silver, were fertile or barren, not that the country was rich or poor. But from the *high or low money-price of some sorts of goods in proportion to that of others*, we can infer with a degree of probability that approaches almost to certainty, that it was rich or poor, that the greater part of its lands were improved or unimproved, and that it was either in a more or less barbarous state, or in a more or less civilized one. (I.xi.n.2–3, emphasis added)

Just as it is the peculiar demand characteristics associated with wheat that recommend the use of its money price as an index of growth when the money stock is constant, so is it another peculiar characteristic of this commodity that recommends its use in this alternative index. In this case, that special characteristic arises from Smith’s theory of rent, a theory that, to later eyes accustomed to a Ricardian framework, appeared “partly just and partly erroneous” (McCulloch 1828, lxxv).⁸ The “erroneous” part was Smith’s claim that “human food seems to be the only produce of land which always and necessarily affords some rent to the landlord” (I.xi.c.1; also b.2). Much to McCulloch’s distress, there is in Smith’s system no “zero-rent margin” in the production of food. This is not to say that Smith was unaware of such a concept. On the contrary, it is clearly evident in his determination of the rent of mines. That, we are told, “is in proportion, not to [the work’s]

8. See Brewer 1995 for an excellent treatment of Smith’s theory of rent and its role in his broader analysis of economic development.

absolute, but to what may be called its relative fertility, or to its superiority over other mines of the same kind" (I.xi.c.33). Hence, at the margin, "some works . . . can afford no rent" because the product price "is barely sufficient to replace, together with its ordinary profits, the stock which must be employed in bringing [it] to market" (I.xi.c.18–19; see also c.23, 32).

It is quite different, however, on "estates above ground." Their rent "is in proportion to their absolute, and not to their relative fertility" (I.xi.c.35). Because "food is always, more or less, in demand," the land that produces food always yields a positive rent (I.xi.b.1–2). Furthermore, because the land producing "the common vegetable food of the people" yields "a much greater quantity of food for man than the best pasture of equal extent" (I.xi.b.6–10, 14), that land nearly always produces the highest rent. Because wheat is, in Europe, that crop "which serves immediately for human food" (I.xi.b.35), it is, with few exceptions, "the rent of good corn land . . . that . . . regulates the rent of the greater part of other cultivated land" (I.xi.l.12; see also c.7–8).⁹

Because the rent of corn land is the standard against which all other uses are measured, any land newly brought under the plow is devoted first to the production of corn. Cultivated land can be turned to animal products only "when the price of cattle . . . rises so high that it is as profitable to cultivate land in order to raise food for them, as in order to raise food for man" (I.xi.l.2). The process of economic development, then, involves a progressive expansion of the area of cultivation. At the beginning of the process, in countries "almost waste, or but thinly inhabited," there is a preponderance of virgin land on which "cattle, poultry, game of all kinds . . . are the spontaneous productions of nature" available "in such profuse abundance, that they are of little or no value" (I.xi.e.27 and l.1; see also xi.b.7 and xi.l.4). As society advances, however, the "extension of improvement and cultivation . . . necessarily raises more or less, in proportion to the price of corn, that of every sort of animal food" (I.xi.n.10). This inevitable rise in the meat-wheat price ratio reflects growth-induced changes to both the supply of and the demand for meat:

9. The exceptions occur either when the lands being compared are incapable of allocation between alternative products (as in the case of rice land, "a bog at all seasons" [I.xi.b.38]), or when demand forces disturb the "natural proportion" (as at I.vii.24; xi.b.11–13, 29–35).

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The extension of tillage, by diminishing the quantity of wild pasture, diminishes the quantity of butcher's-meat which the country naturally produces without labour or cultivation, and by increasing the number of those who have either corn, or, what comes to the same thing, the price of corn, to give in exchange for it, increases the demand. The price of butcher's meat, therefore, and consequently of cattle, must gradually rise till it gets so high that it becomes as profitable to employ the most fertile and best cultivated lands in raising food for them as in raising corn. (I.xi.l.2; see also b.7, d.1, i.3)

By this reasoning, then, a rising wheat price of meat, commonly expressed not in the corn proxy but in the underlying labor-commanded unit, serves Smith as an alternative index of economic growth. In the primitive state, as animal products "can be acquired with a very small quantity of labour, so they will purchase or command but a very small quantity" (I.xi.e.25); but as the nation advances, "their real value . . . the real quantity of labour which they will purchase or command, gradually rises, till at last it gets so high as to render them as profitable a produce as any thing else which human industry can raise upon the most fertile and best cultivated land" (I.xi.l.1).

