

A Century of Methodological Individualism

Part 3: the case of analytical Marxism

Paper for AHE Conference 2010 – please do not disseminate further

Andy Denis

City University London

a.m.p.denis@city.ac.uk

Version 1: May 2010

Abstract

2009 marks the centenary of *methodological individualism* (MI). The phrase was first used in English in a 1909 paper by Joseph Schumpeter in the *Quarterly Journal of Economics*. Yet after 100 years there is considerable confusion as to what the phrase means. MI is often invoked as a fundamental description of the methodology both of neoclassical and Austrian economics, as well as of other approaches, from New Keynesianism to analytical Marxism. However, the methodologies of those to whom the theoretical practice of MI is ascribed differ profoundly on the status of the individual economic agent, some adopting a holistic and some a reductionist standpoint. The purpose of the research of which this paper is part is to uncover and evaluate some of the meanings of the phrase *methodological individualism* (MI). The first paper in the series, “A Century of Methodological Individualism Part 1: Schumpeter and Menger” (Denis, 2009), considers the contributions of Joseph Schumpeter, who was the first to use the term, and of Carl Menger, considered by many to be the founder of MI. The second paper considered the contributions of von Mises and Hayek, concluding that Mises and Hayek based their methodological stance on fundamentally different ontologies, with von Mises building on the reductionism of previous writers such as Schumpeter and Menger, and Hayek, on the contrary, adopting a holistic ontology more in line with Adam Smith, Marx and Keynes. From an ontological perspective this seemed to leave Hayek as something of an outlier in the Austrian tradition. The final paper in the series concludes, touching on some of the more recent literature.

1 Introduction

2009 marked the centenary of *methodological individualism* (MI). The phrase was first used in English in a 1909 paper by Joseph Schumpeter in the *Quarterly Journal of Economics*. Yet after 100 years there is considerable confusion as to what the phrase means. Lukes (1968: 77) notes “the extraordinarily muddled debate provoked by the wide-ranging methodological polemics of Hayek and Popper”, while according to Udehn (2002: 480) “The participants in the debate appear frequently to misunderstand one another and argue at cross-purposes.” MI is often invoked as a fundamental description of the methodology both of neoclassical and Austrian economics, as well as of other approaches, from New Keynesianism to analytical Marxism (AM). However, the methodologies of those to whom the theoretical practice of MI is ascribed differ profoundly on the status of the individual economic agent, some adopting a holistic and some a reductionist standpoint. The purpose of the research of which this paper is part is to uncover and evaluate some of the meanings of the phrase methodological individualism (MI).

The approach adopted is to apply the intellectual apparatus developed in Denis (2004) to the arguments of these writers. In particular, I ask whether the concepts of **holism** – the standpoint that phenomena may be understood as emergent and based in the interrelationships between substrate entities, and **reductionism** – the standpoint that phenomena are to be understood as congeries of substrate entities taken in isolation, are able to clarify the standpoints to which they are applied.

The first paper in the series, “A Century of Methodological Individualism Part 1: Schumpeter and Menger” (Denis, 2009), considers the contributions of Joseph Schumpeter, who was the first to use the term, and of Carl Menger, considered by many to be the founder of MI. This examination of the writings of two foundational figures in MI suggests that both clearly operated within the reductionist paradigm. This implies that there is a fundamental methodological commonality between both these writers and others adopting a reductionist standpoint, such as Bentham and Ricardo, and Friedman and Lucas. On the other hand it does imply a surprising and profound difference in methodology between them and those writers, such as Smith and Hayek, with whom they might have been expected to share an approach.

The second paper, “A Century of Methodological Individualism Part 2: Mises and Hayek” (Denis, 2010), drew the conclusion that Mises and Hayek based their methodological stance on fundamentally different ontologies, with von Mises building on the reductionism of previous writers such as Schumpeter and Menger, and Hayek, on the contrary, adopting a holistic ontology more in line with Adam Smith, Marx and Keynes. From an ontological perspective this leaves Hayek as something of an outlier in the Austrian tradition. The final paper in the sequence summarises and concludes, with some reference to the more recent literature.

