BALKAN JOURNAL OF PHILOSOPHY

Vol. 6, Issue 1, 2014

CONTENTS

Book reviews

Information for contributors

SPECIAL ISSUE OF BALKAN JOURNAL OF PHILOSOPHY 2014

SOCIAL ONTOLOGY

One does not need to be philosophically trained in order to discern that in every mundane scene we come across a "huge invisible ontology" (Searle 1995: 3) which is so thick and rich that it sometimes makes the world of brute facts hardly tangible as such. Social or institutional facts like money or the European Union, which seem to differ from natural facts like mountains or stones, are hard to grasp as facts as they are, in a certain sense, constructed or constituted. This is to acknowledge the difficulty in recognizing "that the ways in which we collectively think and communicate about the world affect the way that the world is" (Elder-Vass 2012: 4).

The unraveling of this metaphysical difficulty, however, undoubtedly requires special philosophical training since it poses a specific puzzle: social reality crucially depends on human practices – beliefs, intentions, descriptions, recognition, acceptance, etc. – while at the same time possessing a discouraging recalcitrance and the ability to exert its own power, shaping our identities and relations. In this sense, the main challenge before social ontology is to lay bare the intricate workings of this hybrid nature of social reality, which obviously possesses at once ontological objectivity and subjectivity. This challenge is itself summarized in the series of questions posed by Margaret S. Archer: "what is it that depends upon intentional human action but which never conforms to these intentions? What is it that is reliant upon people's conceptualisations but which they never fully know? What is it that is always activity-dependent but that never exactly corresponds to the activities of even the most powerful? What is it that has no organisational form without us, yet which also forms us its makers? And what is it whose constitution never satisfies the precise designs of anyone, but because of this always motivates its attempted reconstitution?" (Archer 1998: 190-1).

Numerous attempts have been made to deal with this specific ontological hybridity – analytical (John Searle, Raimo Tuomela, Margaret Gilbert, etc.), phenomenological and ethnomethodological (Alfred Schutz, Peter Berger and Thomas Luckmann, Harold Garfinkel, Melvin Pollner, etc.), systemic (Niklas Luhmann), critical realist (Roy Bhaskar, Dave Elder-Vass, Margaret S. Archer, Andrew Collier, etc.), Hegel-influenced (Robert Brandom, Robert Pippin, Heikki Ikäheimo, etc.), ANT (actor-network theory)-inspired (Bruno Latour, Michel Callon, etc.). Continuing these projects, the present special issue of the Balkan Journal of Philosophy addresses these and similar problems of social ontology.

Specifically, the BJP has invited contributions considering the different ways in which social entities are constituted, who or what is responsible for that constitution, what are the basic building blocks of social reality, what is the role of collective intentionality, language and recognition for bringing into existence such objects and whether and how they can be causally influential.

References

Searle, J. (1995) The Construction of Social Reality. New York: The Free Press

Elder-Vass, D. (2012) The Reality of Social Construction. Cambridge: CUP.

Archer, M. (1998) Realism in the social sciences. In: Archer, M., Bhaskar, R., Collier, A., Lawson, T. and A. Norrie (eds.) Critical Realism. Essential Readings. London and New York: Routledge.

From the Editorial Board
of *Balkan Journal of Philosophy*

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

Articles

Invited paper

SOCIAL EMERGENCE: RELATIONAL OR FUNCTIONAL?

Dave Elder-Vass
Department of Social Sciences,
Loughborough University
Loughborough
United Kingdom
e-mail: d.elder-vass@lboro.ac.uk

Abstract:

This paper outlines a relational variety of the theory of emergence and claims that it can be applied more fruitfully to sociology than the functional variety advocated by Keith Sawyer. Sawyer argues that the wildly disjunctive multiple realizability of social properties justifies a nonreductive approach to causal explanation in the social sciences (but also ontological individualism). In response, this paper argues, first, that the social properties he discusses are not wildly disjunctive, and secondly, that we can explain their causal significance more effectively with a relational emergence theory linked to the critical realist account of causal powers. Although these properties are multiply realizable, they are not emergent because they are multiply realizable, but despite being so.

Key words: Emergence, multiple realizability, reductionism, critical realism, mechanisms.

Introduction

Since it was advanced by Emile Durkheim over a hundred years ago, the idea that social structures might be causally effective as a consequence of being emergent has been controversial (Durkheim 1974 [1898]).[12] One of the most interesting recent contributions to the debate is Keith Sawyer's argument, drawn from the functionalist tradition in the philosophy of mind, that *multiple realizability* and *wild disjunction* provide a justification for regarding social properties as emergent and thus causally effective (Sawyer 2001, 2002, 2003, 2005). If it was viable, Sawyer's argument for emergentism would have important implications. Within sociology, it might offer a possible resolution of the perennial debate on structure and agency. Beyond it, it offers an understanding of emergence that could be applied in many other disciplines. Sawyer himself sees it as providing an opportunity to turn the tide of disciplinary imperialism by making sociology foundational to economics and indeed all the social sciences (Sawyer 2005, pp. 11, 225–9).

This paper will explain and evaluate Sawyer's argument from the perspective of a different kind of emergence theory: what I call *relational* emergence theory. It concludes that Sawyer's functional emergence is *not* applicable to most social properties. Many social properties are emergent, but the concept of multiple realizability does not explain *why* or *how* they are emergent. Instead, multiply realizable properties, when they are emergent, are emergent for the same reasons as other relationally emergent properties. The relational account offers a much more widely applicable version of emergence theory – a version, I suggest, that has been too readily dismissed in much of the mainstream philosophical literature.

The paper begins with a brief overview of the competing strands of emergence theory, then summarises the key elements of the relational version I advocate. It then outlines and evaluates Sawyer's argument.

[1] I would like to thank Jason Edwards and two anonymous referees for their very useful comments on an earlier version of this paper.

[2] Indeed Sawyer traces many uses of the concept back to Auguste Comte (Sawyer 2005, pp. 38–40).

Theories of emergence

Although emergence is a concept that has been invoked in a variety of contexts, philosophical discussions of it have been most heavily concentrated in the philosophy of mind, where it has been seen as a potential solution to the mind-body problem. Early emergentists, such as C D Broad, generally espoused a *strong* version of the concept.[3] For Broad a property of a (token) whole is emergent if it cannot be explained from the properties of the lower-level parts of the whole *and their relations with each other* (Broad 1925, p. 61). While a property that was emergent in such a sense (if one existed) would clearly be autonomous of lower levels, it seems that no scientific explanation of the property would be possible. As Horgan writes, "there is no explanation for why emergent properties come into being, or why they generate the specific non-physical forces they do. These facts are metaphysically and scientifically basic… they are unexplained explainers" (Horgan 2002, pp. 115–6). If mental properties were emergent in this sense, this would seem to provide a justification for treating them as causally autonomous from physical properties. However, there are few philosophers who consider that strong emergence in Broad's sense is a widespread feature of the actual world (Kim 1999, p. 18), and the philosophy of mind in recent decades has seen a series of attempts to theorise alternative versions of emergence that might justify treating mental properties as autonomous in some sense.

Perhaps the most successful of these, at least in terms of its influence in the philosophy of mind, has been the doctrine upon which Sawyer bases his argument: *non-reductive physicalism*, developed originally by Putnam and Fodor (Fodor 1974; Putnam 1975), which employed the concept of multiple realizability to justify the claim that there might be regularities of mental properties that could not be explained reductively as regularities of physical properties. At times this has seemed to be the default view of the mind-body problem. Shapiro, for example, introduced his critique of the view by writing that "Philosophers are near consensus that the multiple realizability of higher-level properties in lower-level properties stops theoretical reduction dead in its tracks" (Shapiro 2000, p. 635) (see also Sober 1999, p. 542).

As I have suggested elsewhere, however, attempts to invoke emergence in the philosophy of mind have been framed by what I have called the residual Cartesianism of the field, which is heavily oriented to the question of whether and how it might be possible to exempt mental properties from attempts to offer neurological explanations for them (Elder-Vass forthcoming). One consequence is that treatments of emergence in this field are mostly rather different from those outside it. Beyond the philosophy of mind, emergentist thinkers generally espouse some variety of what I call a *relational* concept of emergence. This is the version endorsed by most complexity theorists (for example Holland 1998; Gell-Mann 1995) as well as by critical realists like myself, and it also has some important advocates within mainstream philosophy (e.g. Searle 1992; Wimsatt 2006). While Sawyer's approach is a version of the multiple realizability tradition, applied to the social sphere, the approach that is advocated in this paper is a version of the relational tradition, applied to the social sphere.

Relational emergence and causal powers

In general, the relational approach to emergence argues that entities (i.e. objects or things) may have emergent properties, which are properties that arise *because of* the particular relationships that hold between the parts in a particular kind of whole: the particular ways in which the parts are organised that constitutes them collectively into a whole of this type. Thus, for example, in linking sociology to complexity theory, Smith has written "What defines such an emergent phenomenon is that it cannot be understood merely as an aggregative product of the entities or parts of the system but arises though their organization. Interaction often yields structures, forms that cannot be understood through simple linear decomposition of a system into its interacting parts" (Smith 1997, p. 55). And complexity theorists like Holland have stressed this same point: "Emergence is above all a produce of coupled, context-dependent interactions. Technically these interactions, and the resulting system, are *nonlinear*" (Holland 1998, pp. 121–2; Cilliers 1998, p. 43).

Relationally emergent properties can be contrasted with *resultant properties*.[4] These are properties of wholes that are also possessed by their parts, where the property of the whole does *not* depend on the specific relations between its parts that are char-

[3] I owe the usage of *strong* to describe this type of emergence to Boogerd et. al. (2005).

[4] This term, like emergence itself, was first defined by G H Lewes (1874-9).

acteristic of this kind of whole. A typical example is mass – the mass of a molecule, for example, is simply the sum of the mass of its constituent particles. Wimsatt has analysed the distinction between resultant and emergent properties in great detail (e.g. Wimsatt 2000), introducing the concept of *aggregativity* to denote the characteristics that make a property resultant:

> *Aggregativity*, a claim that 'the whole is nothing more than the sum of its parts', is the proper opposite to *emergence* … Aggregative system properties are degenerately simple cases of reduction where the organization of parts doesn't matter: they are unaffected by organizational rearrangements and have no mediating mechanisms (Wimsatt 2006, p. 448).

As Wimsatt argues, this means that a very broad range of properties are emergent; indeed aggregative properties are rather rare (Wimsatt 2006, p. 448). While some commentators have suggested that "there exist too many properties which are emergent in this sense" (Stephan 2006, p. 487), there is no necessity for emergence to be a rare phenomenon. On the contrary, in the critical realist version of this tradition, emergent properties underpin the entire causal process. For critical realists, emergent properties are also *causal powers*: they are properties of entities that enable them to have an effect on events, and all events are caused by the interaction of such powers (Harré and Madden 1975; Bhaskar 1975). Emergent properties thus take on a central place in understanding how the world works, as opposed to being somewhat rare occurrences that might enable us to justify dualistic treatments of, say, mind and the body.

Relational approaches to emergence argue not only that higher level properties are co-occurent with particular organisations of parts, but also that these higher level properties can be explained by such organisation. As von Bertalanffy put it:

> The meaning of the somewhat mystical expression 'the whole is more than the sum of the parts' is simply that constitutive characteristics are not explainable from the characteristics of isolated parts. The characteristics of the complex, therefore, compared to those of the elements, appear as 'new' or 'emergent'. If, however, we know the total of parts contained in a system and the relations between them, the behaviour of a system may be derived from the behaviour of the parts (Bertalanffy 1971, p. 54).

One consequence of this approach is that *entities* play a more prominent role in relational accounts of emergence than in many philosophical accounts. Relationally emergent properties are always properties *of* token entities, and they always arise *from* the composition and structure of the entity possessing them – from the parts of the entity, their properties, and the relations between them. In this paper I will call any complete set of parts of a token entity, along with the relations between them that constitute them into this entity, a *composition base* of the entity.[5] A relationally emergent property, then, always depends upon the composition base(s) of the entity possessing it.

We must go a little deeper, however, if we are to understand both relational emergence and the difficulties in Sawyer's account of functional emergence. Consider that any given entity can possess multiple distinct properties. My shirt, for example, is both a good insulator (a causal power that contributes to it keeping me warm when I wear it) and green. Each of these properties is the consequence of a distinct *mechanism*, and each mechanism may depend on a different subset of the entity's parts and the relations between them. The insulation provided by my shirt arises from one mechanism: it is constructed in such a way as to trap many small air pockets within its fabric, a consequence of the thickness of the fabric and the way it is woven together. Its being green arises from another: the molecules that make up its surface have a range of possible energy levels that causes them to absorb photons representing certain wavelengths of light but not others.

Let me define the *emergence base* of a property of an entity as the subset of the entity's parts, the properties of those parts, and the relations between them that the given property depends upon. The occurrence of any given property – an event – thus depends upon a causal process in which external factors, such as light, heat, and air in this example, interact with the emergence base of the property concerned.[6] Different properties of the same entity may therefore depend upon different mechanisms,

[5] There is some similarity between the concept of a composition base and what Kim calls the microstructural property of an entity (Kim 1999, p. 6).

[6] The idea of mechanisms as processes that underlie the causal powers of entities is also an important feature of Bunge's account of emergence (Bunge 1999, p. 21).

and different emergence bases. Each of those different emergence bases is a different subset of the entity's composition base.[7]

Eliminative vs. explanatory reductions

From the account so far it might seem that relational emergence is thoroughly reductionist, given its acceptance of the possibility that higher level powers can be explained in terms of lower-level entities, their properties, and the relations between them. Stephan, for example, has somewhat pejoratively described this variant of emergence as *weak emergence* and argued that it is "compatible with reductionistic approaches without further ado" (Stephan 2002, p. 79; 2006, pp. 486–8). There are, however, at least as many varieties of the concept of reduction as there are of the concept of emergence (Sober 1999, p. 559). Let us distinguish between two of these: *eliminative reduction* and *explanatory reduction*.[8]

Eliminative reductionism denies the causal effectiveness of the higher-level entities and powers concerned, and hence denies the need for (or value of) any science conducted in terms of these higher level entities. By contrast, in an explanatory reduction, the higher level power is explained by showing how it arises from lower level elements and the relations between them, but this is not taken to entail that the higher level entity is not causally significant, or that it can be eliminated from scientific explanations while retaining their full explanatory value. Relational emergence is compatible with a generalised explanatory reductionism, indeed it assumes that higher level powers are produced by mechanisms that we could in principle explain, and this idea that emergence is compatible with some forms of reductionism is gaining ground in the literature (e.g. Kistler 2006; Marras 2006; Wimsatt 2006, p. 460). But relationally emergent causal powers cannot be eliminatively reduced: these powers would not exist if the whole did not exist, and thus they are ultimately powers of the whole and not of the parts.

A resultant property, by contrast, *can* be explained without reference to the relations between the parts of the higher level entity, and thus eliminatively reduced. But emergent properties *depend upon* the existence of particular sets of relations between the parts of the entity possessing the property: relations that would not exist if the parts were not organised into this kind of whole. Hence any attempted eliminative reduction of an emergent property will suffer from a loss of relevant structure.

One important consequence of this approach is that rather than eliminating higher-level theories, explanatory reductions do precisely the opposite: they provide extra justification for them by demonstrating that they are well-founded in the theory of the lower level, that they are consistent with other accepted bodies of theory, and indeed that they extend their explanatory power (Kitcher 1998; Meyering 2000, p. 181). In Gell-Mann's words, they are not eliminated but "cemented" (Gell-Mann 1995, p. 112).

Relationally emergent properties are irreducible, then, in a rather weaker sense than some commentators have come to expect from the concept of emergence: they can be explained but not eliminated.[9] But this is still an irreducibility that is worth having, because it means that even if they can be explained, higher level entities and their emergent properties are still causally effective in their own right. We cannot ascribe the causal impact of such properties to lower level parts or relations, but only to that complex of parts and relations that *is* the higher-level entity. As Marras has written, "We need to distinguish the *attribution* of causal powers from the *explication of the mechanisms* by which such causal powers are exercised" (Marras 2006, p. 567). Thus, both the higher level entity and its lower level parts may each have causal powers in their own right, being those that depend on the level of organisation represented by the entity concerned (Wimsatt 2006, p. 458).

[7] There is a similarity here with Shapiro's concept of R-properties (Shapiro 2004, pp. 52-9), at least if we translate them from Shapiro's functional language into terms of mechanisms underlying causal powers, as Bechtel suggests (Bechtel 2008, p. 140).

[8] Searle makes the same distinction, using the term 'eliminative reduction' (Searle 1997, pp. 29-30, 212). The term 'explanatory reduction' is used in a similar sense to that used here in (Bhaskar 1975, p. 181) and (Antony and Levine 1997, p. 43). Wimsatt also uses very similar terminology (Wimsatt 2006). Also see (Elder-Vass 2005).

[9] Wimsatt has suggested, developing an argument first made by Nickles, that the common belief that inter-level explanatory reductions are eliminative is an error arising from the conflation of two different kinds of inter-theoretic relations (Wimsatt 2006; Nickles 1998). There is, incidentally, a parallel here with the functionalist argument: as Block says, functionalism too attempts to give us "reduction without elimination" (Block 1980, p. 177).

Relational emergence and social structure

Whatever their philosophical merits, such arguments are of little value to social scientists unless they provide us with tools for explaining the causal forces at work in the social world. Making this step from abstract ontology to a more concrete understanding of the entities and powers that populate the social world has been a major focus of my work (notably Elder-Vass 2010, chapters 4-8; and Elder-Vass 2012). Here I offer only the briefest summary of that work using a limited set of examples, in order to illustrate the point that this does indeed give us a viable way of theorising social structure.[10]

In the terms developed above, for social structure to be explained as a product of relational emergence we would have to identify the entities that were taken to have causal power, the mechanisms by which these powers were produced, and the parts and relations characteristic of those entities that interact in these mechanisms. Broadly speaking, I argue that the effects generally attributed to social structure are emergent causal powers of *social entities*: entities composed of people, and often of other parts as well, interacting in specific sorts of ways as a result of specific relations holding between them (cf Ylikoski forthcoming).