Just as wheat possesses certain characteristics that peculiarly fit it to serve as an element in this growth index, so also are meat products specially suited to that purpose. All other sorts of "rude produce" exhibit relative price trends whose "connection with the state of improvement is uncertain" (I.xi.m.16). The "first sort" (certain luxury goods said to be available only in fixed supply: "rare and singular birds and fishes, many different sorts of game," and the like) will certainly experience relative price increases as their demand rises in response to growth in "wealth and the luxury that accompanies it," but the extent of those price increases will depend entirely on the vagaries of that demand and thus cannot serve as a reliable indicator of growth. Hence, although the prices paid by the Romans for rare birds seem to the modern observer so high as to "surprise" him by their "extravagance," if such creatures were again to become "so fashionable," their prices would "rise to any degree of extravagance . . . not to be limited by any certain boundary" (I.xi.k).

The "third sort" of "rude produce" comprises such things as precious metals, fish, stone, timber, and any commodity whose relative price trend "depends more . . . upon the local situation of the country, than

upon the state of its wealth and industry” (I.xi.c.5, m.16). The argument concerning wool and hides is particularly instructive. Although they are “a kind of appendages to” butcher’s-meat, they nevertheless trace out a quite distinct price trend because “the extent of their respective markets is commonly extremely different.” Because of the problem of spoilage, the market for butcher’s-meat “is almost every-where confined to the country which produces it.” On the other hand, “the market for the wool and raw hides even of a barbarous country often extend[s] to the whole commercial world.” Consequently, meat prices, being determined entirely within a single country, will necessarily rise with the increasing demand associated with that nation’s growth. The prices of wool and hides, however, being determined in international markets, will be little affected by the growth of a single nation and thus cannot be employed as an index of that growth. And, of course, the prices of goods traded in international markets are further corrupted by the “violence and artifice” of government efforts to interfere with that trade (I.xi.m.1–8).

Only the “useful plants and animals” provided by Nature in “profuse abundance” on the wastelands of “barbarous times”—that is, goods of the “second sort”—produce a relative price trend that is predictably associated with economic advance. Of course, the growth-induced rise in the relative prices of these goods cannot continue without limit. When their prices have risen to the point where the rent earned in their production is equal to that earned from corn, they “cannot well go higher,” for “if [they] did, more land and more industry would soon be employed to increase their quantity” (I.xi.l.1–2; see also b.7–9, l.8 and 11, and c.16, where the principle is applied to wood).¹⁰ Meat is the first of these goods whose price reaches this maximum, but it does so only “late in the progress of improvement . . . ; and till it has got to this height, if the country is advancing at all, [its] price must be continually rising” (I.xi.l.2; see also l.5). Hence, up to that point at least, increases

10. Here, too, Malthus’s commentary must be handled gingerly. At one point, he comments favorably on Smith’s use of the meat-wheat price ratio, observing that the latter “shows, in the most satisfactory manner, that, in the progress of cultivation and improvement, there is a class of commodities, such as cattle, . . . etc., which, on account of their becoming comparatively more scarce and difficult of attainment, necessarily rise in value” ([1827] 1986, 62). However, some four years earlier, in his essay *The Measure of Value*, Malthus cites Smith’s observation (I.xi.b.9) that the time involved in meat production is longer than that in wheat production and concludes that the growth-induced decline in the rate of profit must necessarily *reduce* meat’s price relative to that of wheat ([1823] 1986, 185).

in the wheat price of meat (and of wood) are a reliable indicator of economic growth.

