

Two Traditions? Some Dualisms in the Historiography of Economics

Tony Aspromourgos
tony.aspromourgos@sydney.edu.au

1. INTRODUCTION

As is well-known, the fundamental constructive element of Piero Sraffa's intellectual work was the rehabilitation of the approach to the theory of value and distribution of the classical economists, from William Petty to Karl Marx. By way of the resulting rigorous and coherent rational reconstruction, the core logic of this approach serves to determine normal or equilibrium (competitive) relative commodity prices and functional income distribution by reference to the production conditions (or dominant production methods) for producing the gross outputs of the economic system, together with one given distributive variable, determined independently of prices, by reference to wider political, social and economic forces. The determination of functional distribution is thereby conceived of in terms of 'rules of the game' for the distribution of the socio-economic surplus – the gross product of the system net of necessary inputs, including necessary labour consumption – those rules being historically and geographically variable. This is then to be understood as the fundamental framework or point of departure for a genuinely scientific economics of capitalism.

But in the one hundred years from about the mid-nineteenth century, the classical approach had more or less completely disappeared from the mainstream of economic analysis, with the rise of marginalism and the associated recourse to a supply-and-demand (hereafter, 'SAD') approach to the theory of equilibrium commodity prices and functional distribution. This raises a question: how is the position and status of the classical approach to be understood in relation to marginalism and more generally, the wider body of economic literature since the advent of the classical approach, with particular reference to the theory of prices and distribution – and indeed, also in relation to earlier (what may be called 'premodern') economic literature? What follows addresses this question by way of considering some dualisms in the historiography of economics, due to Marx, Maurice Dobb and Sraffa. In relation to this question, what is of particular interest to us here is this: if the classical approach to prices and distribution as reconstructed in the twentieth century is sound, how is one to understand and make sense of an apparently long tradition of belief in *something or other* along the lines of SAD doctrines to explain commodity prices?¹

2. MARX'S DICHOTOMY BETWEEN SCIENTIFIC AND VULGAR ECONOMY

Marx draws a dichotomy between scientific political economy and 'vulgar' economy, the former being identified with 'classical political economy' (although its scientific status is compromised and hence qualified). He regards the classical or scientific political economy as beginning with Petty and Pierre le Pesant de Boisguilbert and ending with David Ricardo and J.C.L. Simonde de Sismondi (Marx 1970: 52).

¹ Belief in some kind of SAD forces also explaining distributive variables – in particular, but not only, rates of labour remuneration – has a much shorter history in economic literature.

Once for all I may here state, that by classical Political Economy, I understand that economy which, since the time of W. Petty, has investigated the real relations of production in bourgeois society, in contradistinction to vulgar economy, which deals with appearances only ... (Marx 1967: vol. 1, 81n)²

The *physiocrats* ... deserve credit primarily for going back from merchant's capital, which functions solely in the sphere of circulation, to productive capital, in opposition to the mercantile system, which, with its crude realism, constitutes the actual vulgar economy of that period, pushing into the background in favour of its own practical interests the beginnings of scientific analysis made by Petty and his successors. (Marx 1967: vol. 3, 784)

But there are vulgar elements in the classical writings as well: 'The vulgar conception ... that wages arise from labour, but profit and rent – independently of the labour of the worker – arise out of capital and land ... evidently creeps into Adam Smith's writing' (Marx 1963–71: part II, 347; and with respect to Ricardo, part II, 427; part III, 502 – the latter, also on Smith).³ The vulgar element in Smith is particularly connected with his treatment of the relationship between commodity prices and distributive variables (more on this below, this section).

Marx also makes use of a dichotomy between reality (or 'essence') and 'appearance' (or 'surface') (e.g., Marx 1967: vol. 1, 176, 307; vol. 3, 817). This latter distinction, in one form or another, can be traced back through Western philosophy and science to at least Plato. And in relation to Adam Smith, there is a further distinction between esoteric and exoteric dimensions of his economics. These three dichotomies, even if not having *precisely* the same meaning, are in very close alignment with each other. The understanding or perception to be found in vulgar economics is limited to the mere appearances or surface phenomena. Thus there is a dimension to the scientific/vulgar dualism of the latter being non-scientific, common-sense or popular understanding. But this limitation to the appearances is not merely non-scientific; it is also connected with an ideological usefulness of limiting understanding to the mere appearances:

the vulgar economists ... translate the concepts, motives, etc., of the representative of the capitalist mode of production ... in whose consciousness only its superficial appearance is reflected. They translate them ... from the standpoint of the ruling section, i.e., the capitalists, and their treatment is therefore not naïve and objective, but apologetic ... very different from the urge of political economists like the Physiocrats, Adam Smith and Ricardo to grasp the inner connection of the phenomena. (Marx 1963–71: part III, 453)⁴

Similarly, Marx says of the chapter on machinery added to the third edition of Ricardo's *Principles of Political Economy, and Taxation* that it 'bears witness to his *honesty* which so essentially distinguishes him from the vulgar economists' (Marx 1963–71: part II, 555); and writing, in relation to wages, of the 'phenomenal form' that makes 'the actual relation invisible', Marx speaks of 'mystifications ... illusions ... all the apologetic shifts of the vulgar economists' (Marx 1967: vol. 1, 540; also vol. 1, 16 (from 'Afterword to the Second German Edition'); vol. 3, 323–4, 844n; 1963–71: part II, 266–7; part III, 168, 353n, 500–04). As a consequence, the Marx distinction is commonly synonymous with a distinction between science and ideology. The two dimensions (merely popular versus ideological) appear side-by-side, but distinguished, in the following:

It is ... natural that vulgar economy, which is no more than a didactic, more or less dogmatic, translation of everyday conceptions of the actual agents of production ... should see precisely in this trinity [capital, land, labour], which is devoid of all inner connection, the natural and indubitable lofty basis for its shallow

² The notion of a 'classical' political economy is itself a conceptual innovation of Marx.

³ The manuscripts published as *Theories of Surplus-Value* date from 1862–63.

⁴ As to 'naïve', Marx elsewhere writes of Smith 'who ... naïvely expresses all sorts of contradictory elements and thus becomes the source, the starting-point, of diametrically opposed conceptions' (Marx 1963–71: part III, 20). And further: 'The naïve way in which Adam Smith on the one hand expresses the thoughts of the agent of capitalist production ... as ... they appear on the surface, while, on the other hand, he sporadically reveals their more profound relationships, give his book its great charm' (Marx 1963–71: part II, 219).

pompousness. This formula simultaneously corresponds to the interests of the ruling classes by proclaiming the ... justification of their sources of revenue (Marx 1967: vol. 3, 830)⁵

The esoteric/exoteric distinction has two key elements: as against the esoteric dimension, i.e., genuine economic science, the exoteric dimension reflects merely the understanding of the participants in economic life; more substantively, this exoteric perspective is particularly expressed in a faulty and mystifying understanding of the relationship between prices and distributive variables. Sketching the two dimensions in Smith, Marx comments:

On the one hand he traces the intrinsic connection existing between economic categories or the obscure structure of the bourgeois economic system. On the other, he simultaneously sets forth the connection as it appears in the phenomena of competition and thus as it presents itself to the unscientific observer just as to him who is actually involved and interested in the process of bourgeois production. (Marx 1963–71: part II, 165–6)

Elsewhere the esoteric is called the ‘really scientific’ part of Smith’s political economy, and it is said that Ricardo ‘upholds the esoteric Adam Smith against the exoteric Adam Smith’ (Marx 1967: vol. 2, 212, 219). And with regard to the substantive matter of the theory of prices and distribution, the ‘esoteric’ and vulgar in Smith are contrasted as follows:

after ... deriving the revenues [i.e, wages, profits and rents] from the value, he proceeds in the opposite direction ... and turns the revenues from ‘component parts’ into ‘*original sources* of all exchangeable value’, thereby throwing the doors wide open to vulgar economy. (Marx 1967: vol. 2, 371–2; also 388–9)⁶

The exoteric Smith fails to see the binding relation between distributive variables and merely adds up remunerations to arrive at prices (Marx 1963–71: part II, 217, 229). Smith is the only economic writer to whom Marx applies the esoteric/exoteric distinction. Smith is probably singled out because Marx sees him as the foundational figure for mature political economy and for the subsequent intensifying divide between science and apologetics (see Marx 1963–71: part II, 165; part III, 501).

3. DOBB’S NOTION OF TWO TRADITIONS

It is in the context of a chapter examining ‘the reaction against Ricardo’ that Dobb (1973: 111–20) proposes ‘two quite distinct and rival traditions’ in nineteenth-century economics. One, supposedly deriving from Smith, is construed as a cost-of-production theory of prices in which remunerations to labour, capital and land were ‘viewed in a general supply-and-demand framework’. This line of thinking is then said to have descended via J.S. Mill and others to Alfred Marshall. Even the Marshallian subjectivization of cost is said to ‘echo’ Smith’s ‘toil and trouble’ of labour (see Smith 1976 [1776]: 47; cf. Aspromourgos 2009: 94–7, esp. note 55). The other tradition, ‘also derived from Smith’, finds fuller expression in Ricardo’s making ‘conditions of production’ the basis for determining prices and explaining distribution ‘in terms peculiar to itself and not as an outcome of general supply-demand

⁵ The possible divergence between the two dimensions of ‘vulgar’ is expressed in relation to John Stuart Mill, who is characterized as a vulgarizer of the content of political economy (e.g., Marx 1967: vol. 1, 507n, 516; 1963–71: part III, 85), but of whom Marx (1967: vol. 1, 610n) also comments: ‘To avoid misunderstanding, let me say that although men like John Stuart Mill are to blame for the contradiction between their traditional economic dogmas and their modern tendencies, it would be very wrong to class them with the herd of vulgar economic apologists.’

⁶ For further references to Smith and the esoteric/exoteric, see Marx (1963–71: part II, 169, 223, 230; part III, 69; 1967: vol. 1, 559; vol. 2, 198, 377). On Marx’s view of Smith in relation to the theory of prices and distribution, see O’Donnell (1990: 154–61). More generally on Marx’s conception of classical political economy, see also Groenewegen (1987).

exchange-relations'. Dobb goes on to connect this with Ricardo's recourse to 'a social or institutional datum in the shape of the socio-economic conditions defining the level of real-wages', which – together with production conditions – opened the way to production-based determination of prices and residual determination of the profitability of capital. Marx and Vladimir Dmitriev are the writers explicitly mentioned. In other words, Dobb's second tradition is the surplus approach, subsequently reinvigorated by Sraffa and others from 1960 forward.⁷ Reacting against 'this whole mode of approach to a theory of profit' and 'its wider implications and corollaries', Nassau Senior and others are supposed as having embraced 'the other and rival tradition deriving from Smith'.

There are two contentions in this Dobb commentary that are of interest here: the existence of two traditions, at least from about Smith's time forward; and the notion that they both have their origin, at least in incipient form, in Smith's political economy. With regard to the former, it is not useful to conflate SAD ideas, before and after '1870' (using that year as symbolic of the advent of marginalism) into a singular tradition: SAD sans functions and the apparatus of SAD functions are too qualitatively different. And the latter is surely false: Smith is not a substantive source for marginalism. On the one hand, Smith's efforts at theories of the general level of the rates of natural wages and natural profits cannot be assimilated to functional SAD relationships that bear any resemblance to later marginalist distribution theory. But in his chapter on Smith, Dobb (1973: 46–7, 50–52) does attempt, in a slight way, to cast Smith's treatment of wages and profits in *some* sort of SAD terms.

On the other hand, the mere notion of a tendency to alignment between the costs of production of commodities and their prices is consistent with *any* theory of competitive prices. In fact, by appealing to Robert Malthus's dichotomy between cost-of-production and SAD 'systems' of price explanation, Dobb (1973: 120) seems to contradict his own earlier identification of Smith's cost-of-production approach with the tradition of SAD theory (Dobb 1973: 112–13):

... the two systems, one of which accounts for the prices of the great mass of commodities by the cost of their production, and the other accounts for the prices all commodities, under all circumstances, permanent as well as temporary, by the relation of the demand to the supply, though they touch each other necessarily at a great number of points, have an essentially different origin, and require, therefore, to be very carefully distinguished. (Malthus 1820: 73)

Dobb (1973: 113) also quotes Charles Forster Cotterill's (1831: 22) statement that '[t]here are two ingredients in cost of production, wages of labour ... and profits of stock' – as if this were, in and of itself, evidence of endorsement of the SAD tradition. But Dobb (1973: 120) himself quotes Ricardo's comment on Malthus: 'Natural price is only another name for cost of production' (Sraffa 1951: 46).⁸

4. SRAFFA'S HISTORIOGRAPHY OF COST

In Sraffa's small corpus of rather cryptic published works there is a quite clear, qualitative distinction drawn between the theoretical character of classical and of marginalist economics (Sraffa 1960: v, 93–5). The extensive collection of Sraffa unpublished manuscripts (in Trinity College, Cambridge) reveals also a more explicit dichotomy between the objectivism of the former and the subjectivism of the latter – which in turn finds its most concrete and substantive expression in a contrast between two notions of cost. These conceptualizations in Sraffa's interpretation of the history of economic theory

⁷ For a seminal account, see Garegnani (1984) – the argument of which was developed much earlier (see page 291, note 1) – or Garegnani (1987). The latter is a more expansive version of the former.

⁸ Dobb (1975: 326–31) is essentially a repetition of the 1973 argument concerning Smith and the two traditions. O'Donnell (1990, especially pages 125, 133–41, 197–218, 228–9) provides an exhaustive assessment and repudiation of Dobb's interpretation of Smith. The central focus of the book as a whole is a critique of the interpretations of Smith by Dobb and Samuel Hollander; but it also deals extensively with Ricardo and Marx on Smith.

have been well documented by Kurz and Salvadori (2005), elaborating an earlier contribution (Kurz and Salvadori 2004; see also Kurz 2006). The contrast between the two notions of cost is nicely captured in a Sraffa metaphor of a donkey that can be *enabled* to labour, by feeding it carrots – the classical notion of cost as material means of production used up. Or it may be *induced* to labour, by dangling a carrot in front of its nose (my paraphrase) – the marginalist notion of cost as disutility, compensated for by the promise of a prospective utility of consumption.⁹ It is also well expressed in a 1971 letter of Sraffa to A. Asimakopulos, referring to

the drama ... enacted on Marshall's stage where the claimants for influence [on price] are utility and cost of production. Now utility has made little progress (since the 1870s) towards acquiring a tangible existence and survives in textbooks at the purely subjective level. On the other hand, cost of production has successfully survived Marshall's attempt to reduce it to an equally evanescent nature under the name of 'disutility', and is still kicking in the form of hours of labour, tons of raw materials, etc. (quoted in Asimakopulos 1990: 342; also in Salvadori 1995: 154)¹⁰

Sraffa also perceives, within the classical cost tradition, that the notion in Ricardo and Marx of reducing objective costs to labour-time, and the associated labour theory of value, were an unfortunate error or detour, *vis-à-vis* William Petty and the Physiocrats – a corruption of the objective notion of cost as the quantities of the physical commodities used up in the production of the gross product or social surplus of the economic system (Kurz and Salvadori 2005: 417–19). This does not, however, justify banishing human labour from the theory of prices. As Kurz and Salvadori (2005: 422–4) sum up the matter, once wages are allowed to vary and share in the social surplus, wages can no longer be represented by a quantity of commodities consumed by the workers and given independently of prices:

... the concept of real wages conceived of as an inventory of commodities was obsolete, a share concept had to be put in its place. Since wages were paid in relation to the hours employed of workers, ... labour had to be treated as a measurable quantity. ... [And] [w]hereas the amount of fodder given to a horse, for example, is decided exclusively by its owner on grounds of economy, the wage paid to workers is the outcome of a bargaining process between capital owners and workers It was only when he began to discuss the implications of the participation of workers in the surplus ... that he introduced the concept of labour as a measurable magnitude which, however, served only a single purpose: that of providing a basis on which wage payments are made.

Two comments may be added. The objective/subjective dichotomy should not be thought of too crudely or mechanically, with regard to the former in particular. The exogenous distributive variable associated with the Sraffa price and distribution system almost inevitably involves elements of social convention. This is true as well of the production methods in use, which always incorporate social norms concerning the acceptable ways in which human labour can be utilized and combined with other inputs. Those conventions and norms are of course subject to historical change. Second, the recourse to labour-time in Ricardo and Marx also faced the problem of how to deal with the heterogeneity of labour inputs. A quasi-reduction to homogeneity could be implemented by using wage relativities as multipliers for weighting and aggregating different forms of labour. But this is really a sleight of hand, since what is then being measured is not labour inputs but wage costs (and paralleling this, what is presented as a labour theory of value becomes really a wages theory of value).

⁹ The metaphor is discussed, and its locations in the Sraffa archive given, in Kurz and Salvadori (2004), page 123 of the 2007 reprint – and more fully treated, and quoted, in Fratini (2018b: 830–31). Sraffa parallels this dichotomy in the theory of cost with the distinction between efficient and final causes (Kurz and Salvadori 2005: 427n; Fratini 2018b: 830–31).

¹⁰ The critique of the marginal productivity theory of factor pricing entailed by Sraffa's 1960 system served to undermine also the theory of prices in terms of SAD with 'rising supply-price', where the associated rising marginal cost is supposed to be an expression of the disutility of supplying factors.

Those wage relativities would also have to be assumed invariant, at least for the analytical purpose at hand.

5. SUPPLY-AND-DEMAND, ANCIENT AND MODERN

In the first of six conjectures offered in another essay (Aspromourgos 2018, section 5.a), as to why the apparatus of SAD functions rose to become widely accepted, even though not plausible, a role was attributed to ‘inchoate’ earlier SAD ideas in the nineteenth century. Of course, in a sense this is just to push the question back a step: why did the inchoate SAD ideas *themselves* gain acceptance? From the point of view of the scientific/vulgar dualism, the answer might be that it was a victory for popular or ‘common-sense’ ideas about prices, captive to purely superficial notions, in contradistinction to a science of prices, penetrating to the deeper and more hidden reality. Such an embrace of the superficial could be encouraged, on the one hand, by the theoretical difficulty in which the classical approach to price theory ended up in the economics of Ricardo and Marx, and on the other, by a possible apologetic role for SAD theory (these being two further of the six conjectures in Aspromourgos 2018, sec. 5). One may suggest further, that those inchoate SAD ideas were a kind of corruption of what may be called the common-sense law of markets – the notion that an imbalance between quantity supplied and quantity demanded tends to cause a *change* in price. The latter is an idea that would be well and easily understood wherever regular markets at all existed, including in the premodern West (and the wider world).¹¹

To that extent, ‘supply-and-demand’, in some sense or other, would be the common understanding of the determination of prices in regular markets in pre-capitalist worlds. These worlds are without competition in the form, most particularly, of capital mobility in pursuit of maximum profitability – competition that generates the systematic price behaviour and price structure that is given formal conceptualization in classical normal or equilibrium prices. In all premodern worlds, just as in the modern world and capitalism, there is production of commodities by means of commodities (and labour); but is there a systematic structure to which commodity prices tend? The latter is not entailed by the former and the extent to which there was systematic price and remuneration structure in premodern and pre-capitalist worlds – even if not capitalistic structure – is a matter of debate (Aspromourgos 2009: 118). Even in the case of regular markets in the premodern world, in which there is a tendency for transactions to occur at a uniform price, this does not at all entail that there is also a tendency to uniform remunerations of some kind, lying behind the uniform commodity price. Richard Cantillon saw the lack of an underlying objective structure of prices, underpinning the understanding of SAD and prices, in earlier, pre-capitalist English economic literature, explicitly targeting the very prominent figure of John Locke:

the real value of everything used by man is proportionable to the quantity of Land used for its production and for the upkeep of those who have fashioned it. ... Mr Locke who, like all the English writers on this subject, *has looked only to Market Prices*, lays down that the value of all things is proportionable to their abundance or scarcity, and the abundance or scarcity of the silver for which they are exchanged. ... I consider that Mr Locke’s idea is correct in the sense of the following Chapter [‘Of Market Prices’], and not otherwise. (Cantillon 1931 [1755]: 115–17; emphasis added)

¹¹ By ‘regular markets’ I mean deep markets, in which individuals are able to observe multiple transactions between buyers and sellers. That is to say, regular markets entail conditions under which individual transactions are not segmented from each other, but are integrated into a singular system of price behaviour. This implies a ‘soft’ notion of competition: the willingness of agents to compare transactions or offer-prices, and respond to the comparison. However, this is well short of thorough-going capitalist competition: the latter entails a tendency towards one price; but that tendency, somewhat mechanically represented by the law of one price, does not entail capitalist competition (Aspromourgos 2009: 118 with 306, note 77).

Premodern Western thought on prices, costs and SAD is discussed at some length in Aspromourgos (2009: 101–31). Some of the significant conclusions that emerge from that discussion may be noted here. (Various attempts to read marginalism back into premodern economic literature are also rebutted there (pp. 119–25 in particular).) Some of the pre-capitalist economic literature that rather imprecisely appeals to SAD may be attempts to account for *levels* of market prices, rather than merely *changes* in market prices (in response to SAD imbalances); but in the absence of a treatment of cost, supply and supply variability, those attempts cannot arrive at any definite price magnitude. Nevertheless, in premodern societies it *is* possible for a notion of normal cost to be operative via customary determination of remunerations and other costs and prices. While reference to cost in relation to price in premodern literature is often rather vague or oblique, cost definitely enters into many versions of the medieval ‘just price’ and accounts of actual prices. Ethical and communitarian norms also evidently played a role in some premodern cost- and price-setting (notions of just remunerations as well as just commodity prices, in tradition-based societies and hierarchies). A fundamental and thoroughgoing role for competitive forces in market processes in general – involving a *system* of markets, integrated via the mobility of capital and labour – only first arises in economic literature in the eighteenth century.

It may be added, in relation to the demand side, that applying some kind of reductionism to use-value – reducing use-value to some form of homogeneity – would be no astonishing or profound intellectual step really, even if it contradicts a venerable tradition of use-value conceived of as heterogeneous and objective, from Aristotle to Smith and Marx (for Aristotle and Smith, see Aspromourgos 2009: 115–25; Marx 1970: **opening, Ch. I, ‘The Commodity’**; 1967: vol. 1, 35–6). Even if one were confident that such a reductionist notion could be found in (or inferred from) some premodern economic literature or other, prior to the advent of the apparatus of SAD functions and marginalism, this would not be of great intellectual significance. Having so conceived of use-value as homogeneous, but without a theory of production, cost and supply, it would be no great breakthrough to then conclude, that quantities of commodities available for supply in *given* quantities will only be demanded by individuals up to the limit of a price reflecting use-value so estimated by them in pecuniary terms. It does no more than add to the Smith (1976 [1776]: 77–8, 172–5, 234–5) and Ricardo (1951 [1817]: 12) treatment of price determination for commodities with more or less inflexible supplies, a trivial gloss of explanation of the demand side, by recourse to ‘use-value’ or ‘utility’ treated reductively.

A common-sense SAD understanding of commodity price determination – an understanding that is quite valid at one level – could prevail both in premodern and later times, wherever regular markets existed (whether or not that understanding referred merely to price movements or also to price magnitudes). On the other hand, it is virtually true by definition that science goes beyond the common-sense understanding of ordinary perception. What would be the point – the ‘value-add’, to use an economic metaphor – of an economic science that merely serves to confirm what common sense already knows, or is supposed to know? As Marx (1967: vol. 3, 817) himself comments, ‘all science would be superfluous if the outward appearance and the essence of things directly coincided’. Science is only really doing its job when it uncovers principles or processes which are not evident to mere common-sense perception. And the appearances are not necessarily wrong; they may be just superficial.¹² Hence, in relation to classical price theory, the idea that prices are determined by SAD is not so much wrong, as rather, not the whole truth, and missing the more fundamental truth. In the classical framework SAD are the *proximate* causes of prices, with supply adaptation to demand ultimately leading, via competition, to prices being regulated by the profit-maximizing technique of production plus a given distributive variable. But the purely formal distinction between proximate or surface determinants of phenomena and the deeper causes at work does not by itself decide the

¹² Nevertheless, they *can* be both superficial and misleading. From the standpoint of the individual firm or industry, the notion of prices as not merely resulting from, but also *explained by*, unit cost plus a profit rate on capital (or a profit mark-up on cost), can appear compellingly plausible; whereas at the system level it becomes evident that costs depend upon prices as well as prices depending upon costs (Steedman 1992).

substantive question of classical versus marginalist theory. Within the marginalist framework SAD are also understood to be regulated by deeper forces: utility and profit maximization with given preferences, resource endowments and available technology.

6. THE CLASSICISM/MARGINALISM DICHOTOMY

While Marx's notion of vulgar economy might legitimately be applied to SAD in some premodern as well as subsequent economic literature, his two dualisms evidently cannot be imputed to a classical/marginalist divide, except perhaps *by inference*. This is so, if only for the banal reason that Marx was not in a position to perceive the advent of marginalism in any significant sense. O'Donnell (1990: 5, 142–3, 166–70) supports the view that Marx's classical/vulgar dichotomy is not equivalent to the distinction between classical and marginalist theory, and also argues that it is 'related, but not identical' (p. 143) to his esoteric/exoteric dichotomy. The former non-equivalence further entails that Marx's notion of a dualism in Smith is significantly different from Dobb's two-traditions dualism – whether or not Dobb's dualism was inspired by Marx on Smith or by Marx's wider scientific/vulgar dichotomy. (Dobb makes no appeal to Marx on the matter.) O'Donnell's perception of a difference between the classical/vulgar and esoteric/exoteric dichotomies seems a distinction with in fact little difference: there is a clear alignment between the two dichotomies in terms of reality versus appearance, and so on. The one qualification to this is that description and analysis of the surface appearances of economic life are only 'vulgar' when inquiry is *limited* to the mere surface – which is clearly not true (in Marx's view) of Smith's political economy as a whole (O'Donnell 1990: 169).

How, in turn, does Sraffa's dualism compare or relate to the Marx and Dobb dualisms? An answer is assisted by reference to Fratini (2018b), which provides more detail on Sraffa's conception of the development of cost doctrines, from the beginnings of classical economics through to marginalism. Some quotations there from the Sraffa manuscripts are illuminating (with Sraffa quotations in single inverted commas):

Petty and the Physiocrats 'had the right notion of cost as "the loaf of bread"' [in the sense of necessary labour consumption]. (823)

'Smith & Ricardo, & Marx ... began to corrupt the old idea of cost – from food to labour'. (832)

'It is a purely mystical conception that attributes to human labour a special gift of determining value.' (826)

'there are in A. Smith's doctrine two distinct ways of representing cost of production: as amount of labour, of a "toil and trouble" required for producing a commodity, or as a stock of material goods, which are used mainly for supporting that labour. ... A. Smith ... could for many purposes treat the two quantities as equivalent.' (824n)

Marshall's reference to Smith concerning the idea of cost in terms of efforts and sacrifices [i.e., subjective inducements] was deemed by Sraffa as a 'futile and misguided' attempt 'to bridge over the cleavage [from classicism to marginalism] and establish a continuity in the tradition'. (827)¹³

Sraffa's dichotomy is not identical to Marx's scientific/vulgar dualism, not least, because Sraffa had a further fifty and more years of economics to consider; but the two sets of conceptions do not contradict each other (they can both be embraced, without inconsistency). And Marx's dualism is obviously *informing* Sraffa's thinking and language. Sraffa's comments on Smith also rather conclusively point to Dobb's dualism having been at least partly inspired by Sraffa (with whom Dobb had a rather close relationship), although one may suggest that Dobb drained the interpretation of

¹³ In private correspondence, Saverio Fratini also drew my attention to the following Sraffa unpublished remarks on Smith. Alluding to a comment on Ricardo by William Stanley Jevons: 'It is A. Smith that shunted the car on the wrong track' (Sraffa Papers, Trinity College, D3/12/11: 66). And this statement, the latter part of which is evidently intended ironically: 'A. Smith had strong "vulgar" tendencies: he can truly be said to be the "founder of modern economics"!' (D3/12/4: 10).

Sraffa's nuance (and irony). To be sure, Smith's 'toil and trouble' formula could be used to impute a distinguished pedigree to the subjective theory of value, but Sraffa regarded it as a *misuse* in relation to the substance of Smith's political economy. Notwithstanding such later marginalist Whig history, toil and trouble play no role in Smith's actual theory of normal or equilibrium prices. Nor does his treatment of wage differentials for heterogeneous labour open a role for subjectivism along marginalist lines (Aspromourgos 2011: 357). Sraffa's cost dualism is also much better focussed, analytically, than Dobb's dichotomy.

The question of the relation between Marx's dualism and the classical/marginalist divide is complicated, however, by the two distinct dimensions he gives to the vulgar: superficial economics and apologetic economics. While Marx was not in a position to perceive the advent of marginalism, let alone a marginalist 'tradition', when he characterizes Senior's 'abstinence' justification for profits as 'vulgar economy' (Marx 1967: vol. 1, 596–7), this has enough kinship with the marginal productivity theory of functional distribution for one to infer that Marx would so regard also the latter. And that doctrine is the fundamental cornerstone of the marginalist theory, since it is the essential basis for rising supply-price in commodity markets and for the supply-side theory of aggregate activity levels. In Marx's indictment of Senior, the emphasis of course is on the apologetic or ideological dimension of the vulgar economy notion. One may further suggest that the dimension of vulgar economics as ideological smokescreen will always be relevant in a discipline as attractive for, and vulnerable to, ideological capture as is economics (Aspromourgos 2009: 255–6).

But would Marx regard marginalism as superficial or popular economics as well – and if so, would he be correct? Let us not pretend to know what Marx's view on this would have been, if he'd lived, say, an additional fifty years or more. The extensive nineteenth-century attempts at SAD theories of prices (including the German 'use-value school'), in contradistinction to the classical objective approach to price theory, can be regarded as a victory for vulgar-superficial economics in the sense of Marx (whether or not they also played an apologetic role). But the marginalist theory of commodity prices, with its SAD functions and intrinsic interdependence with the marginal productivity theory of functional distribution is not an economics of superficial mere appearances – and is certainly and obviously not a form of 'common sense' (ill-informed or otherwise). This only serves to confirm that intellectual elaborateness and complexity are not at all a sign or guarantee of truth-value. There are premodern systems of thought that were elaborate and complex intellectual edifices, but also false or nonsense. Nor is intellectual (especially mathematical) beauty at all evidence of truth, particularly in disciplines lacking compellingly evident empirical test; there are beautiful lies. Hence the considered judgement on general equilibrium theory as an elaborate theorization of an intrinsically imaginary world, which could not serve even as an *ideal type* for actually existing economies (Petri 2016, esp. pp. 60–67; Fratini 2018a).

Nevertheless, Marx's scientific/vulgar-superficial dichotomy also seems still a valid and useful notion for contemporary economic discourse, including academic economics. After all, as indicated earlier (section 2), the notion of science as understanding that penetrates beneath the surface phenomena of mere appearances is a very longstanding one in Western thought. And even if marginalist theory cannot be conceived of as vulgar-superficial, there are parts of contemporary economics which probably should be so regarded; e.g., many applications of rational choice cost-benefit calculus to social life, generating a rather trivial psychology ('freakonomics' is the most salient example). In any case, whether or not it is accepted that there are vulgar-superficial elements in contemporary academic economics, this judgement cannot be made of it in its *entirety* (nor can it be said to be entirely ideological mystification). If, from Marx's standpoint, classical political economy can retain the status of a scientific project, even though having a vulgar dimension (superficial and apologetic), then contemporary mainstream economics can be acknowledged to have legitimate scientific content as well. The repudiation of the marginal productivity theory of distribution (and thereby also, the associated supply-side theory of activity levels) does not entail repudiating the entirety of what is happening in contemporary economics. And there is a difference between characterizing something

as non-science and as bad science – in the latter case, like some of those premodern systems referred to earlier.

One may finally here comment a little further on how the theory of economic activity levels and growth relates to these dualisms. The issue is, in fact, only possibly relevant to the dichotomy between the *reconstructed* classical approach from Sraffa forward, and marginalism – since there is no theory of activity levels to be found in premodern economics, vulgar political economy or classical political economy. There *is* a dichotomy in the literature of aggregate activity levels, between the supply-side approach of marginalism and John Maynard Keynes's demand-side approach; and as is well-known, the dominant view among those advancing the classical approach to distribution and prices since the 1960s has been to combine it with a demand-side approach to activity levels and growth.¹⁴ A key difference here is that in the marginalist framework price determination is *intrinsically* connected with a supply-side theory of activity levels, since a market-clearing condition with respect to the factors of production is simultaneous with the determination of commodity prices and aggregate activity levels. Here, the idea that competition, via wage and price flexibility, can bring about zero involuntary unemployment is capable of fulfilling an ideological function as well.¹⁵ On the other hand, the classical approach to distribution and prices does not foreclose the determination of activity levels and so, is compatible with a Keynesian demand-side approach to aggregate activity and growth. This is a further strength.

7. CONCLUSION

To the extent that marginalism became the overwhelmingly dominant belief system in academic economics, one could almost say that there turned out to be just *one* tradition – albeit subject to some minority contest from Sraffian, Keynesian and other perspectives. Why has not the genuine scientific economics prevailed? In light of the foregoing, one would have recourse to two sets of factors for explanation. On the one hand it can be attributed to ideological obstacles to sound science, a problem primarily of the social sciences, and of economics in particular. On the other hand, there are the inherent intellectual difficulties of social science in general and economic science in particular (on both sets of factors, see Aspromourgos 2009: 255–71). With or without a layer of ideological obfuscation to overcome, the coherent reconstruction of the classical approach required a remarkable intellectual effort.

In social science in general and economics in particular, the in-principle *singularity* of science – reflecting the singularity of truth – might have to acquiesce to the divisions and conflicts in human society being inevitably transported into the scientific endeavour. Pluralism would then appear as a kind of second-best solution to that problem. Perhaps in an ideologically sensitive and vulnerable discipline a genuinely scientific view has very great difficulty prevailing, to the point of becoming the majority view. But to the extent that there are two approaches to the theory of prices, classical and marginalist, these should not be understood as incommensurable 'paradigms' or 'visions'. The non-substitution theorem is a very tangible expression of their commensurability, pointing to the theory of functional distribution as the pivot upon which disagreement between the two approaches turns. In the end, if economics is to be a science, it will be singular. And the idea of cumulative scientific progress should be defended, even if, in economics, it occurs in fits and starts.

¹⁴ Following the lead of Garegnani (1978–79), which was written much earlier, with a version available in Italian (Garegnani 1964–65), in turn derivative from the theoretical part of Garegnani (1962). See the note by the author in Eatwell and Milgate (1983: 21n).

¹⁵ The wages fund doctrine is its precursor in this ideological role. Related to this, it was mentioned earlier (note 1) that SAD applied to explaining distribution has a much shorter history than SAD applied to commodities. This points to the former being more a creature of ideological imperatives with the rise of capitalism.

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