Perhaps the most obvious example is the case of organisations (Elder-Vass 2010, chapter 7): an orchestra, for example, is a social entity composed of the musicians who are members of it, and arguably also their instruments. Each musician occupies a position that is defined as a certain role: for example violinist, trumpet player, and conductor. The role is a bundle of norms about how the musician is expected to act in relation to other musicians, to their instruments, and to scores, etc, and when all the musicians concerned follow these normative expectations, the group has the collective power to play complex harmonious music. This is a causal power that is possessed by the group as a whole, but which would not be possessed by the individual members, even collectively, if they were not organised into such a group by virtue of entering into the specific type of relations with each other specified in their roles in the organisation. At a certain level it is fairly straightforward to explain how these interactions generate the collective power to make co-ordinated music, but it remains the case that these individuals would not be able to do so if they were not organised into a larger social entity of this nature, hence this is a causal power of the organisation, not of the individuals, although it is perfectly viable for us to explain the mechanism that generates this power.

Many other examples could be given. I have offered explanations, for example, of normative social institutions as the product of social entities called *norm circles* (Elder-Vass 2010, chapter 6). A wide range of social phenomena, including language, discourse and knowledge depend on normative considerations, and are in part a product of a variety of forms of norm circles (Elder-Vass 2012). Further forms of social entity may be identifiable as lying behind economic phenomena such as market systems and money (Elder-Vass under review). This is not to exclude the influence of human individuals in their own right: we too are entities with causal powers, which co-determine social outcomes (Elder-Vass 2010, chapters 5 & 8), but ours are not the *only* causal powers at work, as methodological individualists insist.

Relational emergence therefore offers us an alternative to methodological individualism in the social sciences: an alternative that on the one hand, does not deny that social properties can be explained in terms of individuals and the relations between them, but on the other, shows that social properties are nevertheless causally effective in their own right.

Sawyer's non-reductive individualism

By contrast with the relational version of emergence theory, Sawyer draws on Fodor's functionalist arguments in the philosophy of mind and argues for what he calls *nonreductive individualism* in the social sciences.[11] He claims that this is a form of emergence, and justifies it on the basis of *multiple realizability* and *wild disjuncture*. Others before him have argued against reductionism in the social sciences on the basis of multiple realizability, such as Daniel Little and Harold Kincaid (Little 1991; Kincaid 1994; Zahle 2003). However, Sawyer may be the first to draw quite such close parallels with nonreductive physicalism and claim this as a form of

[10] As Zahle has pointed out, the resolution of ontological debates may rest on the ability to demonstrate such benefits rather than on more abstract arguments (Zahle forthcoming).

[11] There is at first sight little or nothing in common between this functionalist tradition in the philosophy of mind and functionalism in sociology. Sociological functionalists claim that certain social phenomena exist because of the useful social functions they perform, whereas "functionalists in the philosophy of mind rather emphasized what a component in the organism did independent of whether it was beneficial to the organism" (Bechtel 2008, p. 136, fn 2).

social emergence. He himself distinguishes his argument from Kincaid's on the grounds that Kincaid neglected the issue of wild disjuncture (Sawyer 2002, p. 553). Nonreductive materialism argues on the one hand for

ontological materialism, the belief that all that exists is matter, thus rejecting various forms of Cartesian dualism and vitalism. However, nonreductive materialism argues that mental properties and states are irreducible to physical properties and states and that the science of the mind is autonomous from the science of neurons (Sawyer 2002, p. 539).

Thus a denial of the independent reality of mind is accompanied by an insistence on the irreducibility of mental properties and states to physical ones. Sawyer takes the validity of non-reductive materialism as read and seeks to apply a similar logic to the philosophy of the social sciences.[12] Nonreductive individualism is the analogous combination of *ontological individualism* – the claim that only individuals, and not social entities, are real in the social world – with the denial of *methodological individualism*, on the grounds that "social properties can participate in causal relations" (Sawyer 2003, p. 203). He argues that "social properties may be irreducible to individual properties, even though social entities consist of nothing more than individuals" (Sawyer 2002, p. 541). These two positions are reconciled by arguing that social properties participate in causal relations as *types* rather than as *tokens*, and Sawyer invokes Fodor's account of multiple realizability and wild disjuncture to support this argument.

It is difficult to make sense of this argument without recognising that it rests on a covering law or regularity theory of cause, as Ylikoski points out (Ylikoski 2009, p. 529).[13] Fodor argued that the concepts and laws of higher level sciences cannot be reduced to those of physics because the "natural kind predicates" of the higher level sciences – the entity or property types that appear in their covering laws – do not correspond to natural kind predicates in physics (Fodor 1974). In particular, the truth of law-like generalisations in the higher-level sciences was not necessarily dependent on a consistency of physical composition amongst the various instances or tokens of the higher-level predicates to which the generalisation applied – what have come to be known as different *realizers* of the higher-level type. There could therefore be a regularity at the higher level which could not be translated by a bridge law into a single corresponding regularity at the lower level because different cases fell under different lower-level regularities.

For a critical realist, this dependence of the argument for functional reduction on a covering law theory of cause is highly problematic. For realists, covering laws do not provide causal explanations, but simply *descriptions* of (usually highly imperfect) empirical regularities, which still require explanation. Those explanations generally take the form of accounts of the processes or mechanisms that contribute to bringing about the approximate regularity. Laws do not cause events; rather, interacting causal powers do, and each such power depends on a mechanism (Bhaskar 1975; Elder-Vass 2010, chapters 2 and 3).

But what the functionalist argument for emergence produces, if it is successful, is nothing more than a covering law. The whole argument rests on the possibility that a higher-level property brings about a certain event sufficiently frequently for this relationship to be judged as a covering law *despite* the fact that the lower-level phenomena underlying the property are different in different cases, so that it is not possible to describe a *single* covering law that links lower level property and the event concerned. We could recast the claim in more realist terms, by saying that in this case there is a single higher level causal power that is produced by different mechanisms in different cases. Such occurences are not impossible: by coincidence, or perhaps by some sort of evolutionary convergence, there might be multiple mechanisms that tend to bring about similar outcomes, and if this phenomenon occurred it would be interesting. But it is difficult to see why we should consider this to be a kind of emergence since the commonality of the property across different realizers does not in itself explain anything at all.[14]

[12] This paper will not address the validity of non-reductive materialism itself, focusing instead on the sociological version of the argument. It is worth noting, however, that non-reductive materialism is increasingly being challenged (e.g. Kim 1993; O'Connor and Wong 2005).

[13] Sawyer occasionally equates the presence of a higher level covering law with the possession of "autonomous causal powers" by the properties concerned (Sawyer 2012, p. 272), but the logic of his (and Fodor's) argument depends on adopting a covering law, as opposed to a causal powers, model of causality. He has suggested we can have both (Sawyer 2005, p. 85).

[14] Ylikoski has noted that Sawyer's failure to engage with the nature of covering laws and the basis on which causal

Sawyer suggests there is an important distinction between multiple realizability and wild disjuncture:

> Multiple realizability alone does not necessarily imply irreducibility; if there are only a few realizing states, or if those states display some common features, the reduction may not be problematic. However, reduction would be difficult if the neurobiological equivalent of a psychological term were an otherwise unrelated combination of many neurobiological concepts and terms… Fodor termed such a realization *wildly disjunctive*... Fodor argued that a true scientific law cannot have wildly disjunctive components and that wild disjunction thus implied that there could be lawful relations among events, described in psychological language, that would not be lawful relations in the language of physics (Sawyer 2001, p. 557).

It is clear from Sawyer's argument that wild disjuncture is a sub-class of multiple realizability, but it is not entirely clear what criteria distinguish cases of wild disjuncture. At one point, Sawyer talks in terms of a "threshold of complexity" (Sawyer 2001, p. 558); and he has enumerated a long list of features of complex systems that he suggests make wild disjuncture more likely (Sawyer 2004, pp. 271–7). Elsewhere, he seems to suggest that it is the sheer number of different realizations that defines wild disjuncture (e.g. Sawyer 2002, p. 546). Both variations, along with the suggestion in the quotation above that wild disjuncture makes reduction *difficult* rather than *impossible*, imply that this is an epistemological rather than an ontological argument for irreducibility, although Sawyer denies this (Sawyer 2002, p. 552). I suggest that there are both ontological and epistemological elements to the argument. The existence of wild disjuncture is an ontological question, but the obstacle that it poses to reducibility remains an epistemological one: it means that we need to identify many different causal explanations for different realizations rather than simply one or a few.

This is also the implication of Kim's well known critique of Fodor's argument. Kim argues that when a higher-level property is multiply realized, each distinct type of lower-level instantiation of the higher-level predicate could be explained separately, and so functionalism does not constitute a viable alternative to reductionism (Kim 1998, p. 116). Thus, for example, the mental property *being in pain* may be realized differently in human beings, reptiles, and Martians, but each case may be reductively explainable (Kim 1992, pp. 16–17). Where there is a large number of radically divergent lower-level realizations, it may be impractical to provide a reductive set of explanations for a single higher-level law, but it nevertheless remains true that the behaviour of each instance of the higher-level predicate may be reductively explainable in principle.

Sawyer suggests that Fodor's argument is significant for sociology because "most social properties of interest to sociologists seem to have wildly disjunctive individual-level descriptions" (Sawyer 2001, pp. 558). For example "an individual-level description of the social-level natural kind term 'competitive team sport' is likely to be wildly disjunctive" (Sawyer 2002, p. 549). On Fodor's argument, any causal law predicated on the properties of such a social-level natural kind will therefore be irreducible to a law expressed in terms of properties of its lower level parts, since the lower level properties involved in each case (or group of cases) will be different.

On the one hand, then, Sawyer believes that each token social event is caused by mechanisms that operate at the level of the individual. But on the other he argues that there are social laws (i.e. covering laws whose predicates are social properties) because there may be empirical regularities and thus causal laws that relate a given type of social property to a given type of social event, even though different token instances of this type of event are caused by different mechanisms at the individual level. Thus, he suggests, there can be social laws in which social predicates cause event types even though the event tokens are caused purely by individual predicates (Sawyer 2003, p. 214). He is somewhat hesitant about the scope of his argument: he does not claim that all social structures are emergent, but rather that there may be some social structures that are wildly disjunctive and if so these are resistant to explanatory reduction. It is thus an empirical question whether (and how many) such structures exist, and Sawyer's evaluation of how many there might be is rather variable (Sawyer 2004, p. 269; 2012, p. 272; 2005, p. 99).

claims are made is troubling (Ylikoski 2009, pp. 529-530).

What counts?

In order to judge such empirical questions we would require some criterion of whether a given set of cases was multiply realized and/or wildly disjunctive. As we have seen, Sawyer is far from clear about what these criteria might be.[15] The long quote in the previous section seems to suggest that there are two criteria for wild disjuncture: the number of different realizers and the degree of difference between those realizers.

It is difficult to see why the quantity of realizers should be significant. What difference in principle is there, for example, between a higher level regularity that is based in three radically different types of realizer and one that is based in a thousand radically different types? And if there is a difference in principle, what is the numerical threshold at which it kicks in? Perhaps if the number of different realizers was very large scientists might not think it worthwhile to identify each one, and be satisfied with stating the higher level regularity instead, but this is a purely epistemological basis for asserting irreducibility, and one that would always be vulnerable to improvements in scientific technique – if, that is, it ever actually occurred in the first place.

The degree of difference between realizers is more interesting, and this question has prompted some useful debate in the philosophy of mind. Both Shapiro and Bechtel have suggested that "two realizations should count as different realizations of the same phenomenon only if they involve different operations (i.e. different mechanisms)" (Bechtel 2008, p. 140).[16] This may be expressed using the concepts of the *composition base* and the *emergence base* of a property introduced earlier. Any given emergent property of a token entity, I have argued, is the product of a mechanism that can be explained in terms of the properties of the parts of that entity and the relations between them: its *composition base*. However, the mechanism underpinning the higher level property need not depend upon *all* the properties of the parts and *all* the relations between them. In some cases it may depend only upon a subset of the composition base: the *emergence base* of this property.

Whenever a token entity possesses a property whose emergence base does not include the entire composition base of the entity, there will be other properties of its parts, and relations between them, that are irrelevant to the determination of the property. *Hence many token entities may possess the same higher level property by virtue of possessing the same emergence base for that property, even though their other properties differ*. In his critique of multiple realizability theories, Shapiro offers the example of different coloured, but otherwise identical, corkscrews (let us say for the sake of the example that they are both double-lever or wing corkscrews) (Shapiro 2000, pp. 643-4). Since the colour of the corkscrew makes no difference to how and whether it can be used to remove corks, it is not, in my terms, part of the emergence base of the capacity of the corkscrew to be used to remove corks. Two corkscrews of different colours may have identical emergence bases and thus remove corks using the same mechanisms. Otherwise identical black and red corkscrews, on this account, would therefore not be different realizers of the property 'can be used to remove corks'.

Shapiro also suggests a slightly more challenging case: what if the corkscrews had identical designs but were made of two different metals (Shapiro 2000, pp. 644-5)? Unlike the colour of the corkscrew, the material is causally relevant: it must have a certain degree of rigidity and strength, for example, for the mechanism to work. Would these count as different realizers? One might argue that the mechanism by which such corkscrews works depends on the rigidity and strength of the materials but not on other properties of the materials, which therefore are not part of the emergence base, but on the other hand, the rigidity and strength of the materials are in turn dependent on their (different) molecular structures, in which case we could accept the view advocated by Pereboom in response to Shapiro that these *are* part of the emergence base of the capacity of the device to be used to remove corks (Pereboom 2002). Now we appear to have two different realizers of the property (though opinions might differ on that – Shapiro argues that the property of rigidity "screens off" the differences between the metails), but perhaps not wildly disjunctive ones (Shapiro 2000, p. 645).

Shapiro takes us further with the corkscrew example: what if we compare a double-lever corkscrew

[15] Shapiro points out that no philosopher has given a clear specification of what is required for two cases to be "distinct realizations" (Shapiro 2000, p. 636), and wild disjuncture presumably requires both this and a further specification of what kinds of distinct realization are wildly disjunctive.

[16] Sawyer also cites different mechanisms as one of his criteria of multiple realizability (Sawyer 2004, p. 267).

with a waiter's corkscrew (Shapiro 2000, p. 644)? One might argue that these use different mechanisms as they obtain the leverage required to pull out the cork from different kinds of structures, and thus are one step more different than the previous pair. Does this take us to wild disjuncture? Or does the fact that both rely on inserting a screw into the cork and applying leverage against the top of the bottle mean that they depend on what are essentially two different varieties of the same mechanism? Even the question of *radical* differences in mechanism seems to be a rather uncertain way of differentiating multiple realization and wild disjuncture – and a significant one here as one of Sawyer's own criteria for wild disjuncture is that "different mechanisms might not be similar in any sociologically meaningful way" (Sawyer 2004, p. 267). We could certainly think of more radical cases of difference in mechanism - cork removers that work by injecting a gas into the bottle and raising the pressure inside it, for example. But how are we to decide what degree of difference is required between mechanisms before the different realizations become wildly disjunctive? It is hard to avoid the conclusion that there is no clear way to distinguish wild disjuncture in real empirical cases, and thus no clear criterion of when functional emergence could be present.

Are there social cases?

While we still have no clear criteria for wild disjuncture, the discussion above suggests that the issue might best be understood as the degree of difference in the mechanisms involved in the different realizers. Given this, we can at least begin to consider the empirical question of whether there *are* any wildly disjunctive social properties. Let us consider the example of churches, cited by Sawyer:[17]

'being a church' could be realized in disjunctive ways in different cultures and social groups. Nonetheless, 'being a church' could participate in social laws such as 'if a group has the property of being a church, then its degree of solidarity will be higher than groups that do not have this property' (Sawyer 2002, p. 550).

It is clear that churches do take many different forms. They are organised in different ways, they espouse differing belief systems, some have to cope with greater problems of internal diversity, and so on. Hence their composition bases can be radically different from one another. I suggest, however, that any regularities in the causal powers of churches as a type arise, not from this diversity, but from certain similarities between churches. Thus, for example, the increased degree of solidarity between the members of a church by comparison with non-church-members may be attributable in part to them (a) sharing similar religious beliefs that are not shared by those outside the church; (b) seeing each other as common members of a distinct community; and (c) meeting other members of this community on a regular basis. The emergence base of the property 'increased solidarity' would seem to include these relations between the parts (members) of the entity (the church), and this emergence base is part of the composition base of all churches despite the variations in other elements of their composition bases.

This property therefore seems to be relationally emergent from the shared emergence base of all churches, rather than wildly disjunctive in the sense required by Sawyer's argument. On the argument developed here, to be wildly disjunctive 'higher solidarity' would need to be (a) common to all churches; but (b) based on many different mechanisms in different types of church. Of course, the details of the mechanisms do vary from church to church – some churches share dogmatically identical beliefs while others allow a range of beliefs with certain core similarities; some represent more unified and homogeneous communities than others; some expect far more frequent attendance at church events than others. But these are all variations of degree of what are essentially the same mechanisms – we could reasonably consider these variations to be analogous to that between corkscrews made with different metals, as opposed to that between screw-and-lever corkscrews and gas pressure cork removers.

A wide range of social properties are multiply realizable in this sense, and inevitably so. Most obviously, social entities are composed primarily of human beings, and all human beings are different, as a result of their differing DNA and the effect of their differing life histories on their beliefs and dispositions. Hence, this variability of their *parts* implies that all types of social entity will be multiply realizable.[18] However, they are also likely to be multiply realizable because of variations in the *relations* between these parts. Just as all churches differ from

[17] I consider this Sawyer's paradigmatic example, as it is the only one of which I am aware that cites a social property *and* a causal regularity in which it participates.

[18] Sawyer makes a similar point, but suggests this is enough to produce wild disjuncture (Sawyer 2002, p. 549).

each other, not just in terms of having different members, but in terms of being organised differently, espousing different belief systems, and so on, so do the instances of many other social types.

Even in Sawyer's paradigm case, then, it seems that the so-called functional property of solidarity in churches is relationally emergent in each token case, and relationally emergent on the basis of *the same causal mechanism* in each token case. The type is multiply realizable in terms of its non-contributing composition base, but all tokens of the type possess the same emergence base. Hence the type has emergent properties, but each token also has the same emergent properties, and the explanatory reduction of the property is the same in each token case. The emergent properties of the type, therefore, arise not *because* of the multiple realizability of the tokens, but *despite* it.