The greater merit of a rise in that price, however, is not that it is only an indicator of economic growth, but that it is also a *cause* of further improvement through its power to stimulate technological advance. In a homily that would have gratified his former employer (whose grandfather was so active in his devotion to agricultural progress as to earn the epithet “Turnip Townshend”—see Ernle [1912] 1961, 173–75), Smith insists that “the quantity of well-cultivated land must be in proportion to the quantity of manure” available to the farm; and this latter “must be in proportion to the stock of cattle which are maintained upon it.” But unless “the price of cattle be sufficient to pay both the rent and profit of cultivated land,” the farmer will produce fodder for no more cattle than are necessary to work the farm. Hence, only with increases in meat’s relative price is the farmer able to increase the share of livestock in the output mix, thereby increasing the share of his land that can be “kept constantly in good condition and fit for tillage,” as the experience of Scotland herself demonstrates (I.xi.l.3, b.8). As these improved practices spread throughout the region, the price of meat will decline somewhat from its previous heights, as was the case “in the London market . . . [since] the beginning of the last century” (I.xi.b.15, l.8). Finally, these new practices and crops are the cause of that increasing variety in the laborer’s market basket that accompanies growth. That greater variety, in turn, more than compensates for any harmful effect the higher meat prices might have on laborers’ budgets, for just as agricultural improvement “necessarily raises” the relative prices of animal products, “so it as necessarily lowers that of . . . every sort of vegetable food . . . because, by increasing the fertility of the land, it increases its abundance.” Hence, although further increases in the prices of certain animal products were anticipated (I.xi.l.6–11), the poor had no cause to fear: “When the real price of butcher’s-meat has once got to its height . . . , any rise which can afterwards happen in that of any other sort of animal food, cannot much affect the circumstances of the inferior ranks of people. The circumstances of the poor through a great part of England cannot surely be so much distressed by any rise in the price of poultry, fish, wildfowl, or venison, as they must be relieved by the fall in that of potatoes” (I.xi.n.10).

Wheat as an “Invariable Standard”

But ingenious though it may be, by itself this alternative growth index does nothing to resolve the ambiguity of the price relative. In the absence of additional information, the “source” of variations in the wheat price of meat is as uncertain as that of variations in the silver price of wheat. Economic advance, as Smith envisions the process, involves a long-run rise in the resource bundle devoted to the production of animal products. It is that resource cost that the labor-commanded unit is intended to measure in this context: “During a long period in the progress of improvement, the quantity of [animal products] is continually diminishing, while at the same time the demand for them is continually increasing. Their *real value*, therefore, *the real quantity of labour which they will purchase or command*, gradually rises, till at last it gets so high as to render them as profitable a produce as any thing else which human industry can raise upon the most fertile and best cultivated land” (I.xi.l.1, emphasis added). Hence, rising prices for animal products can be taken to indicate economic growth only when they are “owing to a rise in the real value of the land which produces them, to its increased fertility; or, in consequence of more extended improvement and good cultivation, to its having been rendered fit for producing corn” (I.xi.n.9), only, that is, when they originate in “something directly affecting” meat production itself and not the precious metals or corn alone.

Smith himself acknowledged that “the most judicious writers” affirmed the “popular notion” because they “inferred the great value of silver in those very antient times . . . not . . . so much from the low price of corn, as from that of some other parts of the rude produce of land” —namely, “cattle, poultry, game of all kinds, &c.” But, although there is no disputing that “in those times of poverty and barbarism [animal products] were much cheaper than corn,” this “was not,” he insisted, “because silver would in such times purchase or represent a greater quantity of labour, but because such commodities would purchase or represent a much smaller quantity than in times of more opulence and improvement” (I.xi.e.25). The “source” of the low price of animal products was to be sought, in other words, in the low cost of acquiring those commodities and not in a high cost of producing silver, those resource costs being, as always, expressed in the labor-commanded unit. But what proof does he offer to convince us of this claim? Indeed, how can we be certain that a

rise in the price of meat relative to that of wheat signifies not a reduction in the cost of producing wheat but rather a rise in the cost of producing meat—a rise that follows the “extension of tillage” and diminution of “wild pasture” which Smith takes as characteristic of economic advance? The answer, of course, as others have noted (e.g., Blaug 1959, 152; Holander 1973, 129n. 46), is that Smith assumes it so:

In every different stage of improvement . . . the raising of equal quantities of corn in the same soil and climate, will, at an average, require nearly equal quantities of labour; or what comes to the same thing, the price of nearly equal quantities; the continual increase of the productive powers of labour in an improving state of cultivation, being more or less counter-balanced by the continually increasing price of cattle, the principal instruments of agriculture. . . . Corn, accordingly, it has already been observed, is, in all the different stages of wealth and improvement, a more accurate measure of value than any other commodity or sett of commodities.” (I.xi.e.28)

Hence, the ambiguity of the price relative is resolved in the same way that Ricardo was to deal with the problem a generation later: one element of the ratio is established by assumption as the “invariable standard measure of value, which should itself be subject to none of the fluctuations to which other commodities are exposed.” For Ricardo, of course, that role is filled by gold rather than by Smith’s corn; but though the chosen commodity differs between the two authors, the reason for the choice is the same—namely, to provide us, “when commodities varied in relative value,” with “the means of ascertaining which of them fell and which rose in real value” (Ricardo [1817] 1951, 43). To be sure, Smith’s choice did expose him to Ricardo’s ridicule (14–15), as corn is no less “subject to fluctuations” in its production costs than are the monetary metals “from the discovery of new and more abundant mines,” a criticism repeated by his followers as well (e.g., McCulloch 1828, lxxv; Mill [1848] 1976, 566–67). Smith might have replied that it is no less credible to attribute to corn the condition of unvarying unit costs than it is to ascribe the same condition to gold, as Ricardo did when he asked us to “suppose . . . the same quantity of labour to be always required to obtain the same quantity of gold” ([1817] 1951, 44).¹¹ However, as Brewer (1995, 196–97) has pointed

11. Of course, Ricardo’s gold possesses a second characteristic as well, that which it acquires as the product of a capital-labor ratio equal to the economywide average. Naturally, we do not

out, the choice of corn for this role opens Smith's model to the charge of inconsistency when we consider the possibility of changes in production conditions at an advancing margin of cultivation. Viewed in this larger perspective, Smith's peculiar claim of unvarying unit costs does appear "as a rather desperate attempt to justify . . . the use of corn as a measure of value."

A Price Index

Justified or not, once established, an invariable standard can be employed not only as a measure of the "changes in the relative value of commodities brought about by changes in the methods of production" (as O'Donnell [1990, 62] properly characterizes Smith's labor-commanded unit), but also as an index by which to adjust for "purely monetary shocks," as Schumpeter would have it. Indeed, since the monetary metal is itself a commodity whose "relative value" is altered by "changes in the methods of [its] production," the latter application is simply a special case of the former. If the unit resource cost of wheat can be taken as fixed "in every different stage of improvement," then variations in its silver price can originate only in "something directly affecting" the stock of silver itself, thereby making the money price of wheat a perfect indicator of such nominal shocks.

It is evident that Smith recognized this feature of his corn measure and employed it just as we would employ a price index, to deflate nominal incomes and prices for the effects of inflation (but, for a contrary view, see O'Donnell 1990, 73–74). Corn is the ideal proxy for the labor-commanded measure in part because its "average or ordinary price . . . is regulated . . . by the value of silver, by the richness or barrenness of the mines which supply the market with that metal" (I.v.16). This is why rent contracts "reserved in corn have preserved their value much better than those which have been reserved in money," or, indeed, in any other unit. The "real [that is, 'labor-commanded'] value" of a contract "reserved in corn is liable only to the variations" in the corn wage, but that of a contract "reserved in any other commodity is liable," in addition, to variations in that other commodity's value in terms of the

find this trait in Smith's corn, as he was innocent of Ricardo's insight into the complications arising from disparities in factor proportions (O'Donnell 1990, 102–4).