2 The relationship between parts and wholes in social science

The key question I am focusing on here concerns the relationship between parts and wholes. I would like to start by saying more about this, drawing on the work of Daniel Dennett on the 'intentional stance'. In my view a bottom-up explanation of organic entities in terms of particles and subordinate components of the thing studied will always be incomplete without an account of purpose, the reason the part is there, the function of the part in the whole. Where there is an organic relationship, the whole is a precondition for the explanation of the parts. That is not to say that congeries don't exist. Marx famously compared mid-nineteenth century peasant small holdings in France to potatoes in a sack (Marx, 1937). And, of course, where there are purposes, they do not override or displace causation but work *through* causation. The important bit of the job is to discover where there are top-down and bottom-up explanations and successfully to marry them up.

In discussing the behaviour of a person we could never be satisfied by an account, however complete, in terms of molecules and cells. We would need to know about the person's identity, his past, his goals, his preferences. While it is of course the case that every aspect of the individual is underpinned by material substance, by organic activity at the cellular and system level, knowing about these subordinate levels, to any desired level of detail, would still leave us asking for more, asking about the beliefs and motivations of the individual. This is what Hayek seizes on as the foundation for the claim that his methodological approach is 'individualist'. We can intuit what it is like to be a person because we ourselves are persons: we can draw on *Verstehen*:

it is the concepts and views held by individuals which are directly known to us, and form the elements from which we must build up, as it were, the more complex phenomena ... it is the attitudes of individuals which are the familiar elements and by the combination of which we try to reproduce the complex phenomena, the results of individual actions, which are much less known (Hayek, 1979: 65).

But this is only the start. This is an application of the intentional stance to other people. But they are not the only potential agents in the world. We can understand the purpose of things because we have purposes. We can think about the meaning of the Antikythera mechanism, or Paley's watch, because we know what it means to mean something. Whatever the provenance of either mechanism, we could not be satisfied by an account exclusively in terms of the component parts, the wheels and pinions and gears. We would have to be told how those parts interacted to achieve the purpose of the whole. For Dennett

There is no substitute for the intentional stance. Either you adopt it, and explain the pattern by finding the semantic-level¹ facts, or you will forever be baffled by the regularity – the *causal* regularity – that is manifestly there ... Even if you can describe, in matchless microdetail, every causal fact in the history of every giraffe who has ever lived, unless you go up a level or two and ask "Why?" ... you will never be able to *explain* the manifest regularities, such as the fact that giraffes have come to have long necks (Dennett, 1995: 421).

Now the big issue is, whether indeed there *are* causally efficacious entities operating at social levels above that of the individual human agent. For some it is obvious that there are not, for others equally obvious that there are. This is the issue of hypostatisation. Hypostatisation is the attribution

of substance or real existence to concepts or abstractions (Greaves, 1974: glossary entry for *hypostasis*). Mises sets out the view that hypostatization is a mental error with great clarity in a subsection of *The Ultimate Foundation of Economic Science* entitled "The Pitfalls of Hypostatization":

The worst enemy of clear thinking is the propensity to hypostatize, i.e., to ascribe substance or real existence to mental constructs or concepts.

In the sciences of human action the most conspicuous instance of this fallacy is the way in which the term *society* is employed by various schools of pseudo science ... society itself is neither a substance, nor a power, nor an acting being. Only individuals act ... Society does not exist apart from the thoughts and actions of people. It does not have "interests" and does not aim at anything. The same is valid for all other collectives (Mises, 1962: 78).

Nagel agrees. Pointing out that the 'extension' of, for example, the French Enlightenment, that is, whatever it is that the phrase "French Enlightenment" refers to, "cannot be articulated with unlimited detail", he suggests that this failure may lead to a 'hypostatic' conception of it as a causally efficacious unitary whole:

such a hypostatic transformation of a complex system of relations between individual human beings into a self-subsisting entity capable of exercising causal influence is the analogue of vitalistic doctrines in biology ... such hypostatic interpretations have been useless as guides in inquiry and sterile as premises in explanations ... [T]he methodological assumption that all collective terms designate either groups of human individuals or patterns of behaviour leads to a more fruitful way of identifying the extensions of such terms than does the perplexing hypostasis of mysterious super-individuals (Nagel, 1979: 537).