Of course, this may just be a poor choice of example on Sawyer's part, and perhaps we could find cases of social entities that have similar properties arising from wildly disjunctive mechanisms. If there were such cases then it would be valid to deny that the *commonality* of the higher level property between the different realizers was due to relational emergence. But on the relational argument, each realization of the disjunctive property may be emergent in its own right, and there is no need to invoke wild disjuncture as a further argument for emergence. This is a close parallel to Kim's well known critique of Fodor's argument. Kim argues that when a higher-level property is multiply realized, each distinct type of lower-level instantiation of the higher-level predicate could be explained separately, and so functionalism does not constitute a viable alternative to reductionism (Kim 1998, p. 116). For Sawyer, it is only wild disjuncture that produces emergence in cases like this; for Kim, each realization of the disjunctive property can be reductively explained and hence the higher-level property eliminated. But on the relational argument, each realization of the disjunctive property may be emergent in its own right, and there is no need to invoke wild disjuncture as a further argument for emergence.[19]

This paper therefore argues that although a wide range of social properties are potentially multiply realizable, such properties are emergent not *because* they are multiply realizable, but *despite* being so. It is the similarity of their emergence bases that underlies the commonality of their higher level properties, not the divergences between the other aspects of their composition bases. Hence they are relationally emergent rather than wildly disjunctive, as Sawyer argues.

Conclusion

If there are any genuinely wildly disjunctive social properties with consistently similar causal influences, this would certainly be an interesting phenomenon, and one worthy of our attention. It is not at all clear, however, that there are, and those types of social structure considered in this paper do not seem to be examples. Furthermore, if covering law theories of cause are as unsound as many realists have consistently argued, such cases would not provide a basis for rejecting reductionism. For that we need a version of emergence theory that is developed in the context of a causal powers theory of cause, which is just what the critical realist version of relational emergence theory provides.

Relationally emergent properties depend upon the organisation of the parts of the higher level entity possessing the property. They may be explainable in terms of those parts and the relations between them, but such explanatory reductions do not entail eliminative reduction because they still depend on properties and relations that only exist when the higher level entity exists. In this sense, the higher level property or power is irreducible, but this sense of irreducibility does not entail a reifying form of dualism. Kinds at each level can be real by virtue of possessing emergent causal powers in their own right, but such causal powers are never independent of the relation between the higher and the lower level.

Furthermore, an emergent property may depend on a subset of the composition base of the entity that possesses the property – its emergence base. Hence, the same property can be realized in tokens with different parts and structures, as long as their parts and structures include as a subset the emergence base of the property. Multiple realizability of a higher level property is therefore consistent with the property being relationally emergent on the basis of the *same* mechanism in all of the different realizations. The cases of sociological emergence cited as examples by Sawyer appear to share the same emer-

[19] Although Kim does not combine his argument with an endorsement of some other form of emergentism, he has indicated support for a view similar to relational emergentism, without labelling it as a form of emergence: "macroproperties can, and in general do, have their own causal powers, powers that go beyond the causal powers of their micro-constituents" (Kim 1998, p. 85).

gence base across their multiple realizations, hence the realist, relational account of emergence developed in this paper is able to account for the common features of these properties across their multiple realizations, as well as their irreducibility. By contrast, the functional account of wildly disjunctive emergence advanced by Sawyer, following Fodor, cannot account for the commonality of properties across multiple realizations, and its account of their irreducibility is open to the sort of challenges made by Kim. This paper concludes, therefore, that relational emergence offers a better explanation of the cases of social emergence discussed by Sawyer than his own argument.

Despite this, there are some attractive features of Sawyer's account. He has made a significant contribution to putting emergence on the radar of the social sciences, and it is surely desirable to reconcile the theoretical basis for emergence across multiple disciplines, as he has attempted to do. If emergence is a general phenomenon, then at least some of the theory of emergence must be common to different levels of the ontological hierarchy.

References

Antony, L. M., and J. Levine. (1997) Reduction with autonomy. *Nous*: 83-105.

Bechtel, William. (2008) *Mental Mechanisms*. New York: Lawrence Erlbaum.

Bertalanffy, Ludwig von. (1971) *General system theory*. London: Allen Lane.

Bhaskar, Roy. (1975) *A realist theory of science*. 1st ed. Leeds: Leeds Books.

Block, Ned. (1980) Introduction: What is functionalism. In *Readings in philosophy of psychology*. London: Methuen.

Boogerd, F. C., F. J. Bruggeman, R. C. Richardson, A. Stephan, and H. V. Westerhoff. (2005) Emergence and Its Place in Nature: A Case Study of Biochemical Networks. *Synthese* 145 (1):131-164.

Broad, C. D. (1925) *The Mind and its Place in Nature*. London: Kegan Paul & Co.

Bunge, Mario. (1999) *The sociology-philosophy connection*. New Brunswick, NJ: Transaction.

Cilliers, Paul. (1998) *Complexity and Postmodernism*. London: Routledge.

Durkheim, Émile. (1974) [1898]. Individual and Collective Representations. In *Sociology and Philosophy*. New York: The Free Press.

Elder-Vass, Dave. (2005) Emergence and the realist account of cause. *Journal of Critical Realism* 4 (2):315-38.

———. (2010) *The Causal Power of Social Structures*. Cambridge: Cambridge UP.

———. (2012) *The Reality of Social Construction*. Cambridge: Cambridge UP.

———. (forthcoming) Social entities and the basis of their powers. In *Rethinking the Individualism-Holism Debate*, edited by J. Zahle and F. Colin: Springer.

———. (under review). The social structures of money.

Fodor, Jerry A. (1974) Special Sciences (Or: The Disunity of Science as a Working Hypothesis). *Synthese* 28:97-115.

Gell-Mann, Murray. (1995) *The quark and the jaguar*. London: Abacus.

Harré, Rom, and Edward H. Madden. (1975) *Causal powers: a theory of natural necessity*. Oxford: Blackwell.

Holland, John H. (1998) *Emergence: from chaos to order*. Oxford: Oxford UP.

Horgan, Terence. (2002). From Supervenience to Superdupervenience. In *Supervenience*, edited by J. Kim. Aldershot: Ashgate/Dartmouth.

Kim, Jaegwon. (1992) Multiple Realization and the Metaphysics of Reduction. *Philosophy and Phenomenological Research* 52 (1):1-26.

———. (1993) The Non-Reductivist's Troubles with Mental Causation. In *Mental causation*, edited by J. Heil and A. R. Mele. Oxford: Clarendon 1993.

———. (1998) *Mind in a physical world, Representation and mind*. Cambridge, MA: The MIT Press.

———. (1999) Making Sense of Emergence. *Philosophical Studies* 95 (1/2):3-36.

Kincaid, Harold. (1994) Reduction, Explanation, and Individualism. In *Readings in the philosophy of social science*, edited by M. Martin and L. C. McIntyre. Cambridge, Mass. ; London: MIT Press c1994.

Kistler, M. (2006) New perspectives on reduction and emergence in physics, biology and psychology. *Synthese* 151 (3):311-312.

Kitcher, Philip. (1998) 1953 and All That: A Tale of Two Sciences. In *Philosophy of Science: The Central Issues*, edited by M. Curd and J. A. Cover. New York: W W Norton.

Lewes, George Henry. (1874-9) *Problems of life and mind*. 2 vols. London: Trubner.

Little, Daniel. (1991) *Varieties of social explanation*. Oxford: Westview.

Marras, Ausonio. (2006) Emergence and reduction: Reply to Kim. *Synthese* 151 (3):561-569.

Meyering, Theo C. (2000) Physicalism and downward causation in psychology and the special sciences. *Inquiry* 43 (2):181-202.

Nickles, Thomas. (1998) Two Concepts of Intertheoretic Reduction. In *Philosophy of Science: The Central Issues*, edited by M. Curd and J. A. Cover. New York: W W Norton.

O'Connor, T., and H. Y. Wong. (2005) The Metaphysics of Emergence. *Nous* 39 (4):658-678.

Pereboom, Derek. (2002) Robust nonreductive materialism. *Journal of Philosophy* XCIX (10):499-531.

Putnam, Hilary. (1975) *Mind, language and reality*. Cambridge: Cambridge UP.

Sawyer, R. Keith. (2001) Emergence in sociology. *American Journal of Sociology* 107 (3):551-585.

———. (2002) Nonreductive individualism Part I - Supervenience and wild disjunction. *Philosophy of the Social Sciences* 32 (4):537-559.

———. (2003) Nonreductive individualism - Part II - Social causation. *Philosophy of the Social Sciences* 33 (2):203-224.

———. (2004) The Mechanisms of Emergence. *Philosophy of the Social Sciences* 34 (2):260-282.

———. (2005) *Social Emergence*. Cambridge: Cambridge UP.

———. (2012) Response to 'Emergence in Sociology'. *Philosophy of the Social Sciences* 42 (2):270-275.

Searle, John R. (1992) *The rediscovery of the mind*. Cambridge, MA: MIT Press.

———. (1997) *The mystery of consciousness*. xvi, 224p. vols. London: Granta.

Shapiro, Lawrence A. (2000) Multiple Realizations. *Journal of Philosophy* 97 (12):635-654.

———. (2004) *The Mind Incarnate*. Cambridge MA: MIT Press.

Smith, Thomas S. (1997) Nonlinear Dynamics and the Micro-Macro Bridge. In *Chaos, Complexity, and Sociology*, edited by R. A. Eve, S. Horsfall and M. E. Lee. Thousand Oaks, Calif.: Sage.

Sober, E. (1999) The Multiple Realizability Argument Against Reductionism. *Philosophy of Science* 66 (4):542-564.

Stephan, Achim. (2002) Emergentism, Irreducibility, and Downward Causation. *Grazer Philosophische Studien* 65 (1):77-94.

———. (2006) The dual role of "emergence" in the philosophy of mind and in cognitive science. *Synthese* 151 (3):485-498.

Wimsatt, W. C. (2000) Emergence as Non-Aggregativity and the Biases of Reductionisms. *Foundations of Science* 5:269-297.

———. (2006) Reductionism and its heuristics: Making methodological reductionism honest. *Synthese* 151 (3):445-475.

Ylikoski, Petri. (2009) Review of Sawyer, *Social Emergence*. *Philosophy of the Social Sciences* 39 (3):527-530.

———. (forthcoming) Rethinking micro-macro relations. In *Rethinking the Individualism-Holism Debate*, edited by J. Zahle and F. Colin: Springer.

Zahle, Julie. (2003) The individualism-holism debate on intertheoretic reduction and the argument from multiple realization. *Philosophy of the Social Sciences* 33 (1):77-99.

———. (forthcoming) Holism and emergence: How to convince an individualist. In *Rethinking the Individualism-Holism Debate*, edited by J. Zahle and F. Colin: Springer.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

Invited paper

A PRELIMINARY GLANCE AT SOCIAL INNOVATION FROM AN ONTOLOGICAL POINT OF VIEW

Roberto Poli
University of Trento, Italy
e-mail: roberto.poli@unitn.it

Abstract:

After presenting four basic ontological frameworks for social being, the paper adopts the two-layered approach defended by Bhaskar and Poli. Within this framework, the relation between emergents and latents is briefly described. Since most emergents are ephemeral (weak signals), the problem arises of what may eventually stabilize emergents, and values are seen as promising stabilizers for emerging new behaviors. By exploiting the case of technological innovation, the paper raises the broader issue of social innovation and the problem of its stabilization.

Key words: social innovation, ontological frameworks, emergent, latents.

1. Four Ontological Frameworks

Since the early days of sociology, the ontology underlying sociological theories has been split between 'individualists' and 'holists'. A variety of terms has been used to denote the differences between the two camps, including the differences between voluntarism and determinism, structure and agency, and the micro-macro opposition. Aside from these terminological variations, both individualists and holists defend a mono-layered ontology: there is only one authentically 'real' level of social reality, and any other level is apparent, in the sense that the entities pertaining to this other level of reality do not exist in any acceptable sense of the expression 'real existence'. For the individualists, only individual agents exist, and any reference to groups, classes, structures, or systems (as in 'social structure' or, even worse, the 'social system') is shorthand with no ontological weight. For the holists, on the other hand, only social structures exist, and the individuals exemplifying them are but occasional pegs for available holes, such as fillers of available roles. Both sides claim that only one of the two levels (respectively, individuals and structures) refers to 'really' real entities, while the other level is unreal in the sense that it refers to apparent or derivative entities, i.e. entities that can be fully analyzed, without residua, in terms of 'really' real entities. The entities that are really real for the individualists are apparent or unreal for the holists, and vice versa (Bhaskar 1998, Archer 1995). Their opposition notwithstanding, Roy Bhaskar long ago noted that both individualists and holists share the same empiricist bias. Getting rid of this bias opens up new ontological avenues. In particular, it makes possible a multi-layered social ontology in which both social individuals and social structures acquire the status of legitimate, authentic ontological entities, so that their interactions can be studied (Bhaskar 1998, Archer 1995, Archer et al 1998, Elder-Vass 2012). This is a major shift towards an ontology possibly able to clarify the complexity of social being better. In what follows, I shall remain within the framework of a two-layered social ontology.

Two more models emerge from Bhaskar's two-layered ontology: either the two layers are stages of a single overall process in which individuals and their actions generate structures, which then, once generated, constrain individuals and their actions (the 'dialectical' model well represented by Berger and Luckmann 1966), or the two layers refer to two

ontologically different processes organized in such a way that the higher process is both *categorially autonomous* and *existentially dependent* on the lower process (which implies that the higher level cannot exist without the activities pertaining to the lower level). These two features (categorial autonomy and existential dependence) define the relation between levels of reality that I have called 'super-position' (Poli 2012, see also Poli 2001 and 2007). The two-layered two-process ontology is the model defended by Bhaskar himself. While Bhaskar's terminology is different from mine, our ideas are very similar. In what follows, I shall work from within the two-layer model defended by Bhaskar and myself. Furthermore, of the two major ties governing systems, namely the *structural* decomposition into subsystems, occasionally known as parts, and the *functional* insertion into higher-order systems, I shall focus on the former alone.

2. Emergence and Latents

Two major issues for any social ontology are the problem of emergence and the problem of latents (Poli 2011). Emergence concerns the conditions that make the constitution of the higher level possible. Two different issues should be distinguished here: namely, the 'reproduction' of the higher level through the activities performed at the lower one, and the 'internal' logic of the higher level, that is, the mutual dynamic adjustments among the nodes of the higher level.

According to Bhaskar, one of the main differences between his model and the dialectical model defended by Berger and Luckmann consists in the different natures of the relations between the two layers. Whilst Berger and Luckmann claim that the lower level generates the higher level, Bhaskar sees the relation between the two levels as a relation of reproduction (Luhmann defends a similar position: see for instance Luhmann 1985; see also Poli 2010). This amounts to claiming that the higher level is 'always' there as soon as the lower level is given.

The simplest way to understand the issue is to note that every act that one performs includes latent aspects which only occasionally become visible, but nevertheless exert their influence on the higher level. When an employee goes to work to earn her salary, as she enters her bureau, she reproduces the difference between employees and employers and, more generally, the division of labor system. When an academic goes to her class to teach a subject (and earn a salary), as she enters the class she reproduces the difference between teachers and pupils, and, more generally, she reproduces the educational system. Two aspects need mentioning. First, 'reproduction' in this context includes variation and transformation: behaviors can be adjusted, reinterpreted, or even changed. The variations implicit in reproduction imply that there are always constant adjustments between and among roles. Second, the higher level is itself stratified into (at least) the reproduction of specific relations (employees vs. employers, teachers vs. pupils) and the reproduction of the functional subsystems to which these relations pertain (the labor market, the educational system).

Interactions among agents generate variations of previous behaviors, and even utterly new behaviors. As a result, new emergents continuously arise. Most of them are feeble, ephemeral. They may last for a while and then disappear. Some other novelties may instead last longer, and even grow to become new, stable behavioral patterns.

3. Weak Signals

Trends and behaviors grow in more or less complex patterns, and they eventually decline. The capacity to discern a wide variety of patterns is precisely what makes an expert an expert. The very beginning of a trend or behavior, however, is a critical point. Critical points can occasionally be seen from *within* trends (e.g., flection points, such as when a positive trend becomes negative or vice versa), but there is apparently no way to detect a singularity without a supporting trend. Weak signals (i.e. seeds of change or early warning signals) are such a troublesome issue precisely because they are not part of an already formed trend. They may eventually become the beginning of a trend. But when they occur, they are 'stateless' so to speak; the trend of which they will eventually become the beginning still does not exist.

4. Emergents and Values

Many emergents do not stabilize. Though some do. Two main possibilities arise here. Emergent ephemeral behaviors may grow, develop, and become stabilized under the effect of two possible catalysts: either the underlying processes determining emergence grow and become stable (stabilization from below) or the emergent may find room within the meshes of the higher ontological level. In order for this to happen, the emergent should first be recognized and accepted, and finally stabilized. Seen from the point of view of interacting agents, these

activities of finding room, being recognized, accepted, and stabilized are perceived as values. 'Value' here is used in a broad sense to include any kind of value (ethical, aesthetic, economic, etc.). Ted Fuller, in particular, has investigated the role of values as stabilizers of emergents, especially in the field of management (see references).

The role performed by values as stabilizers of emergents explains why the violation of established behavioral patterns (such as those shaping common sense) is often perceived as a normative violation, and not just as a breach of abstract patterns. The question arises as to whether any new kind of emergent behavior is forced to breach normative rules. A precondition for this to happen is that the social landscape be fully and completely institutionalized, a situation rarely if ever encountered. As a consequence, some room is always present for innovative emergents that may arise without having to breach previously settled norms.

5. Social Innovation

As Tuomi 2002 convincingly shows, traditional models of innovation are often misleading – not least because they often rely on linear models of innovation. Interactions like those between structure and function, i.e. the fact that the same structure can perform different functions and the same function can be implemented by different structures, can also be detected in the case of relations between products and uses: the same product can be used in different ways, and the same functional use may be based on different products. In this sense, technologies come into the world only half-made: social practices complete them; and when social practices change, new aspects of the same product may emerge, new potentialities arise, and innovation occurs. Any given product may be "used in unanticipated ways, and perhaps no one uses it the way its designers expected it to be used". In other words, "In a very fundamental sense, it is the user who invents the product" (Tuomi 2002, 10). Examples abound. The interactive use of the telephone was invented by American housewives in the 1930s, and SMS have been unexpectedly appropriated by teenagers. In both cases, the engineers that invented the devices had other purposes in mind. As Tuomi caustically adds "People were not that interested in listening to concerts using a telephone or maintaining recipes in computers" (Tuomi 2002, 24).

Most technologies enter the market with pre-established modes of use. The social practices that arise around them may however change their meaning by adding new unexpected uses or not exploiting some of their capacities. The former is patently the most interesting case, in the sense that unintended uses may channel the evolution of the product in new, very different directions. Even more significant is the possibility that new, creative uses will articulate needs that did not exist before their emergence. Properly speaking, as they do so, new layers of reality emerge.