fixed-standard corn (I.v.10–15; see also I.xi.d.2, f.2–3, where the “real price” of silver is measured by the money price of wheat). These considerations apply not only to rent and annuity contracts but also to the proper compensation of public servants (I.xi.n.10) and to any calculation of long-run changes in production costs. Thus we find Smith at various points deflating by the wheat price to determine the change in the real cost of wool since the time of Edward III (I.xi.m.8), of hides, “finest” and “coarse” cloth and stockings over the preceding three centuries (I.xi.m.10, o.7–10), and even of those “rare birds” consumed by the Romans “in the time of their greatest grandeur” (I.xi.k), always remembering to express the result of the calculation in the underlying labor-commanded unit.¹²

Though it might have been an unfortunate one, Smith’s choice of corn as *numéraire* was certainly much encouraged by his authorities. An awareness that the nominal price obscures the “source of variations in the ratios of exchange” had become commonplace long before Smith took up the problem. His own teacher had observed that “we say indeed commonly, that the rates of labour and goods have risen since these metals grew plenty, . . . conceiving the value of the metals as invariable;” but in fact “’tis the metal chiefly that has undergone the great change of value, since these metals have been in greater plenty.” Therefore, “if we would settle fixed salaries, which in all events would answer the same purposes of life, or support those entitled to them in the same condition with respect to others, they should neither be fixed in the legal names of coin, nor in a certain number of ounces of gold or silver” (Hutcheson [1755] 1969, 6:58, 62–63). Similar views were advanced in the preceding century by Pufendorf ([1688] 1934, 696–98), whose works Smith encountered as a schoolboy in Hutcheson’s lectures and retained in his library into adulthood. Similarly, the work from which Smith drew much of the price data for his “Digression” was written to determine the amount by which the nominal income threshold above which students at a “certain college” were obliged to relinquish their fellowships must be adjusted to account for the inflation over the nearly three centuries since the institution’s founding (Fleetwood [1745] 1969, 1–2). For many of these authorities, too, labor and the laborer’s food (typically collapsed into the chief bread grain) are

12. This variety of applications to which the corn deflator is turned will correct the misperception conveyed by O’Brien’s comment that Smith’s measure “is *not* used as a welfare standard for the community but for sectional interests, especially rent receivers” (1975, 84).

the preferred units of account, though Fleetwood constitutes a noteworthy exception with his effort to base his calculation on price data covering an unusually broad range of food products and cloth. Nevertheless, those who relied on food (or corn) alone did so because it is least likely to be subject either to sharp swings in demand or to cost-reducing technical change. Long before Smith penned his colorful observation concerning the “narrow capacity of the human stomach,” it was agreed that food consumption “must be proportioned to our bodies” (Harris [1757–58/1856] 1933, 390), thereby ensuring that the demand for subsistence remains in fixed proportion to population. Consequently, Hutcheson ([1755] 1969, 6:58; see also [1747] 1969, 211–12) could conclude that “the value of labour, grain, and cattle, are always pretty much the same, as they afford the same uses in life, where no new inventions of tillage, or pasturage, cause a greater quantity in proportion to the demand.”¹³ One must avoid for this purpose those commodities subject to such inventions, especially those “more ingenious manufactures, for nice contrivances to facilitate labour, may lower the value of such goods.” By this reasoning, Hutcheson led his pupils to the conclusion that the “most invariable salary would be so many days labour of men, or a fixed quantity of goods produced by the plain inartificial labours, such goods as answer the ordinary purposes of life.” Thus Smith learned as a schoolboy that “quantities of grain come nearest to such a standard.” Here, too, Smith found a similar view in Pufendorf ([1688] 1934, 696), who pressed the search for a value standard back one step to land, “since from it comes, mediately or immediately, most of the things by which human life is sustained,” and likewise warned against the use of those commodities that “received a valuation from the luxury or foolishness of men.” Locke also insisted that “wheat being [in England; “Rice in *Turkey*, &c.”] the constant and most general food . . . is the fittest measure to judge of the altered value of things” ([1696] 1991, 263), a passage cited approvingly by Harris as well ([1757–58/1856] 1933, 387n). Of course, as the chief subsistence commodity, corn possesses the added virtue of determining money wages; and since “the wages of the lower class . . . seems to be the main and ultimate standard that regulates the values of all commodities”

13. Labor is included in this list on the strength of an apparently uniform experience of its pain: “A days digging or ploughing was as uneasy to a man a thousand years ago as it is now” ([1755] 1969, 6:58). This view carries forward to play a central role in the welfare dimension of Smith’s labor-commanded unit (see Hueckel 1998).

(Harris [1757–58/1856] 1933, 355), the price of corn thereby determines the prices of all other goods, except those influenced by “luxury and foolishness.” This last trait is of particular importance to Smith in his solution to the problem posed by the bounty on corn, the last obstacle to be overcome in his attack on that “popular notion” of the mercantilists.

The Problem of the Corn Bounty

With just one exception, the history of corn prices presented in the “Digression” conforms perfectly to Smith’s predictions, those prices falling, as we have seen, in the period before the discovery of the American mines, rising from 1570 to 1640, when those new sources of supply increased the world stock of silver “in a greater proportion than the demand,” and apparently falling over at least part of the period thereafter, when that stock is again said to have remained constant (I.xi.f, g.6–7).¹⁴ The troublesome exception occurs in the last two-thirds of the seventeenth century, where contrary to his hypothesis, Smith’s price data reveal a slight rise in the average corn price. The unexpected price trend is explained by reference to two exogenous events: the civil war, “which, by discouraging tillage and interrupting commerce, must have raised the price of corn much above

14. The qualifying adverb is inserted only to call attention to the ambivalence evident in Smith’s reading of the most recent period. Although his data show an average price over the first sixty-four years of the eighteenth century that is some 20 percent below the average of the last sixty-four years of the preceding century, “the high price of corn during these ten or twelve years past . . . has occasioned a suspicion that the real value of silver still continues to fall in the European market.” Smith, of course, must convince us that this is nothing more than “a transitory and occasional event,” masking a continuing long-run rise in the purchasing power of money produced by a “gradual increase of the demand for silver” (I.xi.g.17, 23). Consequently, we are treated to a lengthy catalog of the various sources of this increased demand, namely economic advance in the major trading regions of the world (I.xi.g.25–28; parts of the argument had already been suggested by others: see, e.g., Harris [1757–58/1856] 1933, 395, 397–98). Nevertheless, Smith is at this point able to muster no more than a highly qualified conclusion: “That . . . the value of silver has, during the course of the present century, begun to rise somewhat in the European market, the facts and arguments which have been alleged above, dispose me to believe, or more properly to suspect and conjecture; for the best opinion which I can form upon this subject scarce, perhaps, deserves the name of belief” (I.xi.h.11; see also g.35 but cf. I.v.12). All these doubts and qualifications fall away, however, in the “Conclusion of the Digression,” where the argument takes on the nature of a polemic directed against the errors of the “popular notion.” The “high price of corn during these last ten or twelve years” is there summarily dismissed as “sufficiently accounted for from the badness of the seasons, without supposing any degradation in the value of silver” (I.xi.n.6).

what the course of the seasons would otherwise have occasioned"; and "the bounty upon the exportation of corn," granted in 1688, which, "by encouraging the exportation of the surplus produce of every year," tended to "raise the price in the home-market" (I.xi.g.3-4). This last, however, Smith anticipates will not convince his mercantilist opponents. It is their claim, as Smith reports it, that because the bounty "tends to encourage tillage," it "must . . . in a long period of years, occasion such an increase in the production of corn, as may lower its price in the home market" (IV.v.a.7; a claim that Smith himself advanced in *LJ* (A), vi.91-97; *LJ* (B), 234). Obviously, such a claim destroys the power of the bounty to explain the unexpectedly higher price from 1688 to 1700; even more devastating, it permits the observed decline in corn prices in the eighteenth century to be interpreted (in accord with its mercantilist apologists) as revealing the beneficial effect of the bounty and not as evidence of a growth-induced rise in the purchasing power of silver. Within the limits of the "Digression," Smith is content simply to observe that because the eighteenth-century decline in corn prices extended to France as well, in spite of that country's contrary policy of prohibiting corn exports, it is "more proper . . . to consider this variation in the average money price of corn as the effect rather of some gradual rise in the real value of silver in the European market, than of any fall in the real average value of corn" (I.xi.g.15-16).

A more complete refutation of the pretended benefits of the corn bounty is reserved for book 4, where we find yet another instructive application of his labor-commanded measure. Here, amid his critique of the "mercantile system," Smith comments on those means by which "merchants and manufacturers, . . . not contented with the monopoly of the home market," seek "certain encouragements to exportation" (IV.iv.1); and the argument rests squarely on the principle that "the money price of corn regulates that of all other home-made commodities" (IV.v.a.11), a view that, though evidently possessed of a long pedigree, was nevertheless firmly rooted in Smith's theory of rent. Because the rent of corn land "regulates" that of nearly all other land, the prices of the products of that other land "must bear a certain proportion to that of corn" within a given "period of improvement," though this structure of relative prices is "different in different periods," since, as we have seen, agricultural advance is necessarily associated with a particular alteration in that price structure and because the real wage varies with

the state of improvement. Nevertheless, at a given stage of development, the corn price “regulates the money price of all other parts of the rude produce.” Of course, agricultural products serve as inputs to manufacturing both directly and indirectly as determinants of the money wage. Hence, through both channels, the price of corn “regulates that of the compleat manufacture” as well. By virtue, then, of the central, determining role of the rent of corn land, within a given stage of development “the money price of labour, and of every thing that is the produce either of land or labour, must necessarily either rise or fall in proportion to the money price of corn” (IV.v.a.11–14). Consequently, any bounty-generated rise in the corn price is transmitted to other agricultural prices as well and through them to the money wage and to the prices of manufactured goods. The bounty, therefore, cannot stimulate output because it cannot “raise the real price of corn, or . . . enable the farmer, with an equal quantity of it, to maintain a greater number of labourers in the same manner, whether liberal, moderate, or scanty, that other labourers are commonly maintained in his neighbourhood” (IV.v.a.10). The bounty has a strictly nominal effect and no more, raising the silver price of corn and that of all other commodities in proportion. Apparently, this rise in the general price level is financed by the inflow of precious metals balancing the newly subsidized corn exports. At any rate, as O’Donnell (1990, 108) reminds us, Smith insists that the bounty “necessarily operates exactly in the same way as [the] absurd policy of Spain and Portugal” in inhibiting specie exports: in both cases the policy leads to a permanent rise in the domestic specie stock and price level (IV.v.a.19–20).

Notice that, unlike the applications involving comparisons across time, the argument here does not rely on Smith’s assumption of constant costs in corn (O’Donnell [1990, 109] advances the contrary reading). That supposition is required to establish corn as the ideal deflator across technological regimes—“in every *different* stage of improvement.” But the discussion of the bounty is a comparative-statics analysis of the consequences arising from a particular government policy applied within a particular technological regime: it is only within a given “period of improvement” that the prices of all other goods “must bear a certain proportion to that of corn.” The former supposition is not relevant to the latter application. The object of the bounty analysis is not to measure the effects across time of an exogenous change in the monetary stock; it is rather to deny the bounty any power to stimulate

output. The claim that corn is available in the long run at constant cost is of no help in that enterprise.¹⁵

The bounty analysis is particularly instructive to our purpose, however, since it contains within its compass illustrations of each of the three applications to which Smith put his labor-commanded measure. Because trade preferences granted to manufacturers are not similarly barren of real consequences, the “country gentlemen” who “established the bounty” on corn “endeavoured to raise its real value, in the same manner as our manufacturers had, by the like institutions, raised the real value of many different sorts of manufactured goods.” The country gentlemen, in other words, hoped by their bounty to raise the price of corn *relative* to those of other commodities, just as similar preferences applied to manufactured goods are capable of increasing their prices relative to that of corn. Here, in accord with O’Donnell’s observation (1990, 62) that Smith employed his labor-commanded index to judge “changes in the relative value of commodities,” we find those higher relative prices of manufactured goods described as “equivalent to a greater quantity of labor and subsistence.” But Smith recognized just as clearly that a bounty-induced gain in relative prices increases the purchasing power of manufacturers’ incomes. Hence, we have here, too, an instance refuting O’Donnell’s denial (1990, 73–74) of the common view of the labor-commanded unit as an index “of the purchasing power of individual commodities or incomes.” As Smith pointed out, the trade preferences not only “render [the favored commodities] equivalent to a greater quantity of labour;” but also “encrease not only the nominal, but the real profit, the real wealth and revenue of those manufacturers, and . . . enable them either to *live better themselves*, or to employ a greater quantity of labour in those particular manufactures” (IV.v.a.23, emphasis added; see also I.xi.g.28 for a cross-country application explaining the greater wealth of a “grandee in China or

15. There is a lesson here for our understanding of the evolution of Ricardo’s thought on value. Although the process that led him to his particular form of the labor theory of value remains a point of some dispute, it is nevertheless widely agreed that he was much influenced by the view that the nominal price of corn “regulates” that of all other goods, a conclusion that Ricardo himself came to describe as “the error of Adam Smith” ([1817] 1951, 307; on this matter, see Peach 1993, chap. 2). But by Ricardo’s time, the principle had come to be applied within the context of an advancing margin of cultivation—that is, as Smith would have described it, across different periods of “improvement.” No doubt Smith committed many errors, but this application to a dynamic context of a principle intended only for a very limited, comparative-statics framework was not among them.

Indostan” as compared to “that of the richest subjects in Europe,” and recall Blaug 1959, 153). That latter option open to the manufacturers—that of employing more labor—is, of course, an illustration of the third of those interpretations cited at the opening of this essay, that which takes labor-commanded to be a measure of potential productive capacity.

A Measure of Capacity

All these readings are simply views of the same concept taken from slightly different perspectives. An index that measures “changes in the relative values of commodities” will also express the changes in the purchasing power of the incomes received by the producers of those commodities. Such an index will likewise express changes in the purchasing power of that commodity employed as money and thus can be employed to adjust for “purely monetary changes.” Finally, if that index is expressed in units of a key productive input, then changes in its magnitude can be read as expressing variations in the power to produce future output. This last explains Smith’s persistence in retaining the labor-commanded language, though his argument ascribes to *corn* all the characteristics necessary to a value measure. Labor is the chief productive agent. The real value of the nation’s capital is properly expressed by “the quantity of productive labour which it can maintain and employ” (II.iv.12). Because the nation’s annual product includes payments to land and capital as well as labor, it “will always be sufficient to purchase or command a much greater quantity of labour than what was employed in raising, preparing, and bringing that produce to market,” making it possible that “the produce of every succeeding year would be of vastly greater value than that of the foregoing.” This, however, marks only the maximum, potential capacity—a potential that the nation never quite reaches because each year some share of the annual product is devoted to the support of the “idle” (I.vi.24).¹⁶

This capacity application arises repeatedly in assessments of public policy. We have already seen it applied in the case of the bounty to express the undesirable consequence of that policy in directing to the

16. Smith had his precursors on this point as well, notably William Petty, who, a century earlier, had similarly employed the labor-commanded measure to reckon changes in the “wealth and strength” of the nation (Hueckel 1986, 50–51).

avored sectors “a greater quantity of the industry of the country than what would probably go to them of its own accord.” It can also serve as a measure of the benefit to be gained from the prudent substitution of banknotes for a share of the nation’s coin (II.ii.33–35), or it can be employed in an attack on “the absurd policy of Spain and Portugal” in inhibiting exports of the precious metals (IV.v.a.19; see also I.xi.m.18).

Conclusion

Invariable standard against which to isolate “the source of variations in the ratios of exchange between goods,” index of money’s purchasing power, index of potential capacity—all embedded in a vision of economic growth grounded in a theory of rent and “united in one chain” to overturn the “popular notion” of mercantilism—Smith asked a great deal of his labor-commanded unit and its corn-commanded proxy. If the commentaries treating of Smith’s value measure convey an impression of “incompatible utterances,” it is not because each proposes a reading that is incorrect, only incomplete. Nevertheless, there is indeed in Smith’s measure a “beauty of . . . systematical arrangement” that is breathtaking in its compass, if we can but grasp the “connecting chain” that gives it form. If the synthesis proposed here can withstand scrutiny, perhaps future students will not feel impelled to follow the young Horner and flee the beauty of Smith’s thought “to something more agreeable because more easy.”

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