For writers such as Marx, Hayek, Keynes, Dawkins, Toynbee and Dennett, however, it is pretty much a given that such 'super-individual' entities exist, and the issue is to identify them and explain their working. For Keynes the class of *rentiers* and the institutional structure of atomistic capitalism are creations of society which served their own interests, interest which now diverge from ours (Denis, 2002b). For Hayek, the networks of social relations within which individuals are embedded undergo a process of natural selection such that the traditions we inherit embody the rules we must follow, even if we don't understand them. Traditions here clearly exist and follow their own logic. For Hayek, this logic is to act in our interest, but no mechanism is specified which guarantees this (Denis, 2002a). For Toynbee, the unit of social analysis is the civilisation, the 'intelligible field of study' (Toynbee, 1972: 45). The activities which take place within the civilisation are directed towards the maintenance of the civilisation, for example, the sustenance of a minority, including the soldiers, administrators and priests, who are free from the necessity of producing the material requirements of the society (Toynbee, 1972: 44). For Dawkins and Dennett, the individual is itself a hypostatization: individual organisms are 'gigantic lumbering robots' built by genes to serve as their vehicle, but a vehicle which comes to have its own interests, which diverge from those of its creators (Dawkins, 1989: 19, 332; Dennett, 1995: 471). Finally, for Marx, states and capitals, are hypostatizations of the activity of social individuals, organic social forms which have acquired their own interests, opposed to the interest of and parasitic on the human substrate of which they are formed (Denis, 2005).

It is not my purpose here to argue that all or indeed any of these views are correct. All that we need to say is that they are not all obviously incorrect. The possibility of non-human social entities cannot be dismissed *in limine*, but has to be explored and – if incorrect – refuted in each case.

3 Analytical Marxism

Analytical Marxism (AM) is a movement which emerged and largely receded again in the last quarter of the twentieth century, attempting to merge aspects of Marxian thought with analytical philosophy. Some of its principle members included GA Cohen, Jon Elster, and John Roemer (Van Parijs, nd). At its heart is the methodological view that “Formal models resting on assumption of individually rational behaviour, as instantiated by neo-classical economic theory and the theory of strategic games, can be used to understand the economic and political dynamics of capitalist societies” (Van Parijs, nd: 1). Van Parijs identifies eight core questions which AM addresses, touching on the falling rate of profit, the labour theory of value and the theory of exploitation, the status of traditional Marxist ethical statements, in particular regarding equality, and the future of socialism after the decline and fall of the supposedly socialist states. However, two of the key questions identified, and indeed the first two in Van Parijs’s list, implicitly and explicitly refer to the issue of MI:

(1) Are the central propositions of historical materialism to be construed as functional explanations, i.e. as explanations of institutions by references to the functions they perform? If so, are such explanations legitimate in the social as well as in the biological realm ? ...

(2) Is it possible, indeed is it necessary, for a Marxist to be committed to methodological individualism, i.e. to the view that all social-scientific explanations should ultimately be phrased in terms of actions and thoughts by individual human beings? Or are there some admissible “structuralist” Marxian explanations which are radically irreducible to an individualistic perspective? (Van Parijs, nd: 2)²

Concerns of MI are thus central to the AM project. In *Making Sense of Marx*, Jon Elster, a noted proponent of AM,

begin[s] by stating and justifying the principle of methodological individualism, not infrequently violated by Marx, yet underlying much of his most important work. The converse of the principle is that of *methodological collectivism*, which is closely related to two other methods of Hegelian inspiration, *functional explanation* and *dialectical deduction*” (Elster, 1985: 4).

In Elster’s view, MI is

the doctrine that all social phenomena – their structure and their change – are in principle explicable in ways that only involve individuals – their properties, their goals, their beliefs and their actions. Methodological individualism thus conceived is a form of reductionism (Elster, 1985: 5).