Technological innovation is but a tiny fragment of social innovation. While the latter may be centered on technical products, social practice itself is the source of all types of social innovation. Most of them are ephemeral and rapidly vanish. Others are stabilized and in time may even become institutionalized. Providing that Fuller is right, values are possible catalysts for the stabilization of emergent novelties. However, the two-layered framework described at the beginning of the paper suggests that something more is probably at work, something operating at the higher level of social reality, the level of the reproduction of social structures.

References

Archer, M.S. (1995) *Realist Social Theory: The Morphogenetic approach*, Cambridge, Cambridge University Press.

Archer, M., Bhaskar, R., Collier, A., Lawson, T., Norrie, A. (1998) *Critical Realism. Essential Readings*, London, Routledge.

Berger, P. L. and T. Luckmann (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Garden City, Anchor Books.

Bhaskar, R. (1998) *The Possibility of Naturalism*, London, Routledge (3rd edition).

Elder-Vass, D. (2012) "Top Down Causation and Social Structures", *Interface focus*.

Fuller, T. and P. Moran (2000) "Moving beyond Metaphor: Towards a Methodology for Grounding Complexity in Small Business and Entrepreneurship Research", *Emergence; A Journal of Complexity Issues in Organizations and Management*, 2(1), 50–71.

Fuller, T. and P. Moran (2001) "Small Enterprises as Complex Adaptive Systems: A Methodological Question?", *Entrepreneurship and Regional Development*, 13(1), pp. 47–63.

Fuller, T., P. Moran and P. Argyle (2004) "Entrepreneurial foresight; a case study in reflexivity, experiments, sensitivity and reorganisation", in H. Tsoukas and J. Shepherd, eds., *ManagingThe Future: Foresight in the Knowledge Economy*, Oxford, Blackwell Publishing, pp. 171–178.

Fuller, T. and L. Warren (2006) "Entrepreneurship as Foresight: A Complex Social Network Perspective on Organisational Foresight", *Futures, Journal of Policy, Planning and Futures Studies*, 38(7), pp. 956–971.

Fuller, T., F. Welter and L. Warren (2006), "The Contribution of Emergence to Entrepreneurship Theory: A Review", *Research in Entrepreneurship* (RENT) Brussels, EIASM.

Gurvitch, G. (1964) *The Spectrum of Social Time*. Dordrecht, Reidel.

Luhmann, N. (1985) *Social Systems.* Stanford, Stanford University Press.

Poli, R. (2001) "The Basic Problem of the Theory of Levels of Reality", *Axiomathes*, 12(3/4), pp. 261–83.

Poli, R. (2007) "Three Obstructions: Forms of Causation, Chronotopoids, and Levels of Reality", *Axiomathes*, 17(1), pp. 1–18.

Poli, R. (2010) "The Complexity of Self-reference – A Critical Evaluation of Luhmann's Theory of Social Systems", *Journal of Sociocybernetics*, 8(1/2), pp. 1–23.

Poli, R. (2011) "Steps Toward an Explicit Ontology of the Future, *Journal of Futures Studies*, 16(1), pp. 67–77.

Poli, R. (2012) "Nicolai Hartmann", in E. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*.

Popper, K. R. 1990. *A World of Propensities*, Bristol, Thoemmes.

Tuomi, I. (2002) *Networks of Innovation*, Oxford, Oxford University Press.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

Invited paper

SEARLE ON COLLECTIVELY INTENDING SYMBOLIC SOCIAL INSTITUTIONAL STATUS

Dale Jacquette
University of Bern, Switzerland
e-mail: dale.jacquette@philo.unibe.ch

Abstract:

Searle's social ontology is criticized on two grounds: (1) that Searle's arguments do not adequately support his commitment to logically and conceptually irreducible collective-to-individual intentionality, and (2) his formulation of the constitutive rule of collective intentionality conferring symbolic social status on intended objects does not express the required concept as clearly, unequivocally, or economically as available alternatives. Two corresponding positive recommendations are offered in response to both criticisms for developing a conservatively improved neo-Searlean philosophy of social phenomena, practices and institutions.

Key words: Collective intentionality; intentionality; Searle, John R.; social institutions; social ontology; social phenomena; social reality.

1. Searle's Social Philosophy

The ontology of social phenomena John R. Searle develops in his (1995) *The Construction of Social Reality* gets so much right about the existence, origin, and nature of social institutions and the speech acts by which they are constituted and pursue their purposes that it must seem ungenerous to raise objections to any particular matters of detail in the picture he paints. That is nevertheless what I propose to do, offering primarily two criticisms and pairing them constructively with two corresponding recommendations for effecting what I consider to be improvements.

The suggestions are advanced as part of a variant Searlean analysis of social phenomena for anyone attracted to the main thrust of Searle's ontology, but troubled by the same kinds of objections to be considered. In lieu of better answers to the arguments offered against Searle's position, capable of preserving his original ontology in its entirety, my revisionary proposal offers the possibility of maintaining the greater part of Searle's theory of the fundamental metaphysical structure of social phenomena intact and strengthened. It can equally sustain Searle's arguments concerning the corresponding expressive and logical structure of the language and speech act instrumentalities that are rooted in collective intentionality and available to social institutions in striving toward their ends. We can preserve in particular the entire remaining philosophical superstructure that Searle unveils, with all its intriguing potential applications for understanding many different aspects of the social reality we inhabit, in part through the causal efficacy of derivatively intentional expressions of intrinsically collective intentionality in creating and sustaining social institutions by conferring symbolic social status on a practical choice of intended objects.

The two objections are that Searle (1) does not adequately support his commitment to an irreducible-to-individual collective intentionality or irreducible *We intend*, in view of the theoretical advantages of the reducible-to-individual collective intentionality thesis; and (2) he does not formulate the fundamental form of a constitutive rule for all collective intentionality in conferring symbol social status on any appropriate object (which he introduces as: 'X *counts as* Y in context C'), as precisely, unequivocally, informatively, or economically, as several

logically more lucent but still appropriately intensionally expressed explicitly intentional alternatives to Searle's 'counts as' locution permit.[1]

2. Irreducible-to-Individual Collective Intentionality

Searle is committed to a model of collective intentionality that is irreducible to individual intentionality. He asks: 'What is the relation between singular and collective intentionality, between, for example, the facts described by "I intend" and "We intend"?'[1] He then delivers what he seems to consider a fatal criticism of collective-to-individual intentionality reductivism, continuing:

> Most efforts I have seen to answer this question try to reduce "We intentionality" to "I intentionality", plus something else, usually mutual beliefs. The idea is that if we intend to do something together, then that consists in the fact that I intend to do it in the belief that you also intend to do it; and you intend to do it in the belief that you also intend to do it; and you intend to do it in the belief that I also intend to do it. And each believes that the other has these beliefs, and has these beliefs about these beliefs, and these beliefs about these beliefs about these beliefs…etc., in a potentially infinite hierarchy of beliefs.[2]

Finally, Searle concludes:

> In my view all these efforts to reduce collective intentionality to individual intentionality fail. Collective intentionality is a biologically primitive phenomenon that cannot be reduced to or eliminated in favor of something else. Every attempt at reducing 'We intentionality' to 'I intentionality' that I have seen is subject to counterexamples.[3]

Searle does not share many details concerning the target collective intentionality reductivists he claims to refute. He speaks of 'most efforts' and 'all these efforts' at reducing collective to individual intentionality, which suggests multiple proposals; yet he refers the reader only to his 1990 book contribution, wherein the only reductive proposal criticized is that advanced collaboratively by Tuomelo and Miller.[4]

Searle's argument therefore invites the objection that he may not have considered the prospects of other, quite different reduction proposals. He seems not to have devoted published consideration to the possibility of reducing the individually intended collectively intentional 'We intend' to any regress-free logical or predicational construction of 'I intend''s. Although, he may have rejected these out of hand as inadequate for forging the essential link between collective intention and its expression, and socially cooperative action. We shall later sketch an obvious way for both collective-to-individual reductivism and non-reductivism to avoid the doxastic regress that Searle thinks threatens only reductivism.

There are difficulties when we look below the surface of Searle's assertions about reductive collective-to-individual intentionality thesis as inevitably falling victim to a doxastic house of mirrors. It is hard to agree that every reductive theory must become doxastically entangled, even if the thesis does not contradict the possibility of such regressive reflective intentionality and belief structures. What if I merely intend to do whatever you intend to do? I will follow your lead. Or try to. If I get it right, and have properly understood your intentions, then you may be pleased, and otherwise you may say or do something to correct me. Then I individually intend: 'We (myself and others) intend to do the same thing, whatever intention the others first express'. If socially I am a follower rather than a leader, whether in a family, among friends, or in more organized social structures, then all I need to believe and consequently semantically-intend, as well as action-intend, is that 'We intend to do *X*'. An interestingly different

[1] Searle 1995, 24.
[2] Ibid.
[3] Ibid.

[4] Searle ibid. refers in endnote 6 to Searle 1990, where he criticizes one strategy for collective-to-individual intentionality reduction presented by Tuomelo and Miller, 1988. See also Searle 2002, Chapter 6, 90-105. I am unable to see the objectionable doxastic regress that Searle in 1990 and 1995 attributes to the reductive models of his acquaintance, apparently represented only by Tuomelo and Miller. Tuomelo and Miller's reductive strategy, even if subject to such a doxastic regress, is only one of many reductions and reductivisms, and Searle has not systematically or sympathetically considered their possibilities. Moreover, it is argued that without another kind of solution, irreducible collective intentionality of the sort that Searle endorses is equally subject to the doxastic regress that Searle attributes universally to collective-to-individual intentionality reductivism.

story needs to be told about leaders and their intentions in relation to followers.

More importantly, in that case I do not have to believe anything over and above what the participants in a social activity need to believe on Searle's non-reductive model of collective intentionality in order for the activity to be successfully undertaken. If I believe that 'We intend' (to be married, to take that bridge, etc.), who do I mean by 'we', anyway, if not a somewhat amorphous collection of myself and other relevantly participatory individual 'I intend'-ers? Who is 'we' in that case, as I intend 'We intend to do *X*'? On Searle's argument directed against the reductive model, must I not then also believe that other individuals in the society are also thinking 'We intend to do *X*', and that they believe similar things about me believing similar things about them, and so on in dizzying progression? What if they are not? What if I am pathetically deluded and think that I have a whole society at my back who intend what I intend and are ready to act with me? How do I know what other thinking subjects are intending, except from what they honestly communicate to me about what they as individuals are intending? Then the problem is whether they must not also believe these things about me, as to what I believe about their beliefs, and so about their own beliefs, and so on, indefinitely, it would seem, in a house of doxastic mirrors.

How serious is the problem on which Searle's advocacy of the alternative irreducible *We intend* model of collective intentionality depends? It must be emphasized that belief and intending to act, individually or collectively, are two very different things, and the relation between belief and intending to act, both intentional psychological occurrences, dispositions or states, is complicated, as their phenomenology also reveals. Whether a vicious regress of belief states arises in explaining how collective intention translates into socially coordinated action appears independent of whether or not collective intention is reducible to aggregated individual intentions. If Searle's doxastic regress problem is genuine and cannot be avoided by any reductive-to-individual theory of collective intentionality, then it poses the same difficulty for both the reductive and the non-reductive collective intentionality thesis. As partial proof, consider the relevant doxastic regress passage lifted from Searle's text quoted above, and doctored in content by substituting 'we intend' everywhere for Searle's references to 'I intend':

> We intend to do it in the belief that we also think we intend to do it; and we intend that we intend to do it in the belief that we and the others also intend that we intend to do it; and we intend that we intend to do it in the belief that we also intend that we intend to do it. And each collectively intending subject believes that the other has these beliefs, and has these beliefs about these beliefs, and these beliefs about these beliefs about these beliefs…etc., in a potentially infinite hierarchy of beliefs.

How does such a doxastic regress get started? Not by reducing collective to individual intentionality, but by raising the doubt, sometimes motivated by Prisoners Dilemma situations discussed in rational choice and game theory, that others will not actually act in unison unless they not only individually intend to do the same thing, but believe this of others, while others believe it also of themselves and of others in the same collectively intending society.

The concern may be real, but Searle's solution seems misplaced in two ways. First, the problem is not engendered by reducing collective intentionality to individual intentionality, nor is it avoided by declaring collective intentionality to be irreducible. If we irreducibly think 'We intend', but must still look around to see if the others are also prepared to act in concert before we do anything, then we do not yet really intend to do anything. Let us consider the moment of the 'We intend' as beyond whatever doxastic niceties must be settled before we individual intenders have decided what we are going to do. Then whatever we must believe that we all believe about ourselves all intending the logically irreducible 'We intend' will no more matter for the non-reductive than it will for the reductive model of collective intentionality. The clutter of beliefs comes before intending to act gets settled and enters the story, and as such cannot interfere with the efficacy of collective intentionality of cooperative social action, once collective intentionality has intended an objective and thereby given itself a purpose to achieve. Second, if the doxastic regress problem gains any foothold in social ontology, then Searle's thesis of irreducible collective intentionality is equally subject to the same doxastic regress that Searle attributes uniquely to the reductive collective intentionality thesis.

There must be another way to avoid doxastic regress for both the reductive and non-reductive model of collective intentionality. Why should be-

liefs intrude into the process of explaining how collective intention results in cooperative social action? After all, the 'We intend' is not an inner declaration, made as though charging into battle, but something true of a subject that has already committed to social action, without necessarily thinking anything consciously at the time beyond the specifics of whatever tasks contributing to the social project may have needed to be done. We do not first intend these things and then look around to see if we are in good company before we actually risk our necks by doing something. We collectively intend *as* we collectively act, and the complex explanation of how and why we collectively act involves more than the collective intentionality component. The situation under analysis is one in which a collective social action is assumed to have occurred, and the philosophical question is how best to explain it. Whatever doubts an individual participant in a socially cooperative action might entertain before making a commitment to act with others, and whatever beliefs might be supposed to answer those doubts, we can allow to be part of a preparatory process prior to the individual actually intending 'We intend' in the explanation of what the society does when it acts cooperatively together. By the time a solid 'We intend' is reached in a social group, whatever doxastic concerns might have complicated the translation of collective intentionality into coordinated social action will have already been resolved, and need not intrude between the interesting step after collective intentionality has been reached at the moment that coordinated social action is initiated.

It is hard in any case to see how positing a logically and predicationally irreducible-to-individual collectively intentional *We intend* could hope to avoid the kind of doxastic regress with which Searle is concerned. Social cooperation cannot function as efficiently as it manifestly does if every collectively intended social action presupposed an infinite crossfire of beliefs back and forth among the individual intending participants about what is or is not intended and what is or is not believed of one another. Searle takes the original regress to be philosophically objectionable, as quite arguably it is. He nevertheless assumes that the regress must be unique to the reductive model, and does not consider that it might equally affect a theory embedding his own irreducible 'We intend'. Why should it not, since, despite the fact that beliefs are semantically intentional, depending on a mind's intending to refer, doxastic matters are otherwise independent of individual or collective intending agents intending to act, to do something more dynamic than referring?

The doxastic problem needs to be pragmatically resolved regardless of whether the individual intending participants in the social action are either reducibly or irreducibly thinking 'We intend'. To whatever extent the doxastic regress arises, it obtains whether individual intenders are required to entertain beliefs about whether other intenders, individual or plural, are also finally intending an irreducible 'We intend'. Cooperative social action had better work in another way and better than this, avoiding this superfluous doxastic clutter, regardless of whether 'We intend' at the theoretical level is logically or predicationally reducible or irreducible. We, in turn, had better find a better way to explain the link between collective intentionality and the engagement of individual will in achieving collective social purposes than by standing firm without more powerful arguments on the irreducibility of collective intentionality.

The meaning of 'We intend to do *X*', and all that a participant in a social activity needs to believe, contrary to Searle's regress concerns, and where motivating individual participation in collective action is what needs to be explained, is for each person to be able to agree that 'I intend to do *X* and others intend to do *X*'. Or, for example, 'I intend along with others to do *X*'. Or, 'I along with others intend to do *X*'. The participants do not need to believe that any subject in particular intends the action (for all they know, a randomly chosen intender might be an opponent of the social trend or even of the entire social order, someone who for other reasons is unwilling to get involved, a misanthrope, etc.). The 'others' that they and I believe or imagine intend as they and I do can also be indeterminate, to say nothing of misjudged. Accurately estimated or not, on the reductive thesis, the attainment of critical mass of individual intendings amounting to collective intendings, whether by growth of sheer numbers or authority of another kind, is an objective supervenient fact about what individual intenders intend as contributing to the foundation and maintenance, growth and development, and adaptation of social practices and institutions to changing circumstances.

Searle presumably expects that when an individual intender intends 'We intend', it is the *content* of the 'We intend', ultimately, the meaning of the '*We*' that is not reducible to 'I (S1) and I (S2) …' to 'I intend and others intend', if the collective intentionality is to coordinate social activity, found and

maintain social institutions, and the like. Searle nevertheless seems to accept the commonsense proposition that it is individual thinking brains, the intentionality-producing biological activity occurring in individual skulls, he might even insist, that alone are capable of intending anything at all, including the purportedly irreducibly collective 'We intend'. Even if the 'we intend' is logically and conceptually irreducible to 'I (S1) intend and I (S2) intend …', as the object of what the members of a social group thereby individually intend, by Searle's reasoning it should still follow that each of the socially cooperating individual intenders would need to believe that other individuals are also thinking 'We intend', and presumably also that they believe the same about him, as intending 'We intend', engendering further intentionalities and further beliefs that seem again to play only a nuisance rather than either pragmatic or explanatory role. There is, accordingly, and presumably, a corresponding doxastic regress of the sort Searle attributes to the reductive collective intentionality thesis as to his own concept of a logically and conceptually irreducible *We intend*.

