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The Incommensurability, Incompatibility and Incomparability of Keynes's and Walrasian Economics

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Abstract

The Cambridge Journal of Economics witnessed an important debate between Mark Pernecky and Paul Wojick on the one side and Rod Thomas on the other about the usefulness of Thomas Kuhn's sociology and philosophy of science in explaining why Keynes's revolutionary ideas exposed in the General Theory have been 'lost in translation'. This brief note is an attempt to reconcile Pernecky and Wojick's claim that Keynes's new economics of the General Theory and Walrasian General Equilibrium are incommensurable paradigms in a Kuhnian understanding and Thomas's critique that – if they were incommensurable – Pernecky and Wojick's appraisal of Keynes's paradigm as a better approximation to the 'real world' than Walrasian General Equilibrium is inconsistent within that very Kuhnian framework.

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I. Introduction

Pernecky and Wojick (henceforth P&W) published a very “insightful analysis” (Thomas, 2020, p. 1423) in the *Cambridge Journal of Economics* on the nature of Keynesian and Walrasian economics to better understand “why the key theoretical constructs found in the *General Theory* [...] have [...] been ignored or misrepresented: or they have been mistranslated when an effort has been made to ‘absorb’ them [...]” (Pernecky & Wojick, 2019, p. 770). According to P&W, this is not due to a conceptional vagueness on the part of Keynes, but due to the incommensurability of Keynes’s new economics and theorising on Walrasian general equilibrium. The lack of awareness of such paradigmatic incommensurability and the inability of most economists who attempted to make sense of the *General Theory* to disentangle themselves from preconceived ideas meant that they read Keynes’s theoretical contributions through the lens of Walrasian general equilibrium. As a result, “(t)his does an obvious injustice to Keynes and an even more important injustice to the goal of producing an accurate and ultimately helpful understanding of the ‘economic society in which we actually live’” (Pernecky & Wojick, 2019, p. 770).

By using the conceptions of ‘incommensurability’ and ‘paradigm’, P&W explicitly refer to Thomas Kuhn’s theory of scientific revolutions. For Kuhn, scientific revolutions occur when the reigning paradigm has fallen into ‘crisis’ due to internal (deductive) inconsistencies or external (inductive) falsification and will eventually be abandoned for a competing paradigm if (and only if) such a competing paradigm exists and is unaffected by the internal or external factors that triggered the crisis. Of course, the Great Depression of the 1930s has been seen by many as the external factor falsifying Walrasian general equilibrium economics in general or the (neo)classical, self-regulating economics of the Marshallian and Pigouvian mould in particular (which was the main target of Keynes’s attack on the ‘citadel’). Keynes’s new economics of the *General Theory* was taken as the new paradigm, eagerly accepted mainly by the younger generation of economists in the USA (see Stanfield, 1974) – the rising hegemon of academic economics after WW2. P&W’s point is that such a Kuhnian revolution never occurred because the necessary paradigm shift failed to materialise. And this was the case because early interpreters of the *General Theory* and, later, most other economists failed to

replace their lenses, instead of viewing the General Theory through their accustomed prism of the Walrasian paradigm, ignoring the problem of paradigm incommensurability¹.

Although Thomas (2020) found this analysis ‘insightful’ (see above), he criticises P&W for running into an internal inconsistency: “[...] if P&W are right in declaring Keynes’s ideas to be superior, then they must be wrong in thinking that Keynes and WGE [Walrasian General Equilibrium, A.H.] present incommensurate paradigms. To bypass this contradiction, P&W assume the virtues of a pre-Kuhnian philosophy of science and use it to contrast Keynes and WGE. But this resorts to a philosophy that their Kuhnian meta-framework overtly discards” (Thomas, 2020, p. 1423). The solution he proposes is to abandon the ‘Kuhnian prison’ as the backdrop for criticism of Walrasian general economics and to adopt “the philosophical attitude of critical rationalism” (Thomas, 2020, p. 1415).

II. The Incommensurability, Incompatibility, and Incomparability of Paradigms

I would like to begin my brief remarks with a disclaimer: I do not believe an economics journal to be the right place for a discussion of the philosophy and sociology of knowledge of Thomas Kuhn. However, it must be acknowledged that Kuhn’s conceptions of the ‘paradigm’ and ‘incommensurability’ are certainly vague and need interpretation. I will not engage in discussing what Kuhn meant or what Kuhn really meant. Therefore, I am not discussing whether Kuhn took ‘incommensurability’ and ‘incomparability’ as synonymous or, at least, supplementary, or whether he saw his philosophy of science as incompatible or even incommensurable (and, therefore, incomparable?) with critical rationalism. Rather, I take – eclectically – those parts of Kuhn’s theory – of course, as I understand them or as I believe them to make sense – which I rate as useful in understanding the development of the economic discipline.

The moodiness of Kuhn’s concept of a paradigm is legendary: it is said that his *Structure of Scientific Revolutions* (SSR) contains as many as 21 different definitions of what a paradigm is (see Masterman, 1970). This is why it might be advisable to borrow more definite content from the Lakatosian concept of Scientific Research Programmes (SRP), which is less catchy

¹ The disequilibrium economics of Robert Clower and the ‘rationing approach’ of Edmond Malinvaud are probably extreme examples of Walrasian interpretations of Keynes’s theoretical constructs, completely ignoring his analysis but merely inferring what Keynes must have “[...] had in the back of his mind” (Clower, 1965, p. 290).

but similar in conceptual meaning: a paradigm or SRP is the set of theories and models which form the backbone of scientific inquiry. What is more important than the label is the content: paradigms or SRPs comprise three dimensions:

- 1) The ontological or heuristic dimension is concerned with the essence of the object of inquiry: its basic constituents. It represents the ‘world view’ underlying a paradigm or, as Schumpeter termed it, its ‘pre-analytic vision’.
- 2) The epistemological dimension breaks down the pre-analytical vision situated in the ontological dimension into core and auxiliary assumptions or, in Lakatosian terms, determines the ‘negative heuristic’ which “specifies certain claims of the research programme as not revisable” (Brahmachari, 2016, p. 5) and the ‘positive heuristic’ forming a protective belt around the core axioms. This can be tinkered with if, for instance, empirical evidence or the pursuit of a particular perspective indicates it would be politic to do so.
- 3) The methodological dimension can be seen as ‘meta-methodical’, as it specifies the procedures accepted by the epistemic community to discriminate between ‘truth’ and ‘non-truth’ or ‘science’ and ‘non-science’. It is part of the professionalisation of a scientific discipline to agree on a common methodological foundation²

Given these considerations, the Kuhnian concept of incommensurability – just as moot as the ‘paradigm’ – may be brought to life: different paradigms are always (as a necessary and sufficient condition) incommensurable, as they are based on different ‘world views’ or ‘pre-analytical visions’³. Any set of theories that share the same ontological basis may be

² From a meta-methodological or philosophy of science perspective, we would not only have to establish procedures to decide what is accepted as established knowledge but also to decide which procedures are accepted to decide upon such procedures because there are different methodologies available (see Žukauskas, Vveinhardt & Andriukaitienė, 2018). However, there is no such ultimate meta-methodological procedure. Natural sciences, nonetheless, have commonly adopted a positivist stance which the economic discipline has come to mimic after some ‘Methodenstreite’ in its formative period.

³ The most eminent example of a scientific revolution and arguably the analytical foundation of Kuhn’s SSR (see Kuhn, 1957) – the Copernican cosmological revolution – is based on such a shift in the ‘world view’ or ‘pre-analytic vision’ which makes the ‘old’ geo-centric Ptolemaic paradigm incommensurable with the ‘new’ heliocentric Copernican paradigm: cosmology is thus either geo- or helio-centric, but evidently, it cannot be both. To make the point even clearer, we could direct our attention to the revolutionary shift in biology from a creationist-theologist to an evolutionary paradigm. Here, it is utterly evident that both paradigms are incommensurable and can be made compatible only when a common paradigmatic basis is accepted- as in Intelligent Design or Theistic Evolution approaches (see Klapwijk, 2011, p. 13ff). Therefore, the expectation of one referee that the incommensurability of paradigms may be overcome eventually appears to me to be unfounded or, rather, misconceived in the sense that theories formerly belonging to different paradigms may eventually become commensurable only when they accept the same pre-analytic vision – but then they no longer

incompatible in their epistemological and methodological dimensions – i.e. with respect to their specific assumptions in the protective belt (e.g. the assumption of imperfect markets is obviously incompatible with the assumption of perfect markets) or with regard to their methodical perspective (i.e. taking a static approach versus a dynamic approach) – yet they are certainly commensurable in forming a common paradigm based on a “[...] strong network of commitments — conceptual, theoretical, instrumental, and methodological” (Kuhn, 1970, p. 42).⁴ On the other hand, different paradigms – as incommensurable as they necessarily are – may (and actually will) share a common methodological understanding as a quality-control device and, therefore, may well be compatible in this respect. Finally, I do not see any reason why different paradigms – as incommensurable as they necessarily are – cannot be compared with each other as Thomas (2020) appears to suggest. In fact, if different paradigms coexist – a situation pluralists take to be the only healthy state of the economics profession – a comparison of paradigms is needed in order to make an informed choice between the use of any paradigm in the first place (e.g., Heise, 2020a). Moreover, if the comparison does not translate into a simple contrasting juxtaposition, modes and objectives of comparison must be conceived. Arguably, verisimilitude (i.e., the likelihood that conjectural knowledge is objective truth) is the most obvious candidate as the objective of comparison (and choice). However, if verisimilitude cannot seriously be taken as a rational criterion of comparison and choice due to the methodological restrictions known as the ‘Duhem–Quine critique’⁵, other objectives might be more practical: for instance, the realisticness of assumptions or the complexity of models (Ockham’s razor) in relating deductive outcome to empirical reality (for a more detailed discussion, see Heise, 2020a).

belong to different paradigms. Basically, there is no point to overcome incommensurability except for the reason to avoid paradigmatic pluralism – but this is exactly the direction the economic profession should not continue to follow (see Heise, 2017).

⁴ New Classical Macroeconomics and the different variants of neo- and standard-Keynesianism combine to form the Walrasian ‘Dynamic Stochastic General Equilibrium model (DSGE), yet they are incompatible with respect to (protective belt) assumptions of market structures and information availability. In terms of P&W’s contribution, sharing the same paradigms means, with respect to the different Keynesiansims, that they adapt and absorb Keynes’s theoretical constructs into a WGE ‘world view’ or ‘pre-analytic vision’.

⁵ According to the ‘Duhem–Quine critique’, only single theoretical statements can be objectively falsified, not entire paradigms. However, even falsifying single components of paradigms may cast light on the capabilities of paradigms and their status as ‘progressive’ or ‘degenerating’ (in Lakatosian parlance). As I have tried to show, the inability of standard neoclassical labour economics to explain the (negligible) impact of minimum wages on employment certainly casts some doubt not only on neoclassical labour market theory but also the entire paradigm (see Heise, 2020b).

III. Kuhn's SSR, Keynes's GT and Walrasian General Equilibrium Theorising

With respect to the controversy between P&W and Thomas, these elaborations have the following bearing: I wholeheartedly follow P&W's argument that Keynes's General Theory incorporates the outlines of an alternative economic paradigm which is incommensurate to theorising on Walrasian general equilibrium. And, therefore, I endorse the view that most of Keynesianism as depicted in textbooks and accepted by mainstream journals is a misconception of Keynes's ideas arising from Walrasian distortions – 'lost in translation! Moreover, I would personally subscribe to P&W's view that Keynes's new paradigm provides a better and more appropriate tool for understanding 'the real world' than Walrasian general equilibrium economics – and, if this is to mean that Keynes's paradigm is superior to WGE, I would also support that conclusion.

But this is only my personal view based on my assessment of the core assumptions of what I believe to be Keynes's paradigm as compared to the core assumptions of WGE. Yet this is where Rod Thomas's critique comes in: if there is no objective inter-paradigmatic comparison on the basis of verisimilitude, the choice of a paradigm must be based on more subjective criteria, such as an assessment of assumptions or model structures. Although this cannot be helped – certainly not by rejecting Kuhn's entire approach and replacing it with an alternative (i.e. Popperian 'critical rationalism'), which is to run into exactly the same problem of not being able to discriminate between competing theories objectively – it is simply to accept the pluralistic nature of the economic discipline and to advocate inter-paradigmatic comparison and methodological rigour as quality-control devices to shield the discipline against the accusation of pure relativism.

This, of course, is a crucial point: what are the core assumptions – the world view or pre-analytic vision – of Keynes's new economics in contrast to the core assumptions of WGE? The latter can be named rather easily: the axioms of rationality, (gross) substitution, the neutrality of money and ergodicity seem to be unchallenged in order to find a paradigm ontologically describing an inter-temporal exchange economy optimally allocating scarce resources as its world view or pre-analytic vision. However, with respect to the new paradigm exposed in the General Theory, such core assumptions encapsulating a different world view or pre-analytic vision are less obvious: Keynes not only failed to inform the readers of the General Theory about his alternative ontological base, but he also sowed some doubt about

the incommensurability of his new economics with WGE (or, rather, the Marshallian version of that paradigm) when he called his magnum opus ‘general’ instead of ‘alternative’ and at various occasions declared (neo-)classical economics to be the specific (full employment, full capital utilisation) version of his more general approach – does that not imply the compatibility and, indeed, commensurability of Keynes’s ideas and WGE? This at least appears to have been the appraisal of most fellow economists starting the chicken-and-egg discussion about which approach is the more general and which is the more specific. And P&W happen not to inform their readers about the evidence on which they built their judgement of incommensurability. Or, to put it more precisely: what is the incommensurable world view or pre-analytic vision in Keynes’s *General Theory* that sets it apart from the exchange paradigm of mainstream WGE?

Earlier versions of Book I of the *General Theory*, unfortunately, omitted in later revisions for the ‘principle of effective demand’, indicate that Keynes rejected the ontological basis of the exchange paradigm (which he labelled ‘barter’, ‘real exchange’ or ‘cooperative economy’) for something he called the ‘monetary economy’ or ‘entrepreneur economy’ (see Keynes, 1979a; Keynes, 1979b). Although Keynes remained rather silent about what exactly – in terms of its axiomatic structures – characterises this new paradigm and although he was not sufficiently aware of the importance of at least sketching his ontological basis, this void did not go unnoticed: it has been suggested that Keynes’s world view or pre-analytic vision is that of social reproduction under uncertainty based on nominal obligations (and private property as its underlying feature; see Heise, 2019), assuming as core axioms non-substitution, monetary non-neutrality and non-ergodicity (see Davidson, 1984; Davidson, 2005).

IV. Conclusion

This brief note was an attempt to reconcile P&W’s claim that Keynes’s new economics of the *General Theory* and WGE are incommensurable paradigms in a Kuhnian understanding and Thomas’s critique that – if they were incommensurable – P&W’s appraisal of Keynes’s paradigm as a better approximation to the ‘real world’ than WGE is inconsistent within that very Kuhnian framework. Accepting paradigmatic pluralism as the only adequate state of the economic discipline, comparing economic paradigms which are necessarily incommensurable must become an acknowledged branch of scientific inquiry within the field of economics in

order to prepare for the informed (but not necessarily an invariably determinate) choice between competing paradigms which every scientist has to make – and which P&W obviously made in favour of Keynes's new economic paradigm, yet without sufficiently disclosing their selection procedure to convince Rod Thomas.

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