In contrast to MI,

Methodological collectivism – as an end in itself – assumes that there are supra-individual entities that are prior to individuals in the explanatory order. Explanation proceeds from the laws either of self-regulation or of development of these larger entities, while individual actions are derived from the aggregate pattern” (Elster, 1985: 6).

The clear implication here is that social science must seek explanations at the level of the individual taken in isolation; these individuals are logically prior to any social entities. To illustrate his notion of MI, Elster continues: “To go from social institutions and aggregate patterns of behaviour to individuals is the same kind of operation as going from cells to molecules” (Elster, 1985: 5). Firstly, we should note that this reference to *going from* institutions and cells *to* individuals and molecules, a passage which is apparently reversed in the account of good scientific method given on the previous page, simply means to pass from the *explanandum*, that which is to be explained, to the *explanans*, the putative explanation. Secondly, we should think carefully about what biologists do when they ‘go from cells to molecules’. What they do is absolutely *not* to take the molecules in isolation. Indeed, the molecules in question can only be understood as parts of the cell. One simply cannot get from naked molecules to the cell. The molecules of RNA, DNA, etc, can only be explained by reference to what they are there for. In other words, understanding of the micro presupposes the macro.

Desirable social science explanations, according to Elster, are three-tiered:

First, there is a causal explanation of mental states, such as desires and beliefs. Next, there is intentional explanation of individual action in terms of the underlying beliefs and desires. Finally, there is causal explanation of aggregate phenomena in terms of the individual actions that go into them. The last form is the specifically Marxist contribution to the methodology of the social sciences (Elster, 1985: 4).

The recipe for successful science described here is reductionist as I define it. We start with individuals considered in isolation from the “aggregate phenomena” which, on other views, might be held to influence or even determine the behaviour of the individual. The aggregate phenomena are presumed to be a consequence of the behaviour of individuals, but cannot themselves cause that behaviour.

According to Elster, ‘the rationale for reductionism’ is the “need to reduce the time-span between explanans and explanandum – between cause and effect – as much as possible” in order to reduce the risk of such errors as spurious correlation (Elster, 1985: 5):

these risks are reduced when we approach the ideal of a continuous chain of cause and effect, that is when we reduce the time-lag between explanans and explanandum. This, again, is closely associated with going from the aggregate to the less aggregate level of phenomena (Elster, 1985: 5).

While it is not clear to me what reducing the time-span between cause and effect has to do with going from the more to the less aggregate level phenomena, it is clear that all the action is presumed to take place at the micro level: it is at the micro level that the explanans is to be sought and the

macro level phenomena are merely epiphenomena, secondary by-products which play no further role.

An important issue which Elster raises concerns the ultimate desirability of different kinds of explanations. "In this perspective," Elster argues,

reductionism is not an end in itself, only a concomitant of another desideratum. We should add however, that a more detailed explanation is also an end in itself. It is not only our confidence in the explanation, but our understanding of it that is enhanced when we go from macro to micro, from longer to shorter time-lags ... [T]here is a real danger that attempts to explain complex phenomena in terms of individual motivations and beliefs may yield sterile and arbitrary explanations ... [T]his may be the case for the problem of finding micro-foundations for collective action. In such cases we are better off with a black-box explanation for the time being, although it is important to bear in mind that this is only *faute de mieux*. Methodological collectivism can never be a desideratum, only a temporary necessity (Elster, 1985: 5-6).

This presentation of the matter contains a concession to 'methodological collectivism', that is, to holism instead of reductionism, which it is important to appraise. From the standpoint of holistic approaches to social science, it is by no means a shortcoming of a theory that the explanation it offers only makes sense at the macro level. On the contrary, an explanation of social entities in terms of a description of the behaviours of micro-level agents may be no explanation at all if it fails to enlighten us as to the macro reasons why the micro-level pattern of behaviour occurs. Why does this tradition persist? Because the individuals concerned behave in such a way as to maintain it, because it is in some sense in their interest to do so. But why is it in their interest to do so? The micro-level explanation stops there. The macro-level explanation might be that the tradition has survived and developed within an evolutionary process, such that traditions which are good at presenting the human substrate with a set of incentives to act in support of the tradition itself are selected for. But that is to posit "supra-individual entities that are prior to individuals in the explanatory order". It is a standpoint that allows institutions and practices – the mafia, the catholic church, or the labour party – to have their own interests.

Elster's formulation contains a grain of truth however. To understand the point requires us to discriminate between two possible statements of methodological individualism:

- (a) The explanation of macro-level phenomena must be in terms of the behaviour of self-seeking individuals.
- (b) The explanation of macro-level phenomena must be consistent with the behaviour of self-seeking individuals.

Statement (a) is a statement of reductionism, while (b) is a statement of materialism, the view that individuals act in some sense in accordance with their perceived interests. Consider the example of calculation. This can be done with a digital computer, an analogue computer such as the Phillips machine, it can be done mentally, or with a stick drawing in the sand, or with an abacus. It cannot be done with the clouds or the stars in the sky. While there is some degree of substrate-neutrality, there are limits. A complete scientific account of calculation would include a description of what is

going on at the micro-level, in the cells of the brain, or the processor in a computer. An account of arithmetic, such as that in the *Principia Mathematica*, which has nothing to say about such substrate matters, is therefore in some sense incomplete. Similarly, Keynes's theory of aggregate demand, and Marx's labour theory of value, supposing for the moment that they are true, may be considered incomplete to the extent that they do not specify the precise agent behaviours, or rather ranges of behaviour, which would be consistent with them. But the contention that such theories are 'black boxes', the notion that we could drop them if only we had complete knowledge of the substrate would be rejected by holists. It is the macro-level description of what is going on which is key, the micro-level description a matter of filling in the detail. Indeed, economy and clarity is gained by *excluding* detail, not accumulating it. To adopt Elster's half-hearted, *faute de mieux*, acceptance of macro-level explanations, if need be, and to look for micro-level explanations wherever possible, is to adopt the strategy of looking for the cause of a traffic jam under the bonnet of the individual vehicles (Hofstadter, 1985: 787).

4 Conclusion

This paper has completed a sequence of papers exploring methodological individualism (MI) using the notions of holistic and reductionist ontologies developed in Denis (2004). The paper began by reviewing the relationships between wholes and parts in social science, and considering the crucial question of the existence of real hypostatisations. A brief consideration of the approach to MI of the analytical Marxist school of thought came to the conclusion that these writers adopted a reductionist ontology in which the non-existence of real hypostatisations was an axiom – an assumption not a finding. Ultimately the rejection *in limine* of non-human causally efficacious social entities appears implausible and unnecessarily restrictive.

Bibliography

Richard Dawkins (1989) [1976] *The Selfish Gene* Oxford: OUP

Andy Denis (2002a) "Was Hayek a Panglossian evolutionary theorist? A reply to Whitman" *Constitutional Political Economy* 13 (3), September, 275-285.

Andy Denis (2002b) "Collective and individual rationality: Maynard Keynes's methodological standpoint and policy prescription" *Research in Political Economy* 20, December, 187-215.

Andy Denis (2004) "Two rhetorical strategies of *laissez-faire*" *Journal of Economic Methodology* 11 (3): 341-353.

Andy Denis (2005) "Collective and individual rationality in the history of economic thought: the early Marx's theory of states as organisms". Unpublished working paper. Available online, URL: <<http://staff.city.ac.uk/andy.denis/research/marx.doc>> (accessed 23 May 2010).

Andy Denis (2009) "A Century of Methodological Individualism Part 1: Schumpeter and Menger" unpublished working paper. Online, URL: <<http://staff.city.ac.uk/andy.denis/research/methind.pdf>> (accessed 5 January 2010).

Andy Denis (2010) "A Century of Methodological Individualism Part 2: Mises and Hayek" unpublished working paper. Online, URL: <<http://staff.city.ac.uk/andy.denis/research/methind2.pdf>> (accessed 23 May 2010).

Daniel C Dennett (1995) *Darwin's Dangerous Idea. Evolution and the meanings of life* London: Penguin.

Jon Elster (1985) *Making sense of Marx* Cambridge: CUP

Milton Friedman (1962) *Capitalism and Freedom* Chicago: Chicago University Press.

Percy L. Greaves Jr (1974) *Mises Made Easier. Glossary for Human Action*. Available online from the Ludwig von Mises Institute, URL: <<http://mises.org/easier/h.asp>> (accessed 23 May 2010).

Friedrich Hayek (1952) *The Sensory Order. An Inquiry into the Foundations of Theoretical Psychology* London: Routledge & Kegan Paul.

Friedrich Hayek (1979) [1952] *The Counter-Revolution of Science. Studies on the Abuse of Reason* Indianapolis: LibertyPress.

Douglas R Hofstadter (1985) *Metamagical Themas. Questing for the essence of mind and pattern* New York: Basic Books

Steven Lukes (1968) "Methodological Individualism Reconsidered" *The British Journal of Sociology* 19(2): 119-129. Reprinted in Dorothy Emmet and Alasdair MacIntyre (1970) *Sociological Theory and Philosophical Analysis* London: Macmillan, 76-88.

Karl Marx (1937) [1852] *The Eighteenth Brumaire of Louis Bonaparte* Moscow: Progress Publishers. Available online from the Marxists Internet Archive, URL: <<http://www.marxists.org/archive/marx/works/1852/18th-brumaire/ch07.htm>>.

Ludwig von Mises (1962) *The Ultimate Foundation of Economic Science* Princeton: Van Nostrand. Available online from the Ludwig von Mises Institute, URL: <<http://mises.org/books/ufofes/ch5~4.aspx>> (accessed 23 May 2010).

Ernest Nagel (1979) *The Structure of Science. Problems in the logic of scientific explanation* Indianapolis: Hackett

Arnold Toynbee (1972) *A Study of History* Oxford: Oxford University Press

Lars Udehn (2002) "The Changing Face of Methodological individualism" *Annual Review of Sociology* 28: 479-507.

Philippe Van Parijs (nd) "Analytical Marxism" Available online, URL:

<http://www.uclouvain.be/cps/ucl/doc/etes/documents/1994.Analytical_Marxism__final_1.pdf> (accessed 23 May 2010). (Published in Dutch as "Analytisch marxisme" in *Vlaams Marxistisch Tijdschrift* 21(1), maart 1987, pp. 41–44 , and in German as "Analytischer Marxismus" in *Kritisches Wörterbuch des Marxismus* Band 1, Wolfgang Fritz Haug (ed.), Berlin: Das Argument, 1994, pp. 202-205.)

¹ Syntax is about the rules for manipulating words, semantics about their meaning. Dennett's discussion of what *West Side Story* and *Romeo and Juliet* have in common illustrates the point: what they share is "not a string of English characters, not even a sequence of propositions ... What is in common, of course, is not a syntactic property or system of properties but a semantic property or system of properties: the story, not the text; the characters and their personalities, not their names and speeches ... So it is only at the level of *intentional objects*, once we have adopted the intentional stance, that we can describe these common properties" (Dennett, 1995: 356).

² Of interest is the final comment of Van Parijs's brief paper, that

Having started with a critical inventory of Marx's heritage, it [sc the "September Group" of analytical Marxists] gradually took a more prospective turn, with a growing emphasis on the explicit elaboration and thorough defence of a radically egalitarian conception of social justice ... and a detailed multi-disciplinary discussion of specific reforms ... This development has arguably brought analytical Marxism considerably closer to left liberal social thought than to the bulk of explicitly Marxist thought" (Van Parijs, nd: 3-4).

In previous papers I have explored the relationship between the ontological approaches of reductionism and holism and the policy prescriptions which they might underpin. The relationship between the reductionist methodological statements of this group and the policies, described here as 'radically egalitarian', which it espoused, is suggestive and warrants further attention.