What if only Joe Schmoe intends 'We intend', where *We intend* is irreducible? How do we make sense of getting things wrong, again, in the minimal case, where there is no actual collective intentionality, if 'We intend *X*' does not *mean* 'I (S1) intend to do *X and* I (S2) intend to do *X*'? Or, for that matter, 'I intend to do *X* with or in cooperation with you'? The reductive analysis neatly explains this possibility as one in which one of the conjuncts in the analysis is false, when only S1 or S2 intends *X*, but not both. Then there is in fact only an 'I intend' and no 'We intend', even if, as Searle does not require, S1 or S2 is *consciously thinking* 'We intend'. This makes 'We intend' false, as intuitively it should be, when deluded Schmoe, poor sap that he is, thinks it, entertains the thought. But what makes his 'We intend (to do *X*)' false? It is false only if in principle we can dissect the meaning of his 'We intend' to see what aggregate of individual intenders is supposed to be included in the 'We'. How is the needed logic managed under Searle's thesis of the irreducible *We intend*? We have in meaning only the impenetrable 'We intend', so logical and conceptual analytic possibilities are eliminated. We suppose that in the Joe Schmoe case, Schmoe's thought that 'We intend to do *X*' is false, both for Searle and the reductive collective intentionality proposal, and that it is false for the same reasons both in the reductive and non-reductive collective intentionality theories, namely, that there is no 'We' that intends what Schmoe thinks they intend. There, too, we are supposing that the first-person intender I (known to the world and hence to us as S1) (or another available individual) is the *only individual intender* intending 'We intend to do *X*', and the others he believes also to be intending 'We intend to do *X*' do not actually do so, regardless of whatever he may or may not believe. How else for S1 to deny the truth of 'We intend *X*' when only S1 intends 'We intend *X*' than to split off the We-intenders from the non-We-intenders, and check to see if there are more than two We-intenders?

This is surely what would need to be done in practice. If such a course is to make sense, however, then the *meaning* of what the individual intenders intend when they intend 'We intend' must be reducible in principle after all to what an aggregate of individuals as individuals intend, as the individuals intending 'We intend' are also capable on reflection of knowing. If the explanation of how reducible collective intentionality engages with moving body parts and rearranging material things in coordinative social activity gets itself stuck in endlessly reciprocative doxastic states and expectations of what others intend and are going to do, and what they believe about what we intend and are going to do, as well as what we believe about all this, then that becomes a problem for another part of the theory than the analytic status of collective intentionality as logically or predicationally reducible or irreducible to individual intentionality. It is also a problem, as we have emphasized, that needs to be addressed by both reductivist and non-reductivist collective intentionality theorist alike, and does not carry force against either to the advantage of the other.

Searle is further challenged to explain how small numbers of collective intenders can socially outmaster vast numbers of collective intenders who do not agree with the society's structure or direction. It happens in fact because of control over different kinds of power, although Searle frequently contests the idea that physical force can hold sway for long if the foundational collective intentionality breaks down. Numerical imbalances in what the members of a society want nevertheless occur, regardless of where outnumbered clusters of We-intenders are to be found in the social hierarchy, and breaking the grip of despotism can sometimes require drastic action, just as sometimes things fold up more or less quietly, like a business disbanding. If there is only primitive unanalyzable collective intentionality, a

'We intend' that cannot be reduced in meaning to 'I (S1) intend and I (S2) intend …', then how do we distinguish intentionally opposed 'We intend'-ers in a society without breaking open the concept of collective intentionality as some kind of logical or predicational structure involving the sum and whatever supervenes on the sum of individual intendings? The result is what Searle himself might call a constructed social reality, resulting from all the individual intendings at work.

The trouble is that we cannot think of such an explanation on Searle's non-reductive collective intentionality thesis. To do so, we would need to be able to look into the meaning of *We intend* and see who, as individuals, the 'we' are; inevitably, it seems more natural to say, the collective 'we' is a certain aggregate of individual intending I's. It is also only in that way that we as participating collective intenders can theoretically identify the leadership structures in a society, the power figures and cultural, class, or economic conflicts, the haves and have-nots, those who are with the program and those who are diametrically opposed, or, in equally interesting less extreme cases, at least sometimes out of harmony with predominant social currents. The subsocieties within a social order that intend incompatible social objectives can finally come down absurdly to even the most politically disinterested or abject *individual* intenders, whose individual intentions on intensional identity conditions are certain to be different subjectively for each thinker.[5]

That is my first criticism and my first recommendation for improving Searle's philosophical ontology of social institutions. I do not consider Searle's effort to refute the reductive collective-to-individual intentionality thesis decisive, and I have gestured toward what I take to be theoretical advantages available to the reductivist thesis from which Searle's non-reductivism is excluded. The doxastic regress Searle believes is necessary to avoid does not arise on all reductive collective-to-individual intentionality models, except where the same motivating problems of translating intention to action through belief can equally afflict the reductive and non-reductive model, as in Searle's irreducible collectively intentional *We intend*. The regress is avoided if collective intentionality is understood as multiple individuals intending the same social objective. How the individuals further physically coordinate their actions in order to promote their collectively intended goals is another matter, with an explanation that presumably depends in large part on the efficacy of just the special kinds of individual and collective speech acts that Searle emphasizes in his social ontology and more generally in his philosophy of language.[6]

The improvement, by my lights, is to replace Searle's irreducible 'We intend' with a reduction in the minimal case to 'I (S1) intend and I (S2) intend', bringing the theory closer also to facts that Searle accepts concerning the individual subjective origin of all intrinsic intentionality. The reduction is ontically more economical, and supports easily intelligible and applicable threshold values or numerical critical mass for the emergence of sufficient collective intentionality to create and maintain social practices and institutions. The exact ontic status of Searle's *We intend* is anyway never clearly positively explained, and he seems reluctant to explain how collective intentionality arises. It certainly does not do so from the fact of any single intender intending 'We intend', as the Joe Schmoe example shows. Collective intentionality must therefore arise after all from an aggregate of contextually influential individual intenders all intending the same social objective. If a theory of collective intentionality cannot do full justice to these fundamental facts, then we should not further concern ourselves with the theory's other implications or potential applications. Searle appears to have turned to the contrary non-reductive collective intentionality thesis more out of desperation rather than love anyway, as the only available alternative after the supposedly devastating doxastic regress is exposed. The regress argument is

[5] See also criticisms by Fitzpatrick 2003; Meijers 2003; Miscevic 2003; Tuomelo 2003; Zaibert 2003.

[6] Searle lays the groundwork for speech acts as the collectively intentional instruments of social activity in his 1969. The precursor for Searle's analysis is Austin 1962, 154–158, especially under the categories of what Austin calls Exercitives and Commissives. The kind of derivatively collectively intentionallity that Searle seems to have in mind with respect to legal documents is illustrated by Charles Dickens in his 1850 novel, *The Personal History of David Copperfield* (Penguin 1996), p. 579: 'It is a little document [marriage license] to do so much; and Traddles contemplates it, as it lies upon my desk, half in admiration, half in awe. There are the names, in the sweet old visionary connexion, David Copperfield and Dora Spenlow; and there, in the corner, is that Parental Institution, the Stamp Office, which is so benignantly interested in the various transactions of human life, looking down upon our Union, and there is the Archbishop of Canterbury invoking a blessing on us in print, and doing it as cheap as could possibly be expected.

nevertheless unconvincing as a basis for excluding reductive collective-to-individual intentionality, inviting consideration of more resilient alternative reductivisms.[7]

3. Collective Intentionality Conferring Symbolic Social Status

The second criticism of Searle's social ontology to be considered concerns Searle's official expression of the logical form of the collectively intended thoughts and speech acts by which institutional symbolic social status is conferred on a large variety of different objects. Hereafter we shall speak as neutrally as possible of collective intentionality, without consciously prejudicing the discussion in favor either of a non-reductive model like Searle's or a competing reductive model. After critical evaluation, it may appear that we can do better than Searle in formulating his own intended principle for what he calls the 'basic form of intentionality that constitutes the structure of institutional facts'.[8]

Searle explains the form of collective intentionality in constructing a social reality as having for its object in a constitutive rule, which we label, (FORM): 'X *counts as* Y in [context or circumstances] C'. The more complete statement of Searle's basic form of intentionality that constitutes the structure of institutional facts would be the supposedly irreducible collectively intentional (We-FORM): 'We intend that X counts as Y in C'. With these concepts in place, Searle believes that we can offer sound ontically-grounded philosophical explanations of money, marriage, the military, and distinguish these markedly collectively intentional social institutional phenomena from such purely physical entities as mountains and molehills. Everything seems to snap into place. What Searle probably means by the 'counts as' locution, moreover, is in one sense undoubtedly pointing in the right direction. The formula nevertheless is burdened with several defects that can be remedied in a revised and arguably improved neo-Searlean social ontology; as always, with or without Searle's blessing. The objections to Searle's irreducible collective-to-individual *We intend* is subject to at least the following disadvantages, when compared with its reductive rival and counterpart:

- The 'counts as' locution in Searle's FORM and We-FORM is not adequately explained.
- Without such explanation, the 'counts as' locution is avoidably vague and equivocal.
- Under one of its meanings, 'counts as' is sometimes, though not always or systematically, logically inappropriate in describing the collectively intentional conferral of symbolic social institutional status on a chosen object or objects, tokens or types.
- According to another of its meanings, the 'counts as' locution expresses identity, and might better make this less ambiguous relation explicit, building the collective intentionality aspect of what Searle intends by social reality into a similar modified formula in another way. There are several possibilities for achieving this, examined in due course below.
- Together, the two horns of the resulting dilemma imply that overall Searle's 'counts as' locution in FORM and We-FORM is either vague or trivial, suggesting both the need and the possibility for a more satisfactory replacement.

The limitations of Searle's 'counts as' locution in his formulation of the target intended object of irreducible collective intentionality in the application of status function speech acts in the conferral on objects of symbolic social status are obvious when 'counts as' is tested in a greater variety of contexts. We do not say that certain pieces of metal and paper *count as* money, but rather more naturally that they *are* money, in the sense of legal tender. These objects are also simultaneously metal and paper or something else comparably practical, of a certain kind, but the metal and paper or shell or gems do not merely count as or serve in lieu of money, in the way that other kinds of objects are taken more literally to count as a designated thing or kind of thing. Shall we allow that saying 'I do' in a marriage ceremony merely counts as getting married, or is it identical to or the same thing as getting married?

Searle seems to model the creation of symbolic social status as too simple a process. It is not as though we have 'coins' and then we declare them money. They cannot be coins unless they are already money. If they are as yet unminted, they are not yet money, but nor are they yet coins. Similarly for wedding vows, to pick another of Searle's favorite collective intentionality conferrals of symbolic so-

[7] I criticize Searle's collective-to-individual intentionality non-reductivism in Jacquette forthcoming, and do not repeat those objections here.
[8] Searle 1995, 98–99.

cial status by means of special social institutionally sanctioned speech acts. The wedding vow undertaken by two willing and legally eligible participants as such is not preexistent and only after being spoken does it have conferred on it the symbolic social status of beginning a marriage. It is essentially being married to pronounce the vows, right out of the starting box. We in a social order decide that there should be such ceremonial ways to mark the social contract, or to institute a system of payment for goods and services by money.

It is not as though we have minted coins in existence and only then adopt a collective intentionality toward them so that they thereafter count as money. We decide that there should be coins as units of monetary exchange, and the instruments reflecting our collective intentionality are money from the moment they are minted and come into existence as coins. The X (metal shapes) are minted (made) as = (to be, from that moment forward until further notice) the same as, nothing other than money-in-coin-form (to stick with one example) Y/C. Then a society suddenly has money, and generally where there are already many things to spend it on, and with a learning curve for its smart management.

For an efficacious collective intentionality realistically to take place introducing money to an economy, it is tautologous to say that the concept of money historically must already be understood at the appropriate moment at the appropriate tier of the social leadership hierarchy in order for collective intentionality to be focused on the intended object of conferred symbolic social value, such as the pieces of metal that become coins the instant they are minted. What if a culture minted coins and only thereafter at a special ceremony, made them into money upon sprinkling them with special water?

One answer is to say that the coins are not minted until that ceremony is completed. Further, that merely having an image and words impressed or engraved into a piece of metal does not a minted coin make, as we know that many kinds of decorations, buttons and seal rings, and other luxury objects, trinkets and fobs, etc., personal identification tokens, and the like, can also be made of metal with images and words impressed or engraved into them that are manifestly not minted coins. A minted coin is not simply an imprinted or engraved metal stock, unless it is collectively intended that such will be the case. Whenever the society deems it proper to declare a minted coin, so does the metal become a coin. This can happen even if under extremities the blank metal stocks were themselves to be made coin money by an act of collective intentionality in some sense of the word.

If Searle's 'counts as' means 'is', then these applications are all intuitively correct, although the relation is not as clearly or economically expressed as it might be. Then we could rewrite Searle's FORM as (Re-FORM): 'X is Y/C' or 'X = Y/C' and Searle's We-FORM as (Re-We-FORM): 'We intend that X is Y/C', 'We intend that X = Y/C', or more inaugurally, 'We intend from here on out that X is to be Y/C'. If this is what Searle means, then he should be encouraged to adopt this more transparent and forthright formulation. There is otherwise something seriously misleading about the choice of the 'counts as' locution. Some situations seem to call specifically for the 'counts as' terminology, but these are not cases that seem relevant to Searle's explanations of social phenomena as the outcome of collective intentionality. Thus, in many instances when we say that 'X counts as Y/C', what we intend thereby is that 'X is an acceptable substitute for Y/C'. An example is when a student is supposed to write a conventional final essay to earn a grade in a course, and the instructor allows a video project to *count as* fulfilling the final essay requirement. We would not say that the video is a final essay, but only that it has been deemed an acceptable substitute for a final essay in meeting the course's requirements.

This cannot be the kind of thing that Searle needs, for then we must consider coins and currency as only an acceptable substitute for money, rather than money itself. Similarly for saying 'I do'. Under the right circumstances this closes a nuptial agreement, but who would classify it as merely an acceptable substitute for getting married? There is no other money in C than the coins and currency for which X could count as an acceptable substitute; nor need there be any other state of marriage or method of getting married in C for which engaging in the speech act 'I do' could count as an acceptable substitute.

Wittgenstein offers a similar set of reflections on what counts as something in *Philosophical Investigations*, in distinguishing between what is essential from what is inessential in the board game of checkers or draughts:

> 562. But how can I decide what is an essential, and what is an accidental, feature of the notation? Is there some reality lying behind the notation, which shapes its grammar?

> Let us think of a similar case in a game: in draughts a king is marked by putting one piece on top of another. Now won't one say it is inessential to the game for a king to consist of two pieces?[9]

We can designate a king-ed piece by means of a penny or some other token, so that Wittgenstein's rhetorical question is rightly answered affirmatively. It is inessential to king-ing a piece in draughts or checkers that one place a checker on top of another. We might be playing without all the original pieces needed for a proper game, individuals having been lost over many years without exact replacements. When a piece comes to be king-ed, accordingly, it might need to be signified on the gameboard by something other than the stacking together of two identically made pieces, such as coins or finger rings or equally conveniently sized trinkets.

Similarly, if we further pursue Wittgenstein's apparent line of reasoning, it seems that when a king-ed piece is signified unconventionally by means of a penny, or like invention, rather than in the canonical way by the stacking of two identically made board tokens, the top piece being the king's crown, the coin counts the same as the two stacked men, but only in the sense of actually being a (unconventionally represented) king. If what Searle means by 'counts as' is an unconventionally represented identity of X = Y/C, then the logical situation could be greatly clarified by speaking of contextual or circumstantial (relative) identity, or predication, that an X is a Y/C, as in 'We intend that an X is (is to be, from here on out, etc.) a Y/C'. Things of kind X are more unequivocally considered as ontically (included in the extension of all) things of kind Y, than as counting as Y, whatever counting as for Searle is finally supposed to mean. Wittgensteinian reflections further suggest that Searle's 'counts as' locution can only be interpreted as identity or predication, which can be made explicit as above in the approved logical structure of the object of collective intentionality in status function applications.

If by 'counts as' Searle means something other than 'identity/C' or 'acceptable substitute/C', what could he mean? Failing a good enough answer to this question, it seems only reasonable to consider the ground having been prepared to advance an alternative formulation of the logical structure of the object of collective intentionality in status function applications conferring symbolic social status Y on objects X. We can suggest several alternatives.

Searle unmistakably understands symbolic social status as originating in collective intentionality and exploiting collective speech acts as instruments in achieving collectively intended purposes. Quite probably he regards the 'counts as' locution as bringing intentionality into the ontology, as I agree he should do, although I do not think that he should do it exactly here or exactly in this way. Since the We-FORM already embeds an explicit collective intentionality, the *We intend* (reducible or not to individual intentionality), the account is intentionalist throughout, without relying on any intentionalist implications of thought taking or counting something as something else. Accordingly, I propose alternatively to replace Searle's We-FORM and FORM, respectively, with: (1) 'We intend that X = Y/C' (and X = Y/C); (2) 'We intend that an X is or from now on be a Y/C' (etc.); (3) 'We intend that X = Y/C, where C specifically includes the collective intending of X as Y' (etc.); (4) Similarly for (2) as (3). Alternatives (3) and (4) make the collective intending of X as Y/C explicit as part of the context or circumstances C in which an X is said to be or be identical with a Y. When Y is an object with symbolic social status, then the status function by which X becomes a Y, and has the social status of Y conferred on it, is said to be the result of the context or circumstances on which the requisite collective intentionality also supervenes.

The suggestion is that any of (1)–(4) would be a more exact, transparent, simpler, more economical, but equally explicit collective intentionality emphasizing replacement for Searle's We-FORM and FORM.

Searle might argue that the 'counts as' locution is indispensable, because only it injects collective intentionality into the specialized speech act conferral of symbolic social status on humble objects like coins or blank stock and marriage vows and contracts or paper scraps and ceremonial openings and closings of social events. Searle says something very much like this:

> The intensionality-with-an-s of the sentence form "X counts as Y in C" is a clue to the intentionality-with-a-t of the phenomena. Because neither the X term nor the Y term permits substitution of coreferential expressions without loss or change of truth value of the whole statement, we have good reasons to

[9] Wittgenstein 1968, §562. See also Wittgenstein 1968, §31; 1974, Part I §22; 1967, §448.

> suppose that the "counts as" locution specifies a form of intentionality.[10]

The question is the weight to be put on the 'clue' Searle mentions, in a presumed but here undeveloped semantic connection between intentional states and their intensional linguistic expression. To be intentional, the 'counts as' locution would need to be spelled out as a thinking subject adopting a particular intentional attitude toward an intended object. Nothing counts as anything else, so to speak, in nature, but only as a result of the intendings of thinking subjects, individual or collective, reducible or irreducible.

Searle's 'counts as' locution doubtless matches up with an explicitly intensional intentionality context. For FORM is not the complete expression Searle's social ontology requires, but rather the We-FORM: 'We intend that X counts as Y in C'. It is the 'intend' rather than 'count as' that delivers the intensionality as a mark of the intentionality of the completed We-FORM (the same is true for the previously unseen counterpart (I-FORM): 'I intend that X counts as Y in C'). Moreover, FORM by itself as a Searlean constitutive rule is not an intensional expression of an intentional state, since no intending subject is mentioned. 'X counts as Y in C', except as an abbreviation for an I-FORM or We-FORM completion, has no truth value, since we are not told for whom X is supposed to count as Y in C. It could be that X counts as an insult to the members of one tribe, and as a friendly invitation to another. Without specifying the intenders for whom X counts as Y in C, FORM is neither true nor false; just as 'to get married' is neither true nor false, as contrasted with 'I intend to get married' or 'We intend to get married'.

