

# 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.

*Key words:* Keynes, Kuhn, Paradigm, Incommensurability  
*JEL classification:* B 2, B 40, B 5

## **1. Introduction**

Pernecky and Wojick (henceforth P&W) published a very "insightful analysis" (Thomas 2020, 1423) in the Cambridge Journal of Economics on the nature of Keynesian and Walrasian economics in order 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 and Wojick 2019, 770). According to P&W, this is not due to a conceptual 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 and Wojick 2019, 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* were taken as the new paradigm, eagerly accepted mainly by the younger generation of economists in the USA (see e.g. 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 viewing the *General Theory* through their accustomed prism of the Walrasian paradigm, ignoring the problem of paradigm incommensurability.<sup>1</sup>

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 by-pass 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, 1423). The solution he proposes is to abandon the 'Kuhnian prison' as the

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<sup>1</sup> 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: 290).

backdrop for a criticism of Walrasian general economics and to adopt “the philosophical attitude of critical rationalism” (Thomas 2020, 1415).

## **2. 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. Although it must be acknowledged that Kuhn’s conceptions of the ‘paradigm’ and ‘incommensurability’ are certainly vague and in need of 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 incommensurate (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 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 indicate 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 foundation.

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’.<sup>2</sup> Any set of theories which share the same ontological basis may be 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: 42).<sup>3</sup> 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 (see e.g. Heise 2020a).<sup>4</sup> Moreover, if comparison does not translate into a simple contrasting juxtaposition, modes and

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<sup>2</sup> 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’ helio-centric Copernican paradigm: cosmology is thus either geo- or helio-centric but evidently it cannot be both.

<sup>3</sup> 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’.

<sup>4</sup> Of course, the choice can also be based on forms of compulsion (e.g. career perspectives) or simply ignorance (about rival paradigms).

objectives of comparison must be conceived. Arguably, verisimilitude (i.e. the likelihood that conjectural knowledge is objective truth) is the most obvious candidate as 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’<sup>5</sup>, 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).

### **3. 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 by an alternative (i.e. Popperian ‘critical rationalism’), which is to run into exactly the same problem of not being able to objectively discriminate between competing theories – it is simply to accept the pluralistic nature of the economic discipline and to advocate inter-

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<sup>5</sup> 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).

paradigmatic comparison and methodological rigor 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, neutrality of money and ergodicity seem to be unchallenged in order to found 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<sup>6</sup> – does that not imply the compatibility and, indeed, commensurability of Keynes's ideas and WGE?<sup>7</sup> 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

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<sup>6</sup> "We are thus led to a more general theory, which includes the classical theory with which we are familiar, as a special case" (Keynes 1936: XXIII).

<sup>7</sup> And is not Keynes's neglect of market imperfections in the *General Theory* rooted in his desire and strategy to make his paradigm as compatible – and commensurable? – with the orthodoxy?

aware of the importance of at least sketching his ontological basis,<sup>8</sup> 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 e.g. Heise 2019), assuming as core axioms non-substitution, monetary non-neutrality and non-ergodicity (see Davidson 1984; Davidson 2005).

#### **4. 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.

#### **Literature**

Brahmachari, D. (2016); Neoclassical Economics as a Method of Scientific Research Program: a review of existing literature; MPRA Paper No. 75341 (online at: <https://mpra.ub.uni-muenchen.de/75341/>; retrieved on the 11th of December 2020)

Clower, R. (1965); The Keynesian Counter-Revolution: A Theoretical Appraisal; in: Hahn, F. H., Brechling, F. P. R. (eds.); *The Theory of Interest Rates*, London, MacMillan, pp. 103 - 125

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<sup>8</sup> Which is something of a mystery, for he accused mainstream theory of precisely such "a lack in clearness and generality in the premises" (Keynes 1936: XXI).

Davidson, P. (1984); Reviving Keynes' Revolution; in: Journal of Post Keynesian Economics, Vol. 6, No. 4, pp. 561 – 575

Davidson, P. (2005); Responses on Dow, Lavoie and King on What Post Keynesian Economics is and Who Is a Post Keynesian; in: Journal of Post Keynesian Economics, Vol. 27, No. 3, pp. 393 - 408

Heise, A. (2019); Post-Keynesian Economics – Challenging the Neo-Classical Mainstream; in: Efil Journal of Economic Research, Vol. 2, Issue 8, pp. 30 - 51

Heise, A. (2020a); Comparing economic theories or: pluralism in economics and the need for a comparative approach to scientific research programmes', in: The Journal of Philosophical Economics, Vol. 13, No. 2, pp. 162-184

Heise, A. (2020b); Minimum wages and the resilience of neoclassical labour market economics. Some preliminary evidence from Germany; in: real-world economics review, issue no. 93, pp. 33 – 40

Keynes, J.M. (1936); The General Theory of Employment, Interest and Money, London, MacMillan

Keynes, J.M. (1979a); A draft of chapter 2 from the last 1933 table of contents: 2. The Distinction between a co-operative economy and an entrepreneur economy; in: Moggridge, D. (ed.); Collected Writings of John Maynard Keynes, Vol. 29: The General Theory and After, A Supplement, London, MacMillan, pp. 76 – 87

Keynes, J.M. (1979b); A draft of the chapter 3 from the last 1933 table of contents: 3. The Characteristics of an entrepreneur economy; in: Moggridge, D. (ed.); Collected Writings of John Maynard Keynes, Vol. 29: The General Theory and After, A Supplement, London Macmillan, pp. 87 – 102

Kuhn, T.S. (1957); The Copernican Revolution. Planetary Astronomy in the Development of Western Thought, Cambridge (Mass.), Harvard University Press

Kuhn, T.S. (1970); Structure of Scientific Revolutions, Chicago, Chicago University Press

Masterman, M. (1970), The Nature of a Paradigm, in I. Lakatos, A. Musgrave (eds.), Criticism and the Growth of Knowledge, Cambridge, Cambridge University Press, pp. 59-89.



Pernecky, M., Wojick, P. (2019); The problematic nature and consequences of the effort to force Keynes into the conceptual cul-de-sac of Walrasian economics; in: Cambridge Journal of Economics, Vol. 43, No. 3, pp. 769 – 784

Stanfield, R.; Kuhnian Scientific Revolutions and the Keynesian Revolution; in: Journal of Economic Issues, Vol. 8, No.1, pp. 97 - 109

Thomas, R. (2020); Keynes, Kuhn and the sociology of knowledge: a comment on Pernecky and Wojick, in: Cambridge Journal of Economics, Vol. 44, No.4, pp. 1415 - 1424