SCHUMPETER AND THE MEANINGS OF RATIONALITY *

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Abstract:

This paper discusses various meanings of rationality distinguished by Schumpeter – as well as related concepts like rationalisation – and connects them with widely remarked tensions or dilemmas in his substantive works. The well-known contrast between Schumpeter's commitment to equilibrium economics and his heterodox, evolutionary vision is analysed on the basis of the notions of 'rationality of the observer' and 'rationality in the observed', developed in his article on *The Meaning of Rationality in the Social Sciences*. Schumpeter's thesis of the obsolescence of the entrepreneurial function is also scrutinised, by investigating the coherence between his conceptions of rationality and of rationalisation. This topic is in turn connected with Schumpeter's assessment of the socialist calculation debate.

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1 INTRODUCTION

So far as vision is concerned, Joseph A. Schumpeter is in my opinion the greatest of all economists. But any scientific work must be an imperfect work in progress. As Schumpeter has taught us, scientific analysis is 'not simply a logically consistent process that starts with some primitive notions and then adds to the stock', nor 'simply progressive discovery of an objective reality'; it is 'an incessant struggle with creations of our own and our predecessors' minds' (Schumpeter 1954, p. 4). The imperfections which we – provisionally and fallibly – think we have found in scientific works do not, however, impair their value if these works 'open doors', to use the often quoted expression from Schumpeter's Bonn farewell speech (Schumpeter 1932). It is because of this quality that Schumpeter's work remains alive even if not all of its constituent elements are, or could reasonably be expected to be, equally convincing.

The least convincing of these elements – from my point of view – is apparent from his famous statement that 'so far as pure theory is concerned, Walras is in my opinion the greatest of all economists' (Schumpeter 1954, p. 827). I have argued elsewhere (see Graça Moura 2002, 2003, forthcoming), as have others, that Schumpeter's admiration for the Walrasian system, though intelligible as a product of methodological preferences, originates a series of tensions and inconsistencies in his substantive work due to a mismatch with his partly implicit ontology.

In this paper, I start once again from the contrast between Schumpeter's evolutionary vision and his commitment to the equilibrium paradigm. However, I propose to further illuminate this tension (and other, related tensions) by focusing on Schumpeter's reflections on rationality. I draw especially on his posthumously published article ('still only a sketch') on *The Meaning of Rationality in the Social Sciences* (Schumpeter 1991), written in 1940 for a Harvard discussion group on rationality which included Talcott Parsons, Wassily Leontief and Paul Sweezy (see p. 337, n. 1) and still, I think, relatively neglected (see, however, Arena and Romani 2002, pp. 177ff.; Festré and Garrouste 2008). My overall purpose is to explain how several meanings of rationality distinguished by Schumpeter – as well as related concepts like rationalisation – contribute to clarifying tensions and dilemmas in his substantive work.

The paper is structured as follows. Section 2 succinctly explains the incompatibility between Schumpeter's evolutionary vision and his equilibrium framework, and in so doing elaborates on the policy implications of each. In Section 3 I focus on Schumpeter's notions of 'rationality

of the observer' and 'rationality in the observed'. I explain how the former notion is connected with Schumpeter's conception of the nature of 'theory'; I explore the latter notion by scrutinising Schumpeter's notions of 'subjective rationality' and 'objective rationality'; and I use these meanings of rationality to elucidate Schumpeter's difficulties in formulating his vision and his tendency to argue that a world where rationality is procedural tends to produce the outcome which would obtain if rationality were substantive. In illuminating a problem, however, Section 3 will be seen to lead to a new one, which is the object of Section 4. In this section I investigate whether Schumpeter's thesis of the obsolescence of the entrepreneurial function – and, more generally, his conception of rationalisation – cohere with the views on rationality explored before (a topic discussed in Langlois (2007) and Andersen (2009)). I then connect this topic with Schumpeter's positivist position with regard to the socialist calculation debate. This section draws attention to a problem which follows from Schumpeter's acceptance of a framework where '[w]e do not want to consider acting men at all, but only the quantities of goods in their possession: we want to describe the changes of those quantities … as if they were carried out automatically, without paying further attention to the men that actually effect them' (Schumpeter 1908, p. 86)[1]. In committing himself to such an approach, Schumpeter is left without a theory of how markets actually operate and of the role of individual knowledge in this process. The relevance of this lacuna for the formulation of policies is obvious. A short conclusion appears in Section 5.

2 VISION AND EQUILIBRIUM IN SCHUMPETER, AND THEIR POLICY IMPLICATIONS

In its most general formulation, Schumpeter's vision can be described as an account of how, under certain structural conditions, a system *evolves* – changing qualitatively rather than quantitatively, or transforming itself in the course of its reproduction in time – due to the endogenous emergence of novelty and to the reaction, or adaptation, to this emergence[2].

[1] Translations from Schumpeter's German works are my own, unless a translation is indicated in the bibliography.

[2] In other words, Schumpeter's vision is evolutionary in Ulrich Witt's (2004) interpretation of the term, where evolution is the self-transformation of a system over time, encompassing the emergence and the dissemination of novelty. It is *not* evolutionary in the much more specific

Schumpeter repeatedly reminds us that he regards this vision as applicable to 'change in all spheres of social life, science and art included' (Schumpeter 1939, p. 97, n. 2; see also, e.g., Schumpeter 1912, pp. 535ff.).

In the economic domain, and in the capitalist institutional setting with which Schumpeter is primarily concerned, this evolutionary vision has a well-known, more specific formulation which underlies most of his substantive writings – first and foremost *The Theory of Economic Development*. In this formulation, individuals are represented as acting in a milieu characterised by a set of rules of conduct, which are usually tacitly known and which facilitate the deliberations that they must make in their daily lives. While they typically act within this traditional framework, individuals are, in varying degrees, capable of transcending particular rules or traditions. This type of action, entrepreneurial action, requires more conscious rationality and leads to innovation: to the introduction of new products, new processes, new organisational forms, etc. (see, e.g., Schumpeter 1934a, pp. 83ff.). Innovation is a creative *response*, dependent on the subjectivity of the entrepreneur and on specific objective conditions (see, e.g., Schumpeter 1947, pp. 222-223). In particular, this response depends on the institutional framework in which the entrepreneur operates: capitalism's *differentia specifica* is precisely the financing of innovation through credit creation by private banks (see, e.g., Schumpeter 1934a, p. 69), a feature which has a decisive impact on the pace, and shape, of the evolutionary process. Innovation stimulates imitation, as well as further innovation, and spreads throughout the economy, because of technological and economic interdependencies; and the swarm-like appearance of entrepreneurial action is behind the essential features of the business cycle, in the course of which firms who rely on the traditional ways of doing things must learn and adapt to change or disappear.

This process of creative destruction, in which firms and industries emerge, grow, change, decline, and disappear – or in which new ways of doing things are created and disseminated – is the most important cause of the rise and fall of individuals and families in the social scale (see, e.g., pp. 155-156); and, through this rise and fall, the social structure of capitalism, and the corresponding institutions, are reproduced in time. However, this reproduction of what we may style 'the capitalist order' (see Schumpeter 1928, p. 49) also entails its transformation. In particular, Schumpeter conjectures that the capitalist process progressively rationalises the

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Darwinian sense. On Darwinism in economics see also, e.g., Cordes (2006) and Vromen (2008). On the details of Schumpeter's evolutionary viewpoint, see Andersen (2009, 2011).

mind (see p. 72). Rationalisation manifests itself, on the one hand, in the way in which innovation is generated. The R&D department routinises the process whereby new ways of doing things emerge, firms tend to reproduce their market power over time, and the business cycle may become less marked. On the other hand, rationalisation engenders a tendency to increasingly regulate, control, or indeed slow down the process of creative destruction and to destroy the institutions of capitalism.

At this juncture, a reader unfamiliar with Schumpeter's writings and with the specific context in which he was writing, might plausibly be wondering where and how equilibrium, in the orthodox or Walrasian sense, is supposed to fit into this vision or assist in its analytical formulation. A century or so later, it is relatively easy to see that it does not. To begin with, it is unclear how entrepreneurial action in the Schumpeterian sense is supposed to arise out of an equilibrium system – which endangers the claim that novelty is endogenous to the economic domain. We already know that Schumpeter does have good reasons to make this claim. As his description of the 'circular flow of economic life' in *The Theory of Economic Development* suggests, he is envisaging a setting structured by rules, which guide everyday decision-making and which individuals are capable of deliberately changing. But this structured, psychologically meaningful setting cannot be converted into, or made equivalent to, an equilibrium framework where it is as if changes in the quantities of goods happen without the intervention of minds – where 'agents', so to speak, merely represent the logic of their positions. It might be objected that an equilibrium setting is still heuristically useful in as much as it enables Schumpeter to 'add' credit-financed innovation to it and, in so doing, to 'explain' the essential features of the capitalist economy: profit, interest, and the business cycle, with its expansion phase and a return to equilibrium which closes the argument. However, Schumpeter never succeeds in demonstrating this return to equilibrium. In converting his rule-based 'circular flow' framework into an equilibrium, moreover, he is distorting his conception of entrepreneurship as a *response*. He is in fact dividing human action into two categories, of which one is determined by 'given data' whereas the other – entrepreneurship – appears as unconstrained[3].

[3] For a fuller analysis of these problems and of their implications, see Graça Moura (forthcoming).

In view of the special issue for which this paper is intended, it is not superfluous to contemplate the policy implications of Schumpeter's vision and of the equilibrium framework to which he commits himself.

In Schumpeter's vision, political action, like human action in any other domain, takes place in a *structured* environment, where structure facilitates and constrains action; and policies and their aims result from standpoints which are likewise historically specific and institutionally conditioned[4]. In any case, however, the main purpose of economic policy is the implementation, preservation, or change of *rules* which contribute to structuring the environment in which economic choices are *made* by individuals, rather than pre-determined by a set of conditions.

If we specify a particular context and a particular goal – say, to facilitate a long term increase in welfare and the reproduction of the institutions of capitalism in time – we can behold policy in more concrete terms. As is apparent from Schumpeter's writings, it is a necessary (but not sufficient) condition for capitalism to work properly that certain rules are in place regarding the workings of its heart, the banking system (or, more generally, the financial system). Regulation must – *for instance* – preserve the independence of the banking system from politics, and prevent attempts of entrepreneurs to control banks and of banks to control industry (see, e.g., Schumpeter 1939, p. 118)[5]. Even with certain rules in place, however,

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[4] This observation leads to topics which, though very important, cannot be further considered in this paper. How certain political choices are facilitated or rendered more difficult depending on the specific institutional setting can be illustrated by Schumpeter's theory of democracy (see Schumpeter 1942, pp. 269ff.; Lakomski 2002, pp. 157ff.). The recognition that the standpoint from which policies are devised is relative and socially conditioned leads to the Schumpeterian concept of ideology. Ideology, incidentally, is linked by Schumpeter to the notion of vision and, therefore, present from the outset in the scientific process (see Schumpeter 1949; Schumpeter 1954, pp. 34ff.).

[5] The violation of these rules is characteristic of 'imperialism', which Schumpeter regards as the product of an atavistic disposition, a remnant of a previous *Zeitgeist*. This disposition may, however, be revived in particular circumstances. As Schumpeter puts it in a famous passage from *The Sociology of Imperialisms*:

bankers 'may … fail to be up to the mark *corporatively*', i.e., 'tradition and standards' may be absent to such an extent that 'wildcat banking' develops; and '[t]his in itself – whatever the legal rules about collateral and so on may be – is sufficient to turn the history of capitalist evolution into a history of catastrophes' (p. 117). Furthermore, of course, whatever the formal rules, traditions, and standards, error is inherent in human action and more likely where innovative activities are concerned.

Thus, the problem of devising appropriate rules cannot have an 'optimal' solution; and the scope for political action is enlarged. This is worth stressing, because the contours of Schumpeter's position in this respect are frequently misrepresented. As Christian Schubert (2013, pp. 230, 236) points out, Schumpeter does claim that, *on the whole* – not, of course, for all individuals or groups – *and in the long run*, capitalism has – or has had – a beneficial impact which outweighs its harmful impact; but this must not be confused with the proposition, often wrongly attributed to Schumpeter, that any amount of destruction brought

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'[T]here has come into being a close alliance between high finance and the cartel magnates, often going as far as personal identity. Although the relationship between capitalists and entrepreneurs is one of the typical and fundamental *conflicts* of the capitalist economy, monopoly capitalism has virtually fused the big banks and cartels into one. Leading bankers are often leaders of the national economy. Here capitalism has found a central organ that supplants its automatism by conscious decisions … [T]he situation … is really untenable both politically and economically. Economically, it amounts to a *reductio ad absurdum* … [W]e have here, within a social group that carries great political weight, a strong, undeniable, economic interest in such things as protective tariffs, cartels, monopoly prices, forced exports (dumping), an aggressive economic policy, an aggressive foreign policy generally, and war, including wars of expansion with a typically imperialist character' (Schumpeter 1919, pp. 200-202).

Schumpeter adds that the victims of this imperialist scenario are the independent traders, the small producers not covered by cartels, the 'mere' capitalists and, 'far more unequivocally', the workers (p. 203).

about in the process of creative destruction is necessary and should not be interfered with[6]. As Schumpeter writes in *Business Cycles*,

'proof, even if it were more satisfactory than it is, that depressions will find a "natural" end, does not in itself constitute an argument for letting things take their course or trusting to "the restorative forces of nature." The case for government action in depression, especially of government action of certain types, remains, independently of humanitarian considerations, incomparably stronger than it is in recession, whatever we may think of that proof' (Schumpeter 1939, p. 155)[7].

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[6] For a recent example of this claim, see Freeman (2014, pp. 675-676), who writes that, in common with all Austrians, Schumpeter wants to show that intervention is (always) misguided and attempts to provide 'a comprehensive response to both arguments for intervention: the humanistic argument that we should mitigate suffering; and the scientific argument that if we don't do something, things will get worse. Schumpeter can respond that the pain of depression is *necessary*.'

[7] Elsewhere, writing about the problems presented by depressions, Schumpeter observes that relief is '[n]ot only imperative on moral and social grounds, but also an important means to keep up the current of economic life and to steady demand, although no cure for fundamental causes' (Schumpeter 1934b, p. 115); and that 'futile as it is to hope for miraculous cures, it is exactly as wrong to believe that the evils of depression are all of them inevitable and that the only sound policy consists in doing nothing' (p. 117). Although '[t]here is no single and simple remedy', 'all those features of depressions, which spell widespread suffering and needless waste, can yet be taken care off' (p. 117). He approves of 'expenditure which will blot out the worst things without injury to the economic organism', provided that it is followed by sound fiscal habits; and argues that, because 'recovery is sound only if it does come of itself', there is 'a *presumption* against remedial measures which work through money and credit', which are 'particularly apt to keep up, and add to, maladjustments, and to produce additional trouble in the future' (p. 117). He also notes that, throughout history, 'measures for regulating and purifying financial practice' have justified themselves on balance (p. 116).

But what about the policy implications of an equilibrium framework, such as the one that Schumpeter adheres to? To begin with, it is important to note that in such a framework, as Tony Lawson (1994, 1997) elucidates, only policy makers can be said to choose and only to the extent that exogenous variables can be affected by their decisions. Once these variables take particular values, the system's behaviour is fully determined: everyone else merely responds mechanically to 'data'. Schumpeterian entrepreneurship is accordingly ruled out, as is evolution in our sense. However, even policy makers may turn out not to choose for long. As science discovers that the variables thought to be exogenous and controllable are after all explicable – i.e., endogenously determined according to some functional specification – the repertoire of moves previously available to policy makers is correspondingly reduced[8]. This world is certainly not the world of Schumpeter's vision.

3 FROM RATIONALITY OF THE OBSERVER TO RATIONALITY IN THE OBSERVED

Why should Schumpeter want to connect his vision to an equilibrium framework which, as we have seen, implicitly refers to another world? As many, including myself, have argued, this is explicable by his methodological preferences. In this section I attempt to add something to these explanations by examining Schumpeter's reflections on rationality, in particular his article on *The Meaning of Rationality in the Social Sciences*. I first present Schumpeter's notion of *rationality of the observer*, as distinguished from *rationality in the observed*, explaining how it is connected to his conception of 'theory'. I then explore the notion of *rationality in the observed* by scrutinising Schumpeter's distinction between *subjective rationality* and *objective rationality*. With these meanings of rationality specified, I explicate Schumpeter's proclivity for arguing that a world where rationality is procedural tends to produce the outcome which would obtain if rationality were substantive – a proclivity in evidence in *The Theory of Economic Development*.

[8] In other words, in this framework choice turns out to be incompatible with explanation: 'To the extent that variables are endogenized – choice is explained – 'society's' freedom of choice is seen to be illusory. Freedom appears to consist not in power of choice, but (*pace* Hegel) in recognition of necessity' (Reder 1982, p. 35, quoted in Lawson 1997, p. 10). For elaborations, see Lawson (1994).

3.1 Rationality as 'rationality of the observer' or, the nature of 'theory'

Schumpeter's *first* thesis in his paper on *The Meaning of Rationality in the Social Sciences* is that, with regard to the logical quality of the scientist's fundamental attitude, rationality in the social sciences is not distinct from scientific rationality in general. It is this logical quality that he calls *rationality of the observer* and of which he proceeds to underline 'a few surface features' (Schumpeter 1991, p. 316), without offering a full description. 'Generalizing Kirchhoff's definition of mechanics', Schumpeter defines science as 'the endeavor to describe phenomena we happen to be interested in, in the way most economical with reference to an assigned degree of accuracy' (p. 316). He then stresses that scientific procedure only admits logical inference, but does not have to restrict itself to observables; that the most economical, or 'optimal', way of describing can only be determined once a goal is chosen – which, however, is not a question of rationality anymore; and that rationality is necessarily 'relative to the information and mental equipment' available to the scientist (pp. 316-318).

'So far, all there is of rationality in social sciences emanates from the analyst', Schumpeter summarises. 'It is imported into the facts from the analyst's mind' (p. 319). In other words, *rationality of the observer* 'has in itself nothing whatever to do with the presence or absence of rationality in the human types or human actions observed, or even with the applicability of the concept of rationality to the subject matter under investigation' (p. 319). Schumpeter's *second* thesis is precisely that, in many cases, rationality in the social sciences is, indeed, *merely* rationality of the observer, which implies that the theoretical procedures of social scientists do not differ significantly from those of natural scientists. There are, he exemplifies, easily observable relations between economic time series. These relations can be expressed analytically, which may suggest the conception of a mechanism. In fact, Schumpeter proceeds,

'[w]e can choose these time series in a way that seems meaningful to us, replace the time series by the concepts that correspond to them, and build a rational model or theory that will display in the abstract some features of those relations and stand to reality as does, say, the scientific model of astronomy … The essential point is that here we have objectively observable quantities which do not, or at least need not, directly imply anything about human behaviour and with which I can, nevertheless, derive significant economic results. It is true, of course, and has been pointed out by Professor Parsons, that further analysis of those entities and the relations that I might set up between them, would inevitably lead to acting men …

[But w]herever we have entities that can be quantitatively expressed and display regular relations to other such entities, we can get some "laws" out of them in much the same way in which the physicist does and, again, the epistemological problems that may arise do not seem to differ from those inherent in scientific procedure in general' (pp. 319-320).

Many readers will recognise commonalities between the perspective presented and Schumpeter's other methodological writings. Kirchhoff's definition of mechanics, for instance, is invoked in a crucial passage from *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*, where Schumpeter criticises the conception that 'theory' should find the 'causes of phenomena' and the 'forces' and 'laws' that govern them, proposing instead that the core of any theory is *a statement of functional relations between quantities* (see Schumpeter 1908, pp. 37-38; see also, e.g., pp. 43, 47).

In turn, in his *History of Economic Analysis*, Schumpeter draws attention to the historically conditioned nature of scientific knowledge – though we are bound to make judgements with our standards, they 'cannot be accepted as the last word on scientific procedure' (Schumpeter 1954, p. 8 and n. 2) – and proceeds to describe the 'techniques of economic analysis', among them 'theory'. He notes that 'theory' means 'simplifying schemata or models' built on hypotheses which, though suggested by facts, are strictly speaking *arbitrary creations*, *mere instruments* framed to establish interesting results according to certain rules of procedure (p. 15). The rationale of this conception of theory is the same in all areas of science, he continues. When we analyse individual phenomena of a given class – 'economic, biological, mechanical, electrical, and what not' (p. 15) – we soon realise that we are using concepts common to all individual cases; and we then notice that all, or at least large sets of, these cases

'display similar features which, and the implications of which, may be treated for all of them together by means of general schemata ... And finally we discover that these schemata are not independent of one another but related, so that there is advantage in ascending to a still higher level of "generalizing abstraction" on which we construct a composite instrument or engine or organon of economic analysis … which functions *formally* in the same way, whatever the economic problems to which we may turn it' (p. 16).

The reference to Walras immediately afterwards suggests that the Walrasian framework is such an organon; and, once again, that 'theory' means functional relations. In other words, the instrumentalist conception of 'theory' put forward here, a conception allegedly general rather than specific to economics, is congruent with the previously presented conception of rationality as (merely) rationality of the observer, where rationality seems to mean the ability to formulate a functional specification of some sort.

Schumpeter adds a qualification, though. Economists, unlike physicists, possess knowledge of the *meanings* of economic action – knowledge which, he writes, can be interpreted in a way akin to logic:

'If I state, for example, that – under a number of conditions – instantaneous gains of a firm will be maximized at the output at which marginal cost equals marginal revenue (the latter equaling price in the case of pure competition), I may be said to be formulating the logic of the situation and a result that is true, just as is a rule of general logic, independently of whether or not anyone ever acts in conformity to it. This means that there is a class of economic theorems that are logical (not of course ethical or political) *ideals* or *norms* … we have, or think we have, the ability to understand meanings and to represent the implications of these meanings by appropriately constructed schemata' (p. 17).

This reinterpretation of the nature of economic theory – the recognition of a specificity of the social sciences – does not, however, appear to have very momentous implications, as is indicated by Schumpeter's criticisms of Weber or Hayek. Hayek's *Scientism and the Study of Society* is singled out on the same page as both a work of profound scholarship and 'an excellent example of how near to each other, in discussion of this kind, dwell truth and error' (p. 17, n. 6). Seeking to preempt the charge of scientism – understood as 'the uncritical copying of the methods of mathematical physics' (p. 17), rather than as objectivism – Schumpeter asserts that 'the concepts and procedures of "higher" mathematics have indeed been first developed in connection with the physicist's problems, but this does not mean there is anything specifically "physicalist" about this particular kind of language … [W]hat we borrow when we use, for example, the concept of an "oscillator" is a word and nothing else' (p. 18). 800 pages later he has caustic words for Weber's *verstehende Soziologie*:

‘There is no sense in asking what the falling stone is about beyond stating the law of its fall. But there is sense in asking what a consuming household is about … [T]his theory of the logic of the social sciences … is quite neutral as between the various kinds of analytic activity. In particular, economic theory in the traditional sense is not ruled out. And it makes precious little difference to the practical work of a theorist whether Mr. Methodologist tells him that in investigating the conditions of a profit maximum he is investigating “meant meanings” of an “ideal type” or that he is hunting for “laws” or “theorems.”’ (pp. 818-819)

In *The Meaning of Rationality in the Social Sciences*, however, Schumpeter elaborates on how the understanding of meaning makes us view models in the social sciences in a different light. This is his *third* thesis. Electing to focus now on the monopolist’s maximisation of profits, rather than on pure competition, Schumpeter first conveys that such a model is still ‘the product of the analyst’s mind as much as any physical theory is, and does not in itself say anything about reality or about anyone’s actual behavior or rationality’ (Schumpeter 1991, p. 321). But, because the model sets up a norm[9], which supposes the understanding of a meaning – because it specifies the conditions logically implied by, or conducive to, a particular end – it makes an assumption regarding rationality in the subject matter, or *rationality in the observed*. And ‘the whole usefulness of the model will depend on the degree to which that hypothesis is justified by the facts’ (p. 322). The norm in itself ‘is “valid,” whether there are any facts conforming to it or not … This is the situation which has given rise to the distinction between what in German is referred to as *Gelten* and *Sein*’ (p. 323), i.e., between to be valid and to be. But,

‘potentially at least, this norm is visualized as something capable of being realized by the firms which are the objects of analysis. This is an additional assumption which, e.g., the mathematician need not make. This is what I mean by rationality in the object and what distinguishes a type of rational schemata in the social sciences from, e.g., “*mécanique rationelle*,”, i.e., rational schemata in the physical sciences (as well as from other types, mentioned before, of rational schemata in the social sciences)’ (p. 323).

[9] A norm ‘in a sense akin to that of a logical rule or, possibly, even to that of an ethical imperative’, Schumpeter (1991, p. 322) now writes.

Schumpeter's third thesis, then, appears to signal that the ontological status of the assumptions regarding rationality in the observed is important. The norm set up by the observer must at least represent a possibility. Perhaps the specificities of the social sciences are not so innocuous after all.

3.2 Rationality as 'rationality in the observed': objective and subjective rationality

A large part of Schumpeter's argument in *The Meaning of Rationality in the Social Sciences* is devoted to a discussion of *rationality in the observed*. In this context, he distinguishes *objective rationality* from *subjective rationality*. The former, said to refer to the 'applicability of a rational schema to the actor's behavior', need not imply the latter, i.e., 'conformity of the actor's mental processes to a rational schema' (Schumpeter 1991, p. 326). We may call this Schumpeter's *fourth* thesis, though it is not labelled as such in his article. He also offers what may be termed a *fifth* thesis, which refers to the tendency of social scientists to obliterate all the previously mentioned distinctions by failing 'to bother about epistemological niceties' (p. 336) and *implicitly identifying rationality of the observer with the subjective rationality of the observed*[10].

Schumpeter's conception of *rationality in the observed* is what interests us here. The term in itself is suggestive of an ontological concern. But, as I will try to show, the scope for an

[10] This fifth thesis cannot be further discussed here. Schumpeter occasionally comments on this error throughout his paper (see Schumpeter 1991, p. 326), which he closes with an incisive digression on the uses and abuses of rationality in the history of thought, covering the Physiocrats, English utilitarianism (which Schumpeter particularly abhorrs), Marx (with a digression on ideologies as rationalisations), Marshall, Wicksell and Pareto (see pp. 331ff.). His overall assessment is that the overestimation of subjective rationality can often be corrected by a more careful formulation ('Much (though not all) of this could no doubt be formulated in terms of objective rationality and freed from the hypothesis of subjective conscious rationality', he writes of Marshall and Wicksell (p. 336); 'Most' of the economic propositions of English utilitarianism, including Bentham's, 'could I suppose be stated in such a way as to avoid the hypothesis of [subjective] conscious rationality. But the political theory of Benthamism could not' (p. 332)).

ontologically meaningful approach is limited. Instead, there is a tension in Schumpeter's article.

In a nutshell, my argument goes as follows. In his discussion of rationality as rationality *in the observed*, Schumpeter introduces, as we have seen, the notions of *objective* and *subjective* rationality. But objective rationality happens to be defined as the empirical adequacy of a model which is a specific product of the rationality *of the observer*. Objective rationality so defined does not contribute to understanding what rationality in the observed actually *is* or consists of: this is an ontological issue, which cannot be reduced to an epistemological one. What is interesting, however – and what renders Schumpeter's article difficult to interpret *and, of course, to convey* – is that his arguments repeatedly point to *another meaning* of objective rationality. He sees *subjective* rationality as limited and as part of a wider rationality in the observed, implying that there are different levels of consciousness in human action. In a figure which he used in his talk on rationality to the Harvard discussion group (see p. 323), he divides rationality in the observed into two components, which he calls *conscious or subjective rationality* and *subconscious or objective rationality*. In sum, Schumpeter seems interested in the nature of rationality and, more specifically, in the limited range of conscious rationality. But these interests are at odds with his initial positivist commitment.

Let us now go over these points in more detail. Recall, first of all, that Schumpeter has not given up his view of a rational model as a particular product of the rationality of the observer, consistent with a generalisation of the positivist conception of science implicit in Kirchhoff's definition of mechanics. Most of the time at least, he is thinking of rationality of the observer as something much more specific than 'understanding'. As his examples indicate, he is thinking of a rational model as the specification of the conditions *which necessarily produce, or imply, a given result* – not as the specification of its conditions of possibility.

If, however, objective rationality refers to the *applicability*, or *empirical adequacy*, of such a rational model – with due allowance for a degree of disturbance or deviation (see, e.g., p. 322) – then it does not tell us anything about what rationality *in the observed* exactly *is* and how it operates. For Schumpeter is, of course, *not* arguing that the *observed* reason as the *observer* does – quite the opposite:

'It is of particular importance to note that even if the model should fit anyone's behaviour this does not mean that the individual in question consciously aims at the result and still less that

he arrives at it by processes at all similar to the analytic procedure. Most businessmen, of course, do not know what a marginal cost and marginal revenue curve is; most of them would not know how to construct them, if they knew what they meant; and it is safe to say that not a single businessman's subjective processes are correctly described by saying that he is hunting for their point of intersection' (p. 321).

There are good reasons, then, for Schumpeter to use the expression 'objective rationality (rationality in the object) seen through the rationality in the observer' (p. 322). Yet it would seem necessary to understand what rationality in the object, or rationality in the observed, precisely *is*, and in particular its connection with consciousness and subconsciousness. Otherwise there is a risk of implicitly reducing rationality in the observed to rationality of the observer.

The Meaning of Rationality in the Social Sciences does not comprise a clear statement of the ontological meaning of rationality in the observed. Interestingly, though, Schumpeter nevertheless succeeds in intimating that objective rationality is not reducible to the applicability of a rational model[11]. And he also clarifies why he is interested in the range of subjective rationality.

His discussion of *objective rationality* is actually centred on the *difficulties* in formulating models that capture this rationality. In this respect, Schumpeter submits that it may be hopeless to attempt to transplant oneself into another cultural world, as is necessary in order to understand ends and judge the rationality of means[12]; that the range of rationality may be underestimated because a model fails, for instance, to incorporate the fact that individuals or

[11] This is already apparent in some of Schumpeter's statements quoted above.

[12] 'Max Weber affords a good illustration of the dangers I mean to refer to, when he denies rationality to the ancient Chinese mind on the ground, among others, that examinations in classical literature were tightened as a remedy for shortcomings the bureaucracy displayed in dealing with catastrophic floods' (Schumpeter 1991, p. 325).

groups pursue contradictory ends[13], or the fact that entities like social classes or business corporations do not act as such but through politicians or business executives with their own (likewise conflicting) goals (see pp. 324-325); or that rational action needs to be distinguished from rational result ('[e]very economic crisis may be cited in verification' (p. 325)).

Secondly, Schumpeter is obviously aware of the previously mentioned risk of *reducing rationality to rationality of the observer*, recommending an investigation of *the actual range of subjective or conscious rationality* to counter this risk:

'If our firm failed to adapt to the new environmental conditions from habit, laziness, lethargy, its behavior may, from the standpoint of its manager, yet conform to a rational model – he may be maximizing his welfare by not bothering. Now, just as in the case of altruistic behavior practiced from an "egotistical" wish for the satisfaction such a behavior yields … so we are in cases such as the one of the lazy manager in danger of losing our criterion of rational behavior: all behavior, so it seems, would have to be looked upon as tautologically rational ex visu of suitably chosen ends and horizons. The ways to encounter this danger – which, if not successfully encountered would limit us to observer's rationality – may be many. But recourse to subjective rationality seems to me to be one of the most feasible ones' (p. 330).

Thirdly, he offers an argument as to why, even when a rational model happens to fit, it may not be otiose to investigate the precise range of subjective or conscious rationality. Returning to his example of the monopolist's profit maximisation, he writes that, if we regard this model as *an interpretative scheme*, we may want to *explain* why it fits particular cases. Research into the range of the monopolist's subjective rationality would then help to provide *ontological*, rather than *epistemological*, grounds (*Realgründe* as opposed to *Erkenntnisgründe*) for observed behaviour (see pp. 326-327).

[13] This particular limitation is retrieved in the article's ironic conclusion, where Schumpeter (1991, p. 337) concedes that conflicting ends in human action cannot be rationally combined and that 'life is ontologically irrational'.

There is more in Schumpeter's article than can be discussed here, including more than a few disconcerting observations[14]. His navigation through the meanings of rationality certainly raises many questions. But the gist of the article, as I see it, is this: while he acknowledges the historical relativity of any methodology, including of course his own, Schumpeter accepts a conception of a model as a mere product of the rationality of the observer. In this conception, imported from the physical sciences, a rational model is the specification of the conditions which necessarily produce, or imply, a given result. Simultaneously, he is interested in the nature of rationality and in the range of conscious rationality in the social world. Throughout his article, he sees conscious rationality as a subset of a wider category, implying that there are different levels of consciousness and stressing 'environmental conditions, group interests, and so on that so happened to mold things' (p. 327). These concerns place him in a different league from those who implicitly assume a congruence between rationality of the observer and rationality in the observed; reduce rationality in the observed to conscious rationality; or reason as if individual rationality implies a socially rational outcome. While Schumpeter has penetrating observations to make about all these issues, the positivist frame of his argument stymies the elaboration of his ontological insights, giving rise to tensions in this methodological essay – as indeed is the case in his substantive work.

3.3 Rationality of the observer and of the observed in Schumpeter's substantive work

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[14] Among the most startling, at least *prima facie*, is a note where Schumpeter revises his meaning of subjective rationality. 'I suspect', he submits,

'that part of the opposition my theory of subjective rationality met in our group, especially from Professor Parsons, is due to my infelicitous terminology. Perhaps I should speak of personal rationality – meaning thereby rationality residing in a man rather than in a pattern – and I should not have used the word "conscious" since automatization of often repeated actions will make forms of behavior subconscious which are, nevertheless, included in my conscious rationality: If a mathematician solves a differential equation in the best known manner he is being "consciously rational" in my sense even if, in a particularly simple case, he writes down the solution quite mechanically' (Schumpeter 1991 p. 337, n. 4).

The tensions just highlighted – between rationality of the observer and rationality of the observed – are manifest in Schumpeter's substantive writings in the same way as in methodological ones like *The Meaning of Rationality in the Social Sciences*. The book that I first briefly consider, *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*, is still, primarily, a methodological defence of equilibrium economics. But it comprises substantive discussions, too, which in fact prefigure much of Schumpeter's subsequent work.

In this book, Schumpeter presents equilibrium economics as a *pure theory*, self-contained and therefore separate from other disciplines (see, e.g., Schumpeter 1908, pp. 33-34, 536ff.) – which, incidentally, is why general equilibrium is, in his famous later expression, the *Magna Carta* of economics. His aim is *to liberate theory from 'metaphysics'* (see, e.g., pp. 22-24) – the assumptions of pure theory are said to be merely hypothetical (see, e.g., pp. 46, 64, 67-68, 82, 531) and, in particular, devoid of psychological meaning – and *to equate it to theory in the exact natural sciences* – which are assumed to focus on functional rather than causal relations (see, e.g., pp. xvii, 37-38, 533-534, 536). He cautions against the belief that, 'because … we are talking about us and our actions, we … can "understand" events better, and indeed in a different sense, than natural events' (pp. 66-67), countering that the purpose of pure theory is simply to describe the workings of *a system of interdependent quantities* (see, e.g., pp. 86, 143)[15].

In taking such a position, the ever recalcitrant Schumpeter is obviously dissenting from his Austrian teachers. But his position is not Walrasian either. The singularity of his views on rationality is already apparent to some extent. In particular, rationality *of the observer*, as embodied in the Walrasian equilibrium framework, is not equated with rationality *of the observed*. The latter do not consciously optimise: 'One can digest very well without even knowing that one has a stomach', Schumpeter (1908, p. 580) writes, 'and we know that correct thinking is not nearly so necessary to correct action as one thinks: the motives and principles consciously known to the actor are often not those which in fact guide him'.

[15] By its nature, then, pure theory is incapable of solving practical problems (at least for the time being) and especially political issues (see, e.g., Schumpeter 1908, pp. 561, 574ff.). Those who resort to theory to address political issues are likened to Icarus; those who misuse it to make political points are said to be its worst enemies (see p. 575). The latter observation foreshadows Schumpeter's concept of the 'Ricardian vice' (see Schumpeter 1954, p. 473).

Moreover, Schumpeter already emphasises that human action encompasses not just adaptation to circumstances but also an 'energetic will', which leads to the pursuit of new paths (see, e.g., p. 568).

These ideas are expanded on in *The Theory of Economic Development* where, as explained in Section 2, individuals are represented as acting in a setting structured by rules, which facilitate their daily deliberations; and rule-following, or adaptive responses, are contrasted with creative responses, which demand more conscious rationality:

'[E]very man would have to be a giant of wisdom and will, if he had in every case to create anew all the rules by which he guides his everyday conduct … [But w]ithin the lines familiar to all, even the function of directing other people, though still necessary, is mere "work" like any other, comparable to the service of tending a machine … This is so because all knowledge and habit once acquired become as firmly rooted in ourselves as a railway embankment in the earth. It does not require to be continually renewed and consciously reproduced, but sinks into the strata of subconsciousness … [O]utside these accustomed channels the individual is without those data for his decisions and those rules of conduct which are usually very accurately known to him within them. Of course he must still foresee and estimate on the basis of his experience. But many things must remain uncertain, still others are only ascertainable within wide limits, some can perhaps only be "guessed" … There will be much more conscious rationality in this than in customary action, which as such does not need to be reflected upon at all' (Schumpeter 1934a, pp. 83-85).

Schumpeter's problem is how to reconcile this conception of rationality *of the observed* – encompassing not just adaptive but also creative responses, i.e., responses which, however rational, cannot be understood *ex ante* – with a Walrasian framework and a conception of rationality as rationality *of the observer*. This he does by interpreting the Walrasian conception as a description of the *meaning* of adaptive responses.

The assumption that conduct is prompt and rational is always a fiction, Schumpeter affirms (see p. 80); but it serves 'to bring out the *rationale* of economic behavior irrespective of the actual psychology of the households and firms under observations. There is, therefore, misunderstanding in the objection so often levelled at pure theory that it assumes the hedonistic motive and perfectly rational conduct to be the only forces actually at work in

economic life' (p. 10 and n. 2). In other words, although the Walrasian framework is descriptively false, Schumpeter surmises that adaptive behavior brings about a position approximate to general equilibrium – that there is a tendency to equilibrium. This approximate equilibrium provides the stability required for creative responses to emerge, and is periodically re-established when innovative activity ceases[16].

But this move, of course, signifies the distortion of Schumpeter's ontologically grounded conception of rationality in the observed. The latter is a conception of rationality as *procedural* rationality, to use Herbert Simon's (1976) expression – a conception which has a psychological and sociological meaning. Yet Schumpeter is now arguing that adaptive responses informed by this kind of rationality tend to produce the result which would obtain if rationality were *substantive* – which, as Richard Arena (2002, pp. 59ff.) shows, they do not. In Schumpeter's conception of adaptive response, but not in the Walrasian world, 'everyone will cling as tightly as possible to habitual economic methods and only submit to the pressure of circumstances as it becomes necessary' (Schumpeter 1934a, pp. 8-9); and, in any event, adaptation 'always offers difficulties' and perfect adaptation is often 'impossible' (p. 33). Even more precarious is the claim that an equilibrium tends to emerge after innovation ceases, as in this circumstance some of the rules supposed to guide conduct have been modified and must be learnt. At this point, in Arena's (2002, p. 60) words, the Walrasian approach is 'entirely useless'.

It is true that Schumpeter's reservations, as to the existence of a tendency to equilibrium and as to the significance of the results established by Walras, increase in the course of his work (see pp. 57-58). In his analysis of the Walrasian system in *History of Economic Analysis*, Schumpeter remarks, for instance, that '[w]e may question the value of a theory that holds only under conditions, the mere statement of which seems to amount to refuting it' (Schumpeter 1954, p. 1012); or that 'both Walras himself and his followers greatly underestimated what had and has still to be done before Walras' theory can be confronted with the facts of common business experience' (p. 1015). Nevertheless, he never wavers in his view of the centrality of 'the conception of an economic cosmos that consists of a system of interdependent quantities' (p. 918).

[16] This paragraph and the next retrieve my argument in Graça Moura (forthcoming).

4 ENTREPRENEURIAL OBSOLESCENCE, RATIONALISATION AND SOCIALISM

Schumpeter's idiosyncratic conception of rationality stands in contrast with Walras', with whom Schumpeter is often (somewhat lazily) associated without some of the necessary qualifications. Notwithstanding the existence of tensions in his writings, whether methodological or substantive, he does have an ontologically grounded notion of rationality in the observed as distinguished from rationality of the observer; and he conceives the former as *procedural* rationality.

There is, however, an ostensible difficulty with this argument, a difficulty about which something must be said. I refer to Schumpeter's famous thesis of the obsolescence of the entrepreneur, which repeatedly surfaces throughout his work:

'[I]n the course of time, work on the advancing rationalisation of the economy is itself being rationalised and thereby mechanised … [Technical progress] has become a matter of systematically conducted science … An increasingly large part of the entrepreneurial function, recently even the direction of a business, has progressively become a question of applying principles that can be learnt and proved … Eventually – if perhaps in a far distant future – we will arrive at a state where the economy will be a single great machine, which automatically develops … [C]reative work will still be necessary, but it will no longer demand the personality of leaders; it will just be a particularly qualified form of office work' (Schumpeter 1920, pp. 467-468).

'Progress becomes "automatised", increasingly impersonal and decreasingly a matter of leadership and individual initiative' (Schumpeter 1928, p. 71).

'The more accurately … we learn to know the natural and social world, the more perfect our control of facts becomes; and the greater the extent, with time and progressive rationalisation, within which things can be simply calculated, and indeed quickly and reliably calculated, the more the significance of [the entrepreneurial] function decreases' (Schumpeter 1934a, pp. 85-86).

‘Progress itself may be mechanized as well as the management of a stationary economy … [I]nnovation itself is being reduced to routine. Technological progress is increasingly becoming the business of teams of trained specialists who turn out what is required and make it work in predictable ways. The romance of earlier commercial adventure is rapidly wearing away, because so many more things can be strictly calculated that had of old to be visualized in a flash of genius’ (Schumpeter 1942, pp. 131-132).

Richard Langlois (2007) offers the most elaborate argument to the effect that this Schumpeterian thesis does reflect a fundamental tension. He proposes that Schumpeter in effect holds ‘two inconsistent views of the role of knowledge and ignorance’ (p. 33) – an ‘empiricist’ view, where rationality is bounded; and a ‘rationalist’ view, where rationality is substantive. As capitalism evolves, or so Schumpeter (wrongly) claims, the limits of rationality are gradually overcome and conscious rationality conquers ‘the previously unknowable future’ (p. 38).

Against this interpretation, Esben Sloth Andersen (2009) observes that, throughout Schumpeter’s writings, ‘progress’ consistently refers to an open-ended evolutionary process, without clear-cut welfare implications. Therefore, the mechanising, or automatising, of progress cannot mean ‘that its precise outcomes become predictable. What becomes “automatic” are, instead, the innovative activities of large firms: they tend to use a fixed proportion of their revenue for innovation and hire employees for performing this function’ (p. 169). Automatising simply means the automatising of a *process*.

In other words, perhaps Schumpeter’s thesis of entrepreneurial obsolescence *can* be interpreted in a way such that it is *not* contradictory with his previously described, ontologically grounded conception of rationality as procedural (or with his ‘empiricist’ conception, as Langlois terms it).

Now, the obsolescence thesis is a part of Schumpeter’s wider conception of *rationalisation*. In this context, as is well known, Schumpeter (1942, p. 122) conjectures that human history is marked by a gradual increase of the sphere within which individuals try to act – ‘more or less’, though ‘never wholly’ – according to their own lights, to logical rules, and to empirical evidence; and he adds that capitalism dramatically propels this process. Spreading from the economic sector, Schumpeter maintains, ‘this type of logic or attitude or method then starts upon its conqueror’s career subjugating – rationalizing – man’s tools and philosophies, his

medical practice, his picture of the cosmos, his outlook on life, everything in fact including his concepts of beauty and justice and his spiritual ambitions' (p. 124). As a matter of fact, '[w]hen the habit of rational analysis of, and rational behavior in, the daily tasks of life has gone far enough, it turns back upon the mass of collective ideas and criticizes and to some extent "rationalizes" them by way of such questions as to why there should be kings and popes or subordination or titles or property' (p. 122). In sum, the capitalist process 'chases from our minds, along with metaphysical belief, mystic and romantic ideas of all sorts', reshaping methods and ends, and producing, e.g., 'free thinking', feminism, or a focus 'in utilitarian ideas about the betterment of mankind which, quite illogically to be sure, seem to withstand rationalist criticism better than, say, the fear of God does' (p. 127)[17].

Schumpeter, then, does *not* equate rationalisation to advancement. To some extent, he regards it as the *abuse* of reason. He sustains that the rationalist attitude may rely on 'information and technique so inadequate' that its actions, 'and especially a general surgical propensity', may, 'even from a purely intellectual standpoint', come to appear inferior to the actions and anti-surgical propensities of eras when tradition exerted a stronger grip (p. 122).

Insufficient though these observations are to convey the whole picture that Schumpeter has in mind, they enable us to see that his conception of rationalisation has much in common with the Weberian notion of rationalisation as *Entzauberung* – as disenchantment and demystification, 'the disappearance of the supernatural and the metaphysical in favor of a hardheaded concern with the here-and-now', the substitution of bureaucracy for tradition, and the critical, albeit precarious, revision of rules of conduct (Langlois 2007, p. 19)[18]. Langlois' interpretation of the thesis of entrepreneurial obsolescence corresponds to the view that, in

[17] This summary account of rationalisation is based on *Capitalism, Socialism and Democracy* only. Schumpeter writes extensively on this topic in this book but also elsewhere (see, e.g., Schumpeter 1919, pp. 189ff.; 1920/21, pp. 462ff.), analysing multiple dimensions of this process not highlighted here. See also Lakomski 2002, pp. 152-153.

[18] Schumpeter refers in this connection to Weber as well as to Emil Lederer (see, e.g., Schumpeter 1920/21, p. 469; 1934a, p. 57, n. 1; see also De Vecchi 1995, pp. 164-165). For a general account of the connections between Schumpeter and Weber – including, e.g., the similarities between *Das Wesen…* and Weber's methodological appraisal of pure theory in economics – see Osterhammel (1987).

this particular element of his theory of rationalisation, Schumpeter draws instead on a Marxist (or indeed constructivist) 'super-strong conception of rationality and rationalization' (p. 19). In Andersen's interpretation, on the other hand, all the dimensions of Schumpeter's concept of rationalisation cohere. In this view, obsolescence simply means that innovation tends to become independent of leadership qualities: creative work becomes office work, as in one of the passages quoted above. Schumpeter is not assumed to hold the implausible view that the progress of reason somehow renders the future reliably calculable.

As the passages quoted above confirm, Schumpeter's phrasing is, in this respect, somewhat equivocal. But this, I think, is not because of a contradiction *in his ontology*. He does not believe that procedural rationality evolves into substantive rationality. No one does[19]. He does, however, as we have seen earlier, accept a conception of science where rationality is substantive; *which conception turns up again at this juncture* because of the link between entrepreneurial obsolescence and the economics of socialism.

Unlike the obsolescence thesis, Schumpeter's reflections on the economics of socialism can most certainly *not* be interpreted in two ways, though in this case that is not quite a merit. They evidently derive from his pure theory framework and rest on a misunderstanding of the Austrian position in the socialist calculation debate. Schumpeter writes about this topic at length in *Capitalism, Socialism and Democrac*y (see Schumpeter 1942, pp. 167ff.) and more concisely in *History of Economic Analysis* (see Schumpeter 1954, pp. 985ff.). Here we shall be concerned only with the broad lines of his argument[20].

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[19] As Langlois (2007, p. 41) argues, taking Schumpeter's obsolescence thesis too seriously 'puts us in danger of reading Schumpeter literal-mindedly. The force of the argument is in the texture of the landscape – not in its details.' Schumpeter, I believe, would respond to arguments about tensions in his work with equanimity, if not irony, knowing that his vision was essentially correct anyway.

[20] For a critique of Schumpeter's arguments on socialism, covering the same ground as here but in greater detail, see Keizer (1997). For a critical overview of the socialist calculation debate, see Lavoie (1985).

Schumpeter first clarifies that by socialism he means a planned economy, where a central organ controls means of production[21], although in his opinion this central organ must leave some freedom to the 'men on the spot' (see Schumpeter 1942, pp. 167-168). He then proceeds to argue that there is 'nothing wrong with the pure logic of socialism' (p. 172), insisting that Wieser, Pareto and Barone have already cleared this matter. The general logic of economic behavior 'automatically yield[s] a theory of the socialist economy as a by-product' (Schumpeter 1954, p. 987) and

'there exists for any centrally controlled socialism a system of equations that possess a uniquely determined set of solutions, in the same sense and with the same qualifications as does perfectly competitive capitalism ... Less technically, this means that so far as its pure logic is concerned the socialist plan makes sense and cannot be disposed of on the ground that it would necessarily spell chaos, waste, or irrationality. This is no small thing' (pp. 988-989).

Perhaps not. But it is hardly the relevant question either. As Hayek (1945) elucidates, Schumpeter is reasoning from a positivist viewpoint; accordingly, he is implicitly identifying rationality of the observer and rationality of the observed, and conceiving rationality as substantive. To him, in Hayek's words, economic phenomena

'appear as objectively given quantities of commodities impinging directly upon each other, almost, it would seem, without any intervention of human minds … [But] we must show how a solution is produced by the interactions of people each of whom possesses only partial knowledge. To assume all the knowledge to be given to a single mind in the same manner in which we assume it to be given to us as the explaining economists is to assume the problem away and to disregard everything that is important and significant in the world' (Hayek 1945, pp. 529-530).

[21] He already specifies this in an earlier article on socialism, *Sozialistische Möglichkeiten von heute* (see Schumpeter 1920/21, p. 458), written with the context in mind which Austria and Germany faced around 1920. This piece is not written from a pure theory perspective.

Oblivious of this, Schumpeter confidently states – this is actually the passage which motivates Hayek's criticism above – that the possibility of rational decision without markets for factors of production follows 'from the elementary proposition that consumers in evaluating ("demanding") consumers' goods *ipso facto* also evaluate the means of production which enter into the production of these goods' (Schumpeter 1942, p. 175). And he goes on to affirm, along similar 'blueprint' lines, that no particular difficulties arise if we leave the precincts of a stationary process, as there exists 'a rational and uniquely determined course for the socialist society to take whenever the opportunity for an improvement in the industrial apparatus presents itself' (p. 178). As Willem Keizer (1997, p. 92, n. 5) notes, however, the very start of this extension is, for those who realize what the Austrians meant in the socialist calculation debate, already question-begging: 'Suppose that a new and more efficient piece of machinery has been designed' (Schumpeter 1942, p. 178).

Schumpeter then turns to the discussion of the 'practical impossibility' of socialism, which he appears to identify with mere computational problems. He maintains that 'a glance at our solution of the theoretical problem will satisfy the reader that it is eminently operational' (p. 185). For the bureaucracy will 'command information sufficient to enable it to come at first throw fairly close to the correct quantities of output in the major lines of production, and the rest would be a matter of adjustments by informed trial and error' (p. 185)[22].

Nevertheless, Schumpeter is alert to 'practical' difficulties in a wider sense. He warns that the pure theory of socialism is formulated at 'a very high level of abstraction' and proves much less than is thought for its 'workability' (Schumpeter 1954, p. 989). In particular, it would be possible to accept 'the validity of the Pareto-Barone result' and yet 'hold that the socialist plan, owing to the administrative difficulties involved or for any other of a long list of reasons, is "practically unworkable" in the sense that it cannot be expected to work with an efficiency comparable to the efficiency of capitalist society' (p. 989). Much of what Schumpeter has to

[22] In his discussion of this part of Schumpeter's argument, Keizer (1997, pp. 81-83) shows that it involves a problematic shift between general equilibrium and partial equilibrium, as Schumpeter takes account of Lange's contribution to the socialist calculation debate.

say about socialism actually points to the unlikelihood that it will perform even acceptably[23]. Yet this does not mean that he forgoes the pure theory of socialism:

'Economic theory is slowly developing the *mental instruments* that are necessary in order to 'rationalize' planning … If a socialist society is defined as the perfectly planned society, then we may further say that modern theory is building the foundations of a truly 'scientific' socialism … To say that pure theory is of no interest for practice is as unreasonable as to say that pure mechanics is of no interest for building the machines we want' (p. 1145).

Schumpeter's views on the economics of socialism – which, as is well known, he culturally detests – draw attention to a seldom emphasised consequence of his positivist conception of science (see, however, Boehm 1990, pp. 229-230). In reducing adaptive action to a mechanical reaction, and misrepresenting rationality, Schumpeter is not just importing unneccessary tensions into his evolutionary framework, as explained in Section 2. He is also left without a theory of how markets actually operate and of the role of individual knowledge in this process. Though the workings of the market depend on the knowledge that individuals actually possess or acquire, and cannot be reduced to the mechanical movement of some quantities, in the framework which Schumpeter chooses rationality in the observed is ultimately ignored in favour of the substantive rationality of the observer. This inevitably colours, and blemishes, his claims as to the relative merits of market and non-market arrangements, precluding sound policy proposals.

Interestingly, there are times when his writing reveals an *echt* Austrian background – as in the first few pages of *The Theory of Economic Development*:

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[23] This issue is too vast to treat here. Schumpeter states that socialism will 'slow down economic development, but therein lies in part precisely its sense: that it will free human life and the best of human energy from economic concerns' (Schumpeter 1920/21, p. 494). This would not constitute an unacceptable performance, though. The likely failure of socialism has to do, rather, with the fact that the bureaucratic machine 'gives little scope for initiative and much scope for vicious attempts at smothering it' (Schumpeter 1942, p. 207). In addition to this, Schumpeter thinks that the prevalence of 'idyllic' views of socialism is likely to lead to 'complete and even ludicrous failure', perhaps insidiously masquerading as a success (p. 218).

‘If someone who has never seen or heard of such a state were to observe that a farmer produces corn to be consumed as bread in a distant city, he would be impelled to ask how the farmer knew that this consumer wanted bread and just so much. He would assuredly be astonished to learn that the farmer did not know at all where or by whom it would be consumed. Furthermore, he could observe that all the people through whose hands the corn must go on its way to the final customer knew nothing of the latter, with the possible exception of the ultimate sellers of bread; and even they must in general produce or buy before they know that this particular consumer will acquire it’ (Schumpeter 1934a, p. 5).

Schumpeter goes on to observe that the farmer learns from experience, in part inherited. Shortly afterwards, however, after generalising the farmer’s case, and introducing ‘simplifying’ assumptions, he writes:

‘This picture may be refined, and made to yield more insight into the functioning of the economic system, by means of a well known device. We assume all this experience to be nonexistent, and reconstruct it *ab ovo, as if* the same people … unaided by experience, had to find their way towards the goal of the greatest possible economic welfare by conscious and rational effort. We do not thereby imply that people would in practical life be capable of such an effort. We merely want to bring out the *rationale* of economic behaviour’ (p. 10).

And in a footnote (p. 10, n. 2) after the expression *ab ovo*, he adds: ‘This method is due to Léon Walras.’

5 CONCLUDING COMMENTS

This paper has focused on Schumpeter’s meanings of rationality, as well as on related concepts like rationalisation, connecting them to tensions in his substantive work. As we have seen, Schumpeter’s methodological discussion of rationality in *The Meaning of Rationality in the Social Sciences* is conditioned by his positivist acceptance of a conception of rationality as mere rationality of the observer. But there are at least hints of a different, ontologically

grounded conception of rationality in the observed, and more than hints regarding the limited range of conscious rationality.

The sort of tensions that we find here are replicated in Schumpeter's substantive writings. His commitment to Walrasian equilibrium is equivalent to the acceptance of a positivist conception of rationality as mere rationality of the observer, or as substantive rationality; and this conception is at odds with Schumpeter's picture of the circular flow as a setting structured by rules of conduct, which facilitate everyday deliberations – a psychologically and sociologically meaningful picture in which rationality is viewed as procedural. While this picture is congenial to Schumpeter's evolutionary vision, the Walrasian framework is not, which engenders tensions.

Schumpeter's thesis of the obsolescence of the entrepreneur may appear to damage his credentials on rationality; but, as we have seen, Schumpeter need not be interpreted as implying that, with rationalisation, calculation replaces imagination. On the other hand, entrepreneurial obsolescence is a topic which Schumpeter closely connects with socialism; and his stance in the socialist calculation debate once again reflects the pure theory conception of rationality as substantive.

I have opened this paper with the statement that, so far as vision is concerned, Schumpeter is in my opinion the greatest of all economists. But his belief in the usefulness of the Walrasian framework as a protocol to some extent distorts, or obstructs the elaboration of, that vision. In so far as this is the case, there is scope for rethinking, or reconstructing, Schumpeter's visionary conception; which in turn may contribute to a clearer understanding of what Schumpeterian policy is.

I have argued elsewhere (see Graça Moura, forthcoming) that such a reconstruction requires an ontologically grounded conception of process and order – in particular, a concept of order which replaces the notion of equilibrium – and that Schumpeter himself makes an important contribution to this alternative conception in his theory of social classes (Schumpeter 1927). To this I now add that a (more specific) theory of the market as a process, built on Austrian insights, is likewise essential.

To be compatible with Schumpeter's outlook, an Austrian conception of markets must, of course, avoid the arguably (see, e.g., Lawson 1994; Runde 2001) extreme sort of subjectivism which Hayek may be thought to uphold when he writes that '[s]o far as human actions are

concerned the things are what the acting people think they are' (Hayek 1942, p. 89); or that a commodity, an economic good, food, or money can be defined only in terms of views people hold (see p. 94). As Schumpeter (1954, p. 919, n. 23) suggests, 'any complete subjective theory must be also objective and vice versa'.

Some will think that, even so, an Austrian conception is based on a view of entrepreneurial action which stands in fundamental contrast to Schumpeter's. But this impression is, to a large extent, a product of the distortion caused by Schumpeter's equilibrium framework, which imposes a stark distinction between (mechanical) adaptation, fully determined by 'given data', and entirely unconstrained (exogenous) innovation. Witness Schumpeter's words, with which I close:

'Seen in this light, the entrepreneur and his function are not difficult to conceptualize: the defining characteristic is simply the doing of new things or the doing of things that are already being done in a new way (innovation). It is but natural, and in fact it is an advantage, that such a definition does not draw any sharp line between what is and what is not "enterprise". For actual life itself knows no such sharp division, though it shows up the type well enough' (Schumpeter 1947, p. 223).

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