The explicit individual or collective intentionality in I-FORM and We-FORM provides all the intentionality that is required for Searle's purposes in advancing a collectively intentional ontology of social institutions, even without the 'counts as locution', as we see again in identity or predication alternatives (1)-(4) above; in (1), for example, the form 'We intend X = Y/C', or (2) 'We intend that an X is or from now on be a Y/C'. We do not need Searle's 'counts as' locution to ground social ontology on collective intentionality, as the alternatives demonstrate. Nor is the 'counts as' locution adequate by itself to introduce intentionality, individual or collective, reducible or irreducible, to an explanation of the conferral of symbolic social status on intended objects, at least not by the intensionality or substitution of coreferential terms or logically equivalent expressions *non salva veritate* criterion, if 'X counts as Y in C' is not yet a complete true or false proposition with a truth value at risk to be preserved or lost upon substitution of coreferential terms for 'X' or 'Y'.

There also seems to be a sense of 'counts as' that has nothing whatsoever to do with intending. It seems proper English, however botanically naïve, to ask whether a fungus *counts as* a kind of vegetation or not, without meaning thereby to defer to collectively intended opinion on the matter, but to the facts of scientific classification and of whether or not fungi are or are not properly included in the category of vegetation. Searle cannot complain that this is also a matter of collective intentionality determining science, because the second half of his book is devoted to a commonsense defense of the intentionality independent real physical world that intending creatures such as ourselves inhabit. Likewise, we say that Fridays do not count as weekend days; that Auguste Renoir counts as an Impressionist; that Pluto does or does not count as a planet in our solar system; and the like. This sense of 'counts as', which Searle does not recognize or try to distinguish from his very different sense of the locution, obviously has nothing to do with conferring on or withholding symbolic social status from Fridays, Renoir, or Pluto.[11]

4. *Revisionary Neo-Searlean Social Ontology*

There are many points of agreement and only two containable dissonances between Searle's collectively intentionalist social ontology and the revision of Searle's philosophy of social institutions proposed here. We conclude by first listing out the convergences enthusiastically shared with Searle's social ontology:

1. Intentionality is essential to at least some (if not all) conscious mental states.
2. The concept of intentionality is therefore indispensable to the ontology of conscious mental states, and consequently in the adequate explanation of the existence and nature of intrinsically intentional conscious mental states and derivatively of all their expressions.
3. Social activity, practices and institutions, is the fruit of collective intentionality, and as

[10] Searle 1995, 95.

[11] See also Butchard and D'Amico 2011.

such the concept of collective intentionality is indispensable in the adequate explanation of all social phenomena.*

[*Searle considers collective intentionality to be logically and conceptually irreducible, whereas the proposed revisionary neo-Searlean social ontology does not.]

4. Collective intentionality is consequently the fundamental social reality.
5. The fundamental social status conferring (collectively intentional) function, essential to understanding all social phenomena, can be precisely, unambiguously and concisely formulated.*

   [*Searle considers the formula to be: 'X counts as Y in C', whereas the proposed revisionary neo-Searlean social ontology presents the formula as 'X = Y/C' or 'X is or from now on is to be a Y/C', rather than in terms of Searle's 'counts as' locution, built into an explicit (reducible) collectively intentional context, 'We intend that X = Y/C' or 'We intend that 'X is or from now on is to be a Y/C'.]
6. Social phenomena and their symbolic expressions and speech act instrumentalities are, respectively, intrinsically and derivatively collectively intentional. ('Legal tender' printed on paper money is the derivatively collectively intentional expression of an originating intrinsically collective intention, often as intended by a governmental authority on the part or in the name of its people.)
7. The existence, stability and success or otherwise of any social institution ontically depends, among other factors, on the state of the relevant society's collective intentionality, what it intends, wants, expects, and the like.

The differences between Searle's social ontology and the proposed revision are indicated in the bracketed comments attached to items (3) and (5) above. The revisionary neo-Searlean social philosophy results from these two emendations in the basic framework of largescale agreement with Searle's original theory, substituting a reductive for Searle's non-reductive collective intentionality model, and substituting a logically more visible but still intensional expression of a collective intention to confer symbolic social status on a chosen intended object. The point has been to outline a variant of Searle's account that, even if not preferable, is worthy of instructive comparison with Searle's otherwise solid prototype, motivated by criticisms of the same two controversial propositions in Searle's social ontology.

References

Austin, J. L. (1962) *How to Do Things with Words*. Ed. J.O. Urmson. New York: Oxford University Press.

Butchard, William and Robert D'Amico. (2011) '"Counting As" a Bridge Principle: Against Searle Against Social-Scientific Laws'. *Philosophy of the Social Sciences*, 41, 455–469.

Fitzpatrick, Dan. (2003) 'Searle and Collective Intentionality: The Self-Defeating Nature of Internalism with Respect to Social Facts'. *American Journal of Economics and Sociology*, 62, 1 (special issue on Searle, ed. David Koepsell), 45–56.

Jacquette, Dale. (forthcoming) 'Collective Intentionality in the Theory of Meaning'. In *Intentionality*, ed. Alessandro Salice, Munich: Philosophia Verlag.

Meijers, Anthonie W.M. (2003) 'Can Collective Intentionality be Individualized?', *American Journal of Economics and Sociology*, 62, 1 (special issue on Searle, ed. David Koepsell), 167–183.

Miscevic, Nenad. (2003) 'Explaining Collective Intentionality', *American Journal of Economics and Sociology*, 62, 1 (special issue on Searle, ed. David Koepsell), pp. 257–267.

Searle, John R. (1969) *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Searle, John R. (1990) 'Collective Intentions and Actions'. In *Intentions in Communication*, ed. Philip R. Cohen, Jerry Morgan and Martha E. Pollack. Cambridge: The MIT (Bradford Books) Press, 1990, 401–415.

Searle, John R. (1995) *The Construction of Social Reality*. New York: The Free Press (Simon & Schuster).

Searle, John R. (2002) *Consciousness and Language*. Cambridge: Cambridge University Press.

Tuomelo, Raino and Kaarlo Miller. (1988) 'We-Intentions'. *Philosophical Studies*, 53, 367–389.

Tuomelo, Raino. (2003) 'Collective Acceptance, Social Institutions, and Social Reality', *American Journal of Economics and Sociology*, 62,

1 (special issue on Searle, ed. David Koepsell), pp. 123–165.

Wittgenstein, Ludwig. (1967) *Zettel*. Ed. G.E.M. Anscombe and G.H. von Wright. Trans. G.E.M. Anscombe. Oxford: Basil Blackwell.

Wittgenstein, Ludwig. (1968) *Philosophical Investigations*. 3rd ed. Trans. G.E.M. Anscombe. New York: Macmillan Publishing Co., Inc.

Wittgenstein, Ludwig. (1974) *Philosophical Grammar*. Ed. Rush Rhees. Trans. Anthony Kenny. Oxford: Basil Blackwell.

Zaibert, L.A. (2003) 'Collective Intentions and Collective Intentionality', *American Journal of Economics and Sociology*, 62, 1 (special issue on Searle, ed. David Koepsell), 209–232.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

UNFAIR TO SOCIAL FACTS: JOHN SEARLE AND THE LOGIC OF OBJECTIVITY

Simon Smith
1Chase Cottages
Winchester Road
Waltham Chase
Southampton, Hampshire
SO32 2LX UK
e-mail: muscatmuskrat@gmail.com

Abstract:

John Searle's Making the Social World addresses a question that is as central to philosophy in general as it is to Social Ontology. It concerns the involvement of human beings in the creation of seemingly objective facts. The facts in which Searle is interested are 'institutional' facts. Such facts are objective; they are also, Searle argues, 'created by human subjective attitudes'. It is my contention that this apparent paradox arises from a misconception of 'subjective' and 'objective'. For Searle, these terms are synonymous with 'mind-dependent' and 'mindindependent'. Following the scientist and philosopher, Michael Polanyi, I argue that 'objectivity' is better understood as 'theoretical' and therefore worthy of universal recognition by rational agents. Being a matter of reason, objectivity contrasts, not with mind-dependence, but immediate experience. It follows that Searle's paradox is a function of the contradictory terms in which it is stated.

Key words: Searle, Polanyi, Objectivity, Institutional Facts, Theoreticity, Open Texture.

John Searle's *Making the Social Worl*[1] addresses a question as fundamental to philosophy in general as it is to Social Ontology. It concerns the involvement of human beings in the accreditation, constitution, and even creation of objective facts. The facts in question are social or 'institutional': facts about the president of the United States and the designation of certain pieces of paper as money, for example. Such facts are, according to Searle, objective. They are also "created by human subjective attitudes". His question, then, is "[h]ow is it possible that we can have factual objective knowledge of a reality that is created by subjective opinions?" (ix).

This article will not consider Searle's answer to that question but rather his conceptual foundations. Both question and answer, I suggest, stand upon a fundamental misconception. Searle assumes that the terms 'subjective' and 'objective' are synonymous with 'mind- dependent' and 'mind-independent'. Not, perhaps, surprising; it is, apparently, common usage. We would do well, however, to heed J. L. Austin's warning: common usage may be the first word, but it "has no claim to be the last" (1961: 133). Following the scientist and philosopher Michael Polanyi, I argue that 'objective' is better understood in terms of theoreticity. The relevant contrast, moreover, is not with mind-dependence but with immediate experience.

Searle's paradox is, therefore, a function of the contradictory terms in which it is stated. He has set out to explain something that does not, in fact, exist.[2]

Searle begins with three categories: 'mind-dependent', 'mind-independent', and 'intentionality-relative'. The first two are traditional philosophical

[1] All references to Searle are from here.

[2] Searle's paradox also has serious moral and political consequences. He has set out to discover what binds a society together; however, as Polanyi points out, this conceptual framework has proved more useful for destroying it.
According to Polanyi, that is, the destruction wrought by fascism and communism in the last two centuries is a direct consequence of that paradox. See, for example, Polanyi 1964: 17–18 and 77–78; 1974: 203-4 and 226–245; and 1998:passim.

categories used for carving up reality as philosophers traditionally conceive it. They encompass the gamut of mental phenomena, intentional – "beliefs, hopes, fears, and desires" – and non-intentional – "pains and states of undirected anxiety" (17). 'Intentionality-relative' designates a "class of phenomena that are not actually located in our minds but are dependent on our attitudes." No middle-ground between mind-dependence and mind-independence, this is, rather, a *tertium quid* in which both sides of this dichotomy may participate. Mind-dependent phenomena are generally 'intentionality-relative'; so, it seems, are some mind-independent ones. Institutions like "money, property, government, and marriage" are not "intrinsically mental in the way that intentions and pains are." Nevertheless, they are "dependent for their existence on the mental." They are, in some sense, constituted by the attitudes, beliefs, and commitments of those participating in them.

The exchange of paper tokens for things we value is made possible by mutual recognition or acceptance. Money exists because we, as participants in the relevant economic systems, agree it exists. Agreement is the basic condition for participation. It means 'recognising the operational rules which both constitute and govern those systems'. Indeed, Searle argues, social institutions are systems of "constitutive rules", rules such as "X counts as Y in context C" (10). Being grounded in mutual recognition or acceptance, these institutions are evidently mind-dependent to some degree. They are not, however, *intrinsically* mind-dependent, according to Searle; they are 'intentionality-relative' (17).

Social institutions automatically create certain facts. Dubbing these 'institutional facts', Searle claims that these too are 'intentionality-relative' (but not intrinsically mind-dependent) (10). Even more than their institutions, perhaps, these facts are mind-independent; that is, objective. Thus, that Barak Obama is the president of the United States, that Qaboos bin Said al Said is the Sultan of Oman, that Searle and I are both licensed drivers, are all (Searle insists) objective facts (10-11).

Notably, both 'objective' and 'mind-independent' are being used here in the same sense as they would be about brute facts. Facts like the distance between the Earth and the sun are (allegedly) true or false independently of anyone's attitudes and beliefs (10). They are also true or false independently of any social institutions; hence, Searle suggests, they set the standard for objectivity.

Institutional facts meet the first part of that standard. They are independent of the anyone's attitudes and beliefs. They do not, of course, meet the second part. They are not independent of any institutions. The question is, whether this is enough for objectivity. The terms offered are mutually exclusive, closed categories: mind-dependence and mind-independence, subjective and objective. There is no middle ground here. Once independence admits the least dependency it is no longer independent and the dichotomy collapses. This is Searle's problem: how can something be simultaneously mind-dependent and mind-independent. When stated in such logically incompatible terms, however, the problem begins to look less like a paradox than a straightforward contradiction.

Searle finds a solution in "collective intentionality" (8). "Collective intentionality", he argues, underpins both cooperative behaviour between individuals and the institutional realities that behaviour generates.[3] Crucially, we cannot "reduce collective intentionality, we- intentionality, to individual intentionality, I-intentionality" (47). Genuinely cooperative behaviour is much more than an aggregate of individual activities. Individuals must actually share aims *and* the intention to realise them.[4] If Searle is right about this, then institutional facts cannot be reduced to subjective, i.e. individual, experience. Institutional facts remain 'intentionality-relative' because they are relative to a group. They are not relative to the individual, however, and neither, therefore, are they *intrinsically* mind-dependent.

Thus, Searle avoids reducing institutional facts to subjective ones. In doing so, however, he reduces objectivity to collective experience, thereby making it relative to the collective. But 'objective', *qua* mind-independent, and 'collective' are not logically equivalent. If 'objectivity' means 'common consent', then institutional facts are objective insofar as they are independent of particular minds. If that is the sum of Searle's claim, however, then there is no philosophical case to answer. It does not follow from this kind of independence that the facts in question

[3] Cf. Polanyi on formation and maintenance of the scientific community: Polanyi 1964: lectures II and III (42–84); 1974: 216–224; and 1998: lectures 2, 3, and 4 (9–83).

[4] Briefly, individuals engaged in cooperative behaviour must share constitutive beliefs about one another's intentions and an active commitment to contribute to the fulfilment of them. This, of course, will have a significant impact on a basic utilitarian premise, namely that society is, as both Bentham and Mill assume, an aggregate of individuals.

are mind- independent *in toto*. If the mountains I see from my window are only independent of my mind, the possibility that the mountains are still mind-dependent has not been ruled out, it has merely been postponed. Indeed, no finite quantity of minds can assure us that the mountains are mind- independent, even if it includes all the minds that actually exist. Otherwise put, there is no logical difference between 'I-relative' and 'we-relative'. Relative is relative; no utilitarian calculations can change that.[5]

To clarify what we are *not* saying: the notes in my wallet count as money in Oman. Take these notes to England or America and they cease to function as money. Thus, any objectivity this institutional fact may have is strictly relative to the country in which I currently live. The idea of 'relative objectivity' is self-contradictory. Case closed.

This claim about money is not strictly true and nor is it our point. It is not true because, although the notes cannot be used outside Oman, they are still recognised as currency. How else could I exchange my rials for pounds, dollars, or anything else? Like any foreign currency, the function of my rials is suspended for the duration of my trip home. International currency exchanges depend on it. This global recognition is the key to Searle's conception of objectivity. Global recognition of the notes as functioning as money somewhere is enough to make facts about those notes objective.

Global recognition, however, cannot retail mind-independence. It may rule out dependence on all *actual* minds but it does not rule out dependence on all *possible* minds. This is the standard that objectivity must meet. We can easily imagine a society which has abandoned money altogether. After all, money is neither logically nor empirically necessary to human existence. A socialist utopia might not recognise or accept the concept of money at all, might rebut any and all claims about money as delusional. It may come to pass that the very concept of money departs peacefully with the last economist. If no conception of money survives, then there would be no way to make claims about money at all, true or false. Hence, as Ayer would doubtless remind us, any putative fact would then lack means of verification.[6] In Searle's terms, the allegedly objective fact that the notes in my wallet are money would have no conditions of satisfaction. Borrowing Searle's notation, X would not count as Y because context C no longer obtained. Any notes still existing, that is, would not count as money; that fact cannot survive the dissolution of the intentionality-relations which constitute it. It could not, therefore, be objectively true or false; it would be meaningless.

It may be that no such utopia ever exists. However, unless the possibility can be shown to be either logically or empirically impossible, then we must concede that a society could exist in which something which appears to us to be objective fact would be no fact at all. Do so, and we make objectivity relative to a particular group of minds at a particular point in history.

One might object here that, as a matter of fact, this is how historical claims work. For example, Searle observes, it is entirely likely that economic recessions occurred long before the expression was coined in 1929.[7] That no one knew what a recession was does not alter the economic facts. As long as there have been nation states, there have been upturns and downturns in their economies. In short, neither having nor understanding a concept are necessary conditions for the events they describe to take place.

We cannot deny that anyone talking economics and history is entitled to claim intelligibly that there was, say, a recession in France in 1473. It is not clear, however, that anyone talking philosophy is entitled to do the same. References to a French recession of 1473 are not objective *qua* mind-independent. Partly, this is because the term 'recession' does not refer to events as such. It is a measure of economic activity, a point on a scale of measurements. Like all such measures, it is an institutional fact. As such, it functions according to mutual agreement. That, however, is a long way from mind-independent objectivity. Scales of measurement yield facts for everyone recognising them (in both senses). But they cannot be blithely appropriated by philosophers hoping to discover "the fundamental nature and mode of existence – what philosophers call the essence and ontology" of their objects, as Searle assumes (ix). His target here is not a description relative to one, rather narrow, account of human experience; it is the nature of social reality as it really, mind-independently, is; what Peter Byrne dubs the "non- perspectival truth" (2003: 40). We cannot simply assume, however, that anyone talking economics is also talking metaphysics.

[5] Peter Byrne's case for 'innocent realism' amounts to much the same thing; see, for example, 2003: 35, 65, 117–118.

[6] For a summary of verificationism, see Ayer 1975: 7–17.

[7] In fact, Searle borrows Julius Shiskin's definition of a recession as 'two consecutive down quarters of GDP' (Shiskin, 'The Changing Business Cycle', *New York Times* 1st December, 1974: 222).

Similarly, physicists might reasonably deny that the temperature of the sun has anything to do with the accidents of history. However, a philosopher cannot insist that the surface of the sun would be 5778 kelvin even if Lord Kelvin had never been born. We might just as well say

that there is a temperature scale which will never be invented; 5778 kelvin is equivalent to a certain point on that scale. But this is clearly unintelligible.[8]

Returning to medieval France, talk of recession is a description of events from a particular perspective: economics. It relies on what we might call a particular 'theoretical lens' through which events are viewed and interpreted. *Nota bene,* this is not a question of whether or not *we* should accept King Louis the Prudent's[9] account of events: that, for example, the country laboured under some, possibly English, witch's curse. The point is, rather, under what circumstances *he* should feel compelled to accept *ours*. Economic claims cannot be made sense of without presupposing that 'lens'. We should not expect the Universal Spider to agree that there was, in fact, a recession going on unless we gave him the 'theoretical lens' through which we view the situation. Without it, he might legitimately observe that our claims are neither true nor false but strictly meaningless. It remains to be shown how any fact can be objectively true for one person and logically and cognitively empty for another.

Economists, unlike philosophers, are not concerned with the fundamental nature of any existence. They offer, instead, descriptions of a specifically *economic* reality: they interpret events in economic terms. Their 'lens' is what Strawson would call an adequate logical condition[10] of coherent interpretation and any related knowledge claims. Further, a 'lens' presupposes the thinkers who craft and polish it; that is to say, the whole community of economists elaborating and refining economics as a discipline. Consequently, any factual claims it reveals cannot be mind-independently objective. Indeed, the only objectivity here is Searle's 'objectivity': 'objectivity' relative to, and dependent upon, the community of thinkers; and that is no objectivity at all.

Searle tackles this objection by distinguishing between 'epistemic objectivity' and 'ontological objectivity'. Doing so, he suggests, allows us to talk coherently about objective facts grounded in subjective experience. Ontologically speaking, money is mind-dependent; epistemically, however, it is mind-independent. Ontological relativity does not preclude epistemic objectivity.

The prospect of sitting on Hume's fork is hardly inviting. If the distinction holds, 'epistemic objectivity' offers nothing more than common consent: Searle's own constant conjunction. It also leaves us unable to make knowledge claims about an 'ontologically objective' world that is independent of our knowledge. As Austin Farrer observed, "[i]t is not plausible that we should be able to talk about types of things, about which we can do nothing but talk" (1959: 74); not, that is, if we wish to talk about any kind of facts. Surrender our knowledge claims about the 'ontologically objective' world, moreover, and we surrender our standard of objectivity. 'Objective' can no longer be taken to mean 'mind-independent' because there is no mind- independent reality that we know of. Thus, rather than help his case, Searle's distinction actually means that we cannot talk about objective facts at all.

It cannot make sense to assert existence while simultaneously denying all knowledge of the existence asserted. Whether I am talking about the money in my wallet or the mountains around Muscat, my knowledge of their existence cannot be independent of my knowledge of their existence. Almost anything *might* exist independently of my knowledge; how shall I know which of these possibilities my assertion refers to? Answer 'those mountains there' and we abandon Searle's distinction for we assume that what I know and what there is coincide. If they do coincide, how then shall I distinguish between them? 'Those mountains there' are objects of knowledge. No, linguistic idealism will not do. For the distinction to hold, we must find a way to identify the existents I *do not know about.* But then how shall I recognise these existents *as* existents? That was Wittgenstein's question: "if you admit that you haven't any notion of what kind of thing he has before him – then what leads you into saying, in spite of that, that he has something before him?" (1953: §

[8] The tendency to ignore the differences between types of talk is underpinned by another of the realist's suppressed premises. *Unum nomen, unum nominatum:* one thing per thing named (Austin 1961: 7). Why anyone, let alone Searle, would want to resurrect this hackneyed theory of language is unclear. The difficulties it presents are as numerous as they are notorious. Austin put his finger on the problem: 'why, if 'one identical word' is used, must there be 'one identical' object present which it denotes? Why should it not be the function of a word to denote many things? Why should words not be by nature 'general'?' (1961: 7).

[9] Louis the XI; also known as the 'Universal Spider'; see *Encyclopedia Britannica* 2012.

[10] See P. F. Strawson 1959: 105–6 and 112; and 1952: Ch. 6.

294). A coherent answer, Charles Conti argues, must obey Quine's predicate-rule: "To be is to be the value of a variable; to have predicate function" (1995: xxxi).

Logically isolate knowing agents from objects known and we are left with empty object- reference: the claim *that* something is *there* with no hint of *what* is *where*. We cannot even say 'there is an X such that...' for the claim lacks predicable possibility. An X such that...what? This is what we do not know. Farrer called it "an X absolutely undefined" (1972: 88). If we cannot say *what* this X is, then, equally, we have no way of knowing what it is not: "the snort of a hippopotamus or the left great toe of an archangel or the taste of asparagus." In short, Searle's distinction leaves us unable to identify any particular thing. "We cannot say that the stuff is there *qua* 'mine'; the last word is, that it is there" (1959: 66). With three possibilities down, Farrer went on to cover all conceivable bases:

[W]hat is just 'there' is not there *qua* simple, nor *qua* complex of a certain structure, nor *qua* anything rather than anything else. The 'thereness' has no unit; it is no more whole than part, nor part than whole, no more one than many, nor many than one; it is no more 'it' than 'they', nor 'they' than 'it'; *it/they is/are that/those* in which all such distinctions equally lie (1959: 66).

Thus, Searle's distinction offers logical indifference in place of real reference. It means,

as Stuart Hampshire notes, that "all our statements would be unrestricted general statements, unrelated to reality by any indication of particular segments of reality" (1983: 18). This defeats any possibility of intelligible identification, for an identification containing all distinctions is logically equivalent to one containing none at all. Yielding no particular distinction, sheer *'thereness '* tells us literally nothing about any putative reality. Returning to Quine, Conti insists "no entity without identity and no identity without describability; *no entia non grata*" (1995: xxii). No *there* or *that* without some particular *where* and *what.* And where and what are functions of concrete epistemic connection: objects of knowledge. This defeats any coherent conception of that descriptively threadbare ontology: the world-as-it-is-in-itself, apart from our knowledge of it. Hence, even a stalwart realist like Byrne admits "we only know the world as it appears to us, but not as it is in itself" (2003: 69).[11]

Here, then, is our quandary. No abstraction from the community of thinkers or their 'theoretical lens' will supply reality as it is in itself. Mind-independence, except in the strictly limited and somewhat trivial sense of being independent of individual minds, has failed us. Demand more and we risk losing our epistemic grip. Objectivity corresponds to global recognition, mutual acceptance. This much to Searle. Indeed, this is true of all facts, brute and institutional. Facts of physics are as dependent on the physicist's 'lens' as economic facts are on the economist's. All facts are therefore 'we-intentionality-relative'. But now we face an impossible choice: linguistic idealism or (in Wittgensteinian parlance) ontologically empty language-games. Reduce 'objectivity' to global recognition and we either concede that reality is what our 'theoretical lens' picks out or we abandon the attempt to refer to any particular reality at all. Either

[11] Cf. Hampshire on the futility of distinguishing between what we know and what there is. "We cannot now separate the world as we see it, as a result of the infinitely complicated evolution of our ways of thought and speech as civilised beings, from the world as it really is, somehow divided into its elements by a 'natural system of classification'" (1983: 39.). Being unable to make that separation, neither can we conceive it. Radical abstraction from the linguistic and conceptual framework through which the world is accessed renders that world utterly unknowable, literally unthinkable. To identify even as much as merely 'that' inevitably draws on our linguistic resources for a designation of 'thing-hood'. To make good on the distinction, Hampshire suggests, would require some "natural, pre-social units already discriminated as the ultimate subjects of reference in our experience" (1985, 26). See also 34 where Hampshire calls it the "self-refuting assumption of man in a partial state of nature, retaining one social institution, one means of communication and one set of conventions, but one that he has freely invented for himself, without the prior institutions, the means of communication and conventions, which would enable him to attach a sense to his invention." Sadly, for the realist, it is simply "too late to make this effort of abstraction." Only then would this distinction meet the pragmatic requirements of actual language users. This is because the primary function of language is, according to Hampshire, to divide the world into "segments which are to be the constant subjects of reference" (1983, 11).
Hampshire is correct here, as far as he goes. However, simple physical conjunctions will ultimately fall short of the fullest expression of human relations. In brief, the first experience of conscious agents is not of a world as such, but other agents. Therefore, the basic function of language is not to relate agents to the world as such, but to one another. (See Allen 2012: 35 n3.) Language is a mode of communication. We do not soliloquise often, and when we do it is usually to some practical effect: even Hamlet had a very active murder in mind.

way, objectivity is defeated and Searle's paradox does not arise.

Since the choice is impossible, we shall not choose. We shall rethink 'objectivity' instead. As the scientist and philosopher, Michael Polanyi, shows, 'objectivity' does indeed signal an increasingly theoretical perspective. Objective facts relate to theory-builders: individual enquirers in intellectual communities. It is they who develop and refine the discourses within which facts are recognised. Nevertheless, *that* any fact is objective cannot depend on any particular theory-builder or community of theory-builders. Recognition of objectivity is a conscious act but whether it is undertaken by a particular individual or a particular community cannot effect the objectivity recognised. This does not mean, however, that objectivity is equivalent to mind-independence. It remains, in Polanyian terms, the coefficient of the objectively theorising mind (1964: 10).

For Polanyi, that is, objectivity exchanges crude anthropocentrism for rational interpretation of experience.[12] Take the Copernican Revolution. In driving humanity from the centre of the universe, Copernicus rejected empirical evidence: "the irresistible fact of the sun, the moon, and the stars rising daily in the east to travel across the sky towards their setting in the west" (1974: 3-4). His grounds for doing so were essentially theoretical. His discovery was built on mathematical calculations that would not be confirmed empirically for several hundred years. Its claim to objectivity stands upon the belief that it is more rational to accept it than not.[13] Being rational, that interpretation is not merely global, but genuinely universal: true or false for all *possible* minds.

This is because "[a] theory is something other than myself" (1974: 4); it ameliorates individual limitations, personal biases, etc. It does so, Polanyi argues, not because it is recognised by others, but because it can be expressed as a system of rules allowing anyone using it to consistently organise and evaluate their experience. The clearer and more explicit the system, the more likely it is that any anomalies encountered are caused by the system. I may, of course, make mistakes when applying the system, but my mistakes do not effect its consistency or coherence. Rules "cannot be led astray by my personal illusions" or, we might add, collective ones (1974: 4). Rules have a "rigid formal structure, on whose steadfastness I can depend whatever mood or desire may possess me." That 'rigid formality', the theories 'otherness', legitimises the confidence I and my community place in it. For "it is not I, but the theory, which is proved right or wrong when I use such knowledge" (1974: 4). Granting this, we can see that "the formal affirmations of a theory are unaffected by the state of the person [or, again, community] accepting it". An objective theory will be constructed "without regard to one's normal approach to experience." Geographical location, for example, will

[12] Farrer, too, rejected the traditional dichotomy of reason and experience. See 1967: 18–21.

[13] For Polanyi, the only reason we can give for believing this is that, for those who accept it, the belief is more intellectually satisfying than any alternative (1974: 4–5). This, moreover, explains the extreme difficulty faced by scientific proselytizers like Richard Dawkins. Intellectual satisfaction is, Polanyi adds, a matter of conscience; see 1964: 10–11; 25–28; 65–67. The particular world view I hold is a pragmatic and personal question. My choice will, obviously, be informed by a whole host of considerations, cultural, social, historical, etc.. Ultimately, however, it comes down to how well the world view in question explains my experience to me and my community. Arguably, the sciences fair poorly here, something Dawkins seems to have forgotten. Armed only with 'mere' theories, the scientist cannot be surprised if he or she is unable to shake the convictions of those who trust their – usually quite reliable – senses. The irony of demanding as much while trumpeting empirical evidence has been lost on many.

See, for example, Levi-Strauss 1972: 188-205 for a detailed description of the *Mu-Igala*. Sung by shaman of the Cuna people of Panama, this song is used to help women experiencing difficult childbirth. It recounts the shaman's (mythical) journey into the suffering woman's uterus. The force and endurance of the practice is a corollary of its efficacy. To caricature (mildly and without malice) philosophical pragmatism, it is true because it works. Scientific or rationalist denials of this will not have the slightest effect on those who believe in the *Mu-Igala*; for the denial to have any force, one must have already accepted it's underlying presuppositions, presuppositions which cannot themselves be either scientifically or rationally justified. My reasons for believing that the universe is amenable to rational investigation are no worse than the Cuna's; but neither are they better. Science is not the only field to face this dilemma, of course. As Peter Singer points out; see 1993: 316. Indeed, one suspects that this accounts for the popularity of ideas like moral and cultural relativism. Attempts have been made to overcome this difficulty by, for example, appropriating scientific discovery on behalf of Islam; most famously, perhaps, see Bucaille 1978. This tactic is dubious, however, and not to be recommended. Despite being a fairly popular pastime in Oman and elsewhere, it has no scholarly merit and can do little credit to either genuine scientists or genuine Islamic scholars.

be irrelevant. If it is genuinely objective, Copernicus' theory "equally commends itself to the inhabitants of Earth, Mars, Venus, or Neptune, provided they share our intellectual values."

Thus, objective descriptions of our environment are only possible if we can distinguish between objects experienced and our experience of them. Farrer called this the 'scientific ideal' (1967: 18). Such a distinction can only be made theoretically, through the conscious application of a system of rules designed for the purpose. It cannot be done in practice: no community, however large, can distinguish intelligibly between object and experience *in the act* of experiencing it. Thus, the 'objective' explorer deploys her theory in order to identify features of her environment as they *would be*, not mind-independently, but apart from the immediate circumstances of their discovery.

Discovery is, of course, subject to confirmation and agreement by others. Hence

Feuerbach's claim: "[t]he knowledge of a single man is limited, but reason, science, is unlimited because it is a common act of mankind" (1957: 83). It is by such common acts that any community of enquirers evaluates the theories and explanations of its members. Judgement is a matter of mutual agreement. By passing judgement on the efforts of his or her fellows, every member uphold the standards and ideals which make their enquiries possible and which bind them together as a community.[14] In short, any objective claim must be tested in the crucible of open debate. Succeed there and the community as a whole may say of a theory that 'its excellence is not a matter of personal taste on our part, but an inherent quality deserving universal acceptance by rational creatures' (1974: 4).

Nevertheless, objectivity is not dependent on that acceptance. A theory rejected is not thereby proven false; entire communities can be wrong. Indeed, there are numerous examples of scientific theories gaining acceptance only after years in the wilderness. Polanyi's own 'potential theory of adsorbtion' was initially rejected by the scientific community because it ran counter to the prevailing scientific assumptions and beliefs. Its eventual acceptance followed a fundamental change in those assumptions.[15]

There is more to objectivity than universal acceptance. There is also a fundamental faith in a reality hitherto unseen and unknown. That is the essential premise of all enquiry; after all, the "vast growth of science in the last 300 years proves massively that new aspects of reality are constantly being added to those known before" (1964: 24). To qualify as objective, Polanyi argues, any new addition must reach out into this open horizon. Laws of physics cannot hold for the immediate circumstances of their discovery alone. A law governing one, possibly unique, expression of physical forces is not a law. It must offer the possibility of connecting to an indefinite range of other facts and theories. "To hold a natural law to be true is to believe that its presence will manifest itself in an indeterminate range of yet unknown and perhaps yet unthinkable consequences" (1964: 10). Objectivity, in other words, signifies a truth which reaches beyond its immediate facticity and promises to be true in ways the discoverer will not have dreamt of. Hence Polanyi's "new definition of reality": "Real is that which is expected to reveal itself indeterminately in the future" (1964: 10).

Logically speaking, this indeterminacy follows from the "*essential incompleteness* of empirical description" (Waismann 1968: 39). Full, final, and complete explanation eludes the enquirer primarily

[14] This does not, of course, mean that every scientist is an expert in every scientific field. Polanyi notes, "[e]ach scientist watches over an area comprising his own field and some adjoining strips of territory, over which neighbouring specialists can also form reliable first hand judgements" (1974: 217). This overlapping of expertise and proficiency organises the scientific community into a matrix of interconnected judges, governed by what Polanyi calls General Authority. See Polanyi 1964: 15–16, 47–49, 54, 60–61; for the extension of General Authority into civic life, see 1964: 67–74.

Given this, it seems that philosophy is more objective than science in that philosophy aims at a more theoretical understanding of human experience; one that is, moreover, applied to the whole of human experience rather than one aspect of it. On the other hand, it is clear that philosophy is considerably *less* objective than science because there is no general consensus among philosopher regarding a methodology or the values, ideals, and standards which underpin it.

[15] See, Polanyi 2010: 87–96; cf. Kuhn, 1996 on 'paradigm shifts'. See also Polanyi 1964: Appendix; and Polanyi 1998: 13-18. Notably, Polanyi is not actually complaining about the fact that his ideas were not immediately accepted. On the contrary, he argues, a relatively high degree of orthodoxy in scientific opinion is essential to the survival of the scientific community and its activities. Some authority must be exercised if the sciences are to avoid the relativist's trap: truth being decided according to the whim of the individual, the isolation of scientists from one another (since they no longer share values or standards), and the whole cultural practice collapsing into nonsense.

because no finite series of tests will confirm or deny a theory absolutely. The number of possible tests may always be extended and the possibility of obtaining different results cannot be ruled out *a priori*. This 'open-ended-ness' marks the limits of inductive reasoning. According to Waismann, however, not only am I unable to perform all the tests needed to prove my theory once and for all, I cannot "be sure that I know all the tests that may be required." Indeed, I cannot even imagine all the possibilities which might call for testing. Experience inevitably outruns reason, leaves explanation playing catch up with exploration. (Thus, where Polanyi rejected positivist conceptions of science, Waismann attacked their theory of language.)

Waismann called this *Porositat der Begriffe*, the 'open texture' of language (1968: 37).[16] It means that "we can never exclude altogether the possibility of some unforeseen situation arising in which we shall have to modify our definitions" (1969: 38). Since we cannot determine either the properties or the interactive potential of any given existent, neither can we exhaustively delimit its predicable possibilities. We cannot because we cannot know all the possible circumstances in which the existent might be found or the properties and potentials that might there be encountered. Our empirical descriptions cannot, therefore, be made logically watertight. As Austin put it, "however well-equipped our language, it can never be forearmed against all possible cases that may arise and call for description" (1961: 143). That "is what is meant by the open texture of a concept" (Waismann 1968: 38).

We may cheerfully admit the limitations of our theories; no failure of reason, but an essential feature of exploration. Experience offers access to a world awaiting description. Fact, in Austin's always pithy idiom, "is richer than diction" (1961: 143). Our most objective claims find expression in an unlimited, and therefore unknown, range of possibilities. Put simply, declare a theory 'objective' and we "accept it in the hope of making contact with reality," a reality which cannot be defined once and for all by any particular description or set of rules (1974: 5).

It is this "wholly indeterminate scope of its true implications" which supplies the "deepest sense" in which anything may be designated 'objective' (1974: 5). It is, moreover, this 'deeper sense' which makes talk of fourteenth century French recessions potentially objective.

'Objective' means open to "an indefinite range of of possible future confirmations". For any discipline equipped to make them, 'future confirmations' includes historical claims. Such descriptions are no less theoretical and, most importantly, no less 'open textured' than the Copernican solar system. We may reasonably apply the terms 'recession' and 'heliocentric' retroactively if the phenomena identified fit within the relevant theoretical framework. The descriptions are objective insofar as they are revealed by a 'theoretical lens' which faces an open horizon of possible manifestations. This, Polanyi suggests, is the essence of our "belief in the superior rationality and the objective validity of...[a] system" (1974: 5).

Institutional facts may not be mind-independent, as Searle supposes; but they are

objective. Facts about money belong to a theoretical framework which is globally accepted and universally accept*able*. Whether you and I agree that the notes in my wallet are money is irrelevant. Their function is governed by a system of universally applicable rules: an economic theory which promises an indefinite range of future applications. Similarly, the objective fact that Searle and I are married (not to each other, obviously) is a function of the system of rules governing certain types of personal relationships and contracts. These facts also point beyond immediate experience. The fact of my marriage may yet be manifest in ways unthought of at the time of its creation. For example, that my wife is currently entitled to, among other things, residency in Oman and a flight home paid for by MCBS are confirmations of our marriage. They are institutional facts which, I suspect, no one at our wedding would have expected or, frankly, imagined.

In sum, all facts – brute and institutional – may qualify for objectivity. To do so, the theoretical framework to which they belong must abstract from the immediate circumstances of both discoverer and discovery. They are not, therefore, objective *apart from* all *actual* minds, but *for* all *possible* ones. This neither entails nor even requires that we imitate the realist's "pretence of jumping off one's own shadow" (Farrer 1967: 1). Indeed, "[a]ny attempt to rigorously eliminate our human perspective from our picture of the world must lead to absurdity" (Polanyi 1974: 3). Copernicus did not abandon the human point of view, he realigned it. Taking an imaginative step outside the solar system gave "preference to man's delight in abstract theory". That delight may be unlimited but it remains "under the sun" (Conti 1995: xxv).

The most objective fact is a coefficient of the

[16] Waismann attributes the translation to W. C. Kneale, (1968: 37 n1). On 'open texture', see also Hampshire 1989: 85–88; and Polanyi 1964: 21–25

minds constructing, interpreting, and applying the rules which reveal it. However good our system of rules may be, our view of reality is inevitably shaped by our perceptual and rational faculties. Our investigations must meet the pragmatic requirements of human communication; they must be expressible in a human language if they are to be subject to the basic constraints of intelligent thought. Crucially, they also stand upon a foundation of non-theoretical knowledge. The act of discovery is not itself theoretical. Using a system of rules is, perforce, a practical matter that is both informed and (punning the point) *in-formed* by a considerable array of practical knowledge, some explicit, some tacit.[17] The enquirer must know, for example, how to follow and apply rules, how to compare sets of circumstances, and, perhaps, how to align discordant ones. Understanding the ideas with which she is presented and those she would present to others means knowing how to use the language in which her system is framed: its grammatical, syntactical, and semantic organisation. Most importantly, perhaps, she must know how to extend her own agency through other agents, generating and controlling causal sequences. Put simply, she must know how to interact with her environment, manipulating its features to bring about predictable change.

Being a corollary of the rule-formulating project, objectivity is, moreover, grounded in the projections of rule-formulating enquirers. The belief that the human mind is up to the job of exploring and explaining the universe is a basic presupposition of any enquiry. The scientist must hold that the universe is fundamentally rational. This belief is an imaginative projection of her own rationality. She has no grounds beyond the pragmatic for assuming it to be true. Scientific success *could* as easily be a result of coincidence or divine whim. Of course, scientists, *qua* scientists, do not concern themselves with such matters. Their business is with the workings of the universe, not the metaphysical implications of their own assumptions.

Reason may be no less anthropocentric, then, but it is ambitious. Reason aspires to a view that is universal in scope and application. It strives to overcome the limitations of both individual *and* community. Simultaneously, it seeks to make contact with reality, to construct a picture of our universe that encompasses everything from one end to the other. Pursuing the ideal of universality has, Ludwig Feuerbach observed, enabled our species to count "the stars in the sky, the ova in the spawn of fish and butterflies, and the coloured spots on the wings of insects" (1986: 17). Moreover, "[w]hile one man notices what is happening on the moon or Uranus, another observes Venus or the intestines of a caterpillar." Therein lies the "ambitious anthropomorphism of our reason" (Polanyi 1974: 5). Unhindered by ontological distinctions, ambition is fulfilled, objectivity grasped, not mind-independently, but fully in the transactions between knowing agents and objects known.

Not mind-independence, then, but universality. Universality is the coefficient of the 'open texture' of those facts: that they are not logically self-contained or expressed in particular circumstances – either of discovery or future affirmation – but offer an indefinite range of future possible confirmations. Our acceptance of any fact as objective is an acknowledgement of that. Hence, objectivity does not merely signify the actual recognition of any individual or group of individuals. It also signifies the recommendation that a fact is worthy of recognition by all rational creatures, now and for the unforseable future.[18] Ultimately, that recommendation, whether made by an individual or an entire intellectual community, stands upon the conviction that a theoretical framework and the standards governing it simply are more rational, more intellectually satisfying, than any alternative. This does not, indeed *cannot*, negate the role of the discoverer or her intellectual community. Only as a member of that community can she legitimately lay claim to the systems, standards, and values that make her enquiry possible in the first place. More importantly, those systems, standards, and values are themselves underpinned by non-theoretical knowledge, without which the whole cultural practice of discovery could not even begin. This is the personal coefficient of any fact; ignore it and philosophy must fall dismally short of a full account of factual knowledge, institutional or otherwise. There is, Harvey points out, "no knowledge without the personal coefficient" (2012: 64). For "knowledge is always constituted in part by the tacit commitment of the knower." Turn to the dictionary,

[17] For Polanyian scholars the role of non-theoretical and specifically tacit knowledge in the process of discovery marks Polanyi's special contribution to the field of epistemology. See, for example, Polanyi 1964: 10–19; 38–41; and 1974: ch.4. See also Clark 2012: 11–20; and Harvey 2012: 64–66.

[18] Cf. Polanyi 1964: 53: "Nor can science be successfully guided by scientific opinion unless it is strictly understood that this opinion represents only a temporary and imperfect embodiment of the traditional standards of science."

as Austin advised, and we find the point neatly spelled out (1961: 134). The Latin root of the word 'fact' is*facere,* meaning 'to do' or 'to make' (Shipley 1945: 148). Thus, the most objective facts do not simply await discovery in epistemic (still less, ontological) independence. They are made, more properly, constituted by concrete transactions between the discoverer, her intellectual community, and the reality discovered. Finally, the confirmation of any discovery and of any future manifestations will be the common task of both *actual* and *possible* members of that community: those currently engaged on the search and those not yet born. The logical conditions for objective facts known – as opposed to facts the existence of which we can only speculate about – are thereby honoured in full.

If correct, this analysis of objectivity raises serious problems for Searle. It seems he has attempted to explain something which does not, in fact, exist. His paradox concerns the mind- dependent foundations of some mind-independent facts. Ultimately, however, there are no such facts. On his own terms, institutional facts remain a matter of mutual agreement, dependent not on the individual but on the group. They are not, therefore, independent at all. His question, then, is fairly straightforward but hardly contentious. Not 'how can some facts be simultaneously subjective and objective?' but rather 'how does cooperative behaviour generate mutual agreement?' In the end, I suggest, that is a question of psychology, not philosophy.

References

Allen, R. T. (2012)'The Dialectic of Assimilation and Adaptation Revisited', *Critical Conversations: Michael Polanyi and Christian Theology* 33-55. Ed. Rae, M. A. Oregon: Pickwick.

Austin, J. L. (1961) 'A Plea for Excuses', *Philosophical Papers.* Eds. Urmson, J. O. & Warnock, G. J. Oxford: Clarendon.

Ayer. A. J. (1946) *Language Truth and Logic.* London: Penguin, 1946.

Bucaille, M. (1978) *The Bible, the Qu'ran and Science.* Trans. Pannell, A. D. Indianapolis: American Trust Publications.

Byrne, P. (2003) *God and Realism.* Aldershot: Ashgate.

Clark, T. (2012) 'Knowledge in Science and Religion: A Polanyian Perspective', *Critical Conversations: Michael Polanyi and Christian Theology* 9-32. (2012) Ed. Rae, M. A. Oregon: Pickwick.

Conti, C. (1995) *Metaphysical Personalism.* Oxford: Clarendon.

Farrer, A. M. (1959) *Finite and Infinite,* 2nd Edition. Westminster: Dacre.

———. (1967) *Faith and Speculation.* London: Adam & Charles Black.

———. (1972) 'Metaphysics and Analogy', *Reflective Faith,* 82-90. Ed. Conti, C.C. London: SPCK.

Feuerbach, L. (1957) *The Essence of Christianity.* Trans. Eliot, G. New York: Harper & Row.

———. (1986) *The Principles of the Philosophy of the Future.* Trans. Vogel, M. H. Cambridge: Hackett.

Hampshire, S. (1983) *Thought and Action.* Notre Dame: University of Notre Dame.

———. (1989) *Innocence and Experience*. London: Peguin.

Harvey, L. (2012) 'The Theological Promise of Michael Polanyi's Project: An Examination within the Contemporary Context of Atheism and the Constructivist Critique of the Natural Sciences', *Critical Conversations: Michael Polanyi and Christian Theology* 56-73. Ed. Rae, M. A. Oregon: Pickwick.

Kuhn, T. S. (1996) *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

Levi-Strauss, C. (1972) *Structural Anthropology.* London: Penguin.

Phillips, D. Z. (1981) *The Concept of Prayer*. Oxford: Blackwell.

Polanyi, M. (1964) *Science, Faith and Society.* Chicago: University of Chicago Press.

———. (1974) *Personal Knowledge.* Chicago: University of Chicago Press.

———. (1998) *The Logic of Liberty.* Indianapolis: Liberty Fund.

———. (2010) 'The Potential Theory of Adsorbtion', *Knowing and Being* 87–96. Chicago: University of Chicago Press.

Searle, J. R. (2010) *Making the Social World.* New York: OUP.

Shipley, J. T. (1945) *Dictionary of Word Origins.* New York: Philosophical Library.

Strawson, P. F. (1952) *Introduction to Logical Theory*. London: Methuen & Co.

———. (1959) *Individuals*. London: Methuen & Co.

Waismann, F. (1968) 'Verifiability', *The Theory of Meaning* 35–60. Ed. Parkinson, G.H.R. Oxford: OUP.

Wittgenstein, L. (1985) *Philosophical Investigations*. Oxford: Blackwell.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

GROUP MINDS AND THE PROBLEM OF THE FIRST BELIEF

Arto Laitinen
School of Social Sciences and Humanities
University of Tampere
Finland
e-mail: arto.laitinen@uta.fi

Abstract:

This article presents theories of group belief with a problem. It is conceptually and psychologically impossible for there to be a believer with just one belief. For conceptual reasons, a single belief could not have any content without the background of other beliefs. Or even if it could, it would for psychological reasons be impossible for the believer to know or understand the content of its sole belief. With certain plausible assumptions, however, groups would at some point of time have to have only one belief. (The assumption of discontinuity between the group's and its members' commitments leads to this.) If it is conceptually or psychologically impossible for the group to acquire its first belief, it can never come to acquire any beliefs at all. The article ends by discussing various ways out of this dilemma.

Key words: Group belief, Philip Pettit, belief formation, holism, content of beliefs, problem of the first belief.

Background

Groups, committees, organizations and so on seem to be 'centers of 'or 'loci of" or 'bearers of" responsibilities, commitments, or obligations, which are separate from their members' responsibilities, commitments, or obligations. For example, if a society buys something, it is to pay for it from its own bank account, not from its members' accounts. If a society makes a promise or a contract *it* is to keep it, instead of, say, one its members privately doing the promised thing.

The same goes for beliefs and voluntary acceptances, which are commitments to hold a proposition true (say, in further deliberation).[1] We typically attribute beliefs to groups as in this list of examples from Tuomela (1992):

> a) The Government believes that war against Iraq will begin soon; b) The Catholic Church believes that miracles exist; c) Texaco believes that children should be seen, not hurt; d) The Communist Party of Ruritania believes that capitalist countries will soon perish (but no one of its members really believes so); e) Our family believes that the schools in this country are inefficient; f) The team believes that it will win today's game; g) The Finns believe that sauna originated in Finland; h) This mob believes that Smith is a traitor, and i) Europeans believe that face-to-face discussants should keep at least half a meter apart from each other.

One way to understand the talk of group beliefs is offered by Anthony Quinton, who calls any attributions of beliefs to groups as a "summative" or "metaphorical" way or speaking about what "most or all" of its members believe or intend:

> We do, of course, speak freely of the mental properties and acts of a group in the way we do of individual people. Groups are said to have beliefs, emotions, and attitudes, and to take decisions and make promises. But these ways of speaking are *plainly metaphorical*. To ascribe mental predicates to a group is always an indirect way of ascribing such predicates to its members. With such mental states as beliefs and attitudes, the ascriptions are of what I have called *summative* kind. To say that the industrial working class is determined to resist anti-trade union laws is to say that *all or most* industrial workers are so minded. (Quinton 1975, 17, ital. added)

This understanding is opposed by those who think that group beliefs do not reduce to the beliefs of individuals, any more than any other commitments of groups reduce to the commitments of the

[1] On belief and acceptance as true, see Cohen, Hakli.

individuals.

Does the talk of commitments and beliefs of a group commit one to a group mind? No. Such attribution does not mean attributing to groups a mind in the same sense of a phenomenal, experience-laden consciousness that individuals have. Any defences of a "group mind" have defined the notion in some more restricted sense. [2] Pettit (2001) and Rovane (1998) draw a distinction between phenomenal and rational points of view. Groups do not have a phenomenal viewpoint or 'mind' – they do not feel pain, sensations or sentient experiences – but they do have a rational center of commitments, and their system of commitments may include a commitment to rational unity, coherence and lack of contradiction. That, according to Rovane and Pettit, is central to group personhood and agency. Because 'mind' in the relevant sense need not be phenomenal, it is innocent enough to speak of group minds (see also List & Pettit 2011). But most theorists drop even that talk, and steer between Quinton's summative view and Pettit's and Rovane's talk of group minds, arguing that talk of group beliefs is actually talk of the shared intentions, joint commitments or we-mode attitudes of the (operative) members of the group together.[3] This article refers to Pettit's view, but the problem posed applies *mutatis mutandis* to any theory – in the concluding section some of these are discussed.

Are groups mere *objects* of an "intentional stance" (Dennett 1987), like chess computers? Or, are groups also *subjects* of such intentional stances? Say, when a group of chess players plays together against a chess computer, the group (via its members) possibly adopts a stance towards the chess computer, whereas the chess computer does not adopt any stance towards the group. The problem discussed in this paper concerns groups as (putative) *subjects*, not merely objects, of intentional stances.

The conceptual problem

Theories of group belief face a problem, what I call the problem of the first belief. On the one hand, it is conceptually and psychologically impossible for there to be a believer with just one belief. For conceptual reasons, a single belief could not have any content without the background of other beliefs. Or even if it could, it would for psychological reasons be impossible for the believer to know or understand the content of its sole belief. On the other hand, with certain plausible assumptions groups would at some point of time have to have only one belief. (Assuming a discontinuity between the group's and its members' commitments leads to this.) If it is conceptually or psychologically impossible for the group to acquire its first belief, it can never come to acquire any beliefs at all.

Let us first examine the conceptual impossibility. One way (and not the only way) to defend the view that there cannot be a believer with merely one belief is to appeal to "holism" about belief-contents.

Eric Schwitzgebel's encyclopedia presentation of holism begins with the following situation: "Ani believes that salmon are fish; not knowing that whales are mammals, she also believes that whales are fish. Sanjay, like Ani, believes that salmon are fish, but he denies that whales are fish." Which leads him to ask the following: "Do Ani and Sanjay share *exactly* the same belief about salmon—namely, that they are fish—or is the content of their belief somehow subtly different in virtue of their different attitude toward whales? With certain caveats, the *atomist* will say the former, the *holist* the latter. Schwitzgebel continues:

> Holism may be defended by a slippery-slope argument. It seems that we can imagine Sanjay's and Ani's beliefs about the nature of fish and the members of the class of fish slowly diverging. At some point, it will seem plainly correct to say that even though they may both say "salmon are fish", they are not expressing the same belief by that sentence. As an extreme case, we might imagine Ani to ... hold that to be a "fish" is neither more nor less than to be an Earthly animal in regular contact with Martians, and that only salmon, whales, leopards, and banana slugs are in such contact. But if we deny, in the extreme case, that Ani and Sanjay share the same belief, expressed by the sentence "salmon are fish", it seems artificial to draw a sharp line anywhere in the progression of divergence.[4]

Now imagine that the web of surrounding be-

[2] Pettit (2001, 118–119) admits various disanalogies between individuals and groups (of the socially integrated type that can have beliefs): groups have no feelings, no direct memories, no direct perceptions ("nothing that it 'is like' to be a group"); they have no subpersonal, natural, automatic belief-formation mechanisms, and they can have beliefs only on a restricted range of matters, to do with whatever purpose they are organized to advance.

[3] See Bratman and forthcoming, Gilbert 2013, Tuomela 2007, 2013.

[4] Schwitzgebel 2008, section 3.2. See Fodor & Lepore (1992) for arguments for and against holism.

liefs is gradually impoverished by removing beliefs from the web. In this scenario, the belief "salmon are fish" has gradually less and less content, and ultimately it will have no content at all, when it is the sole 'belief' that the believer has. At this end point, we can imagine that the believer takes no stand on issues such as "salmon are numbers", "salmon are relations", "salmon are animals", "salmon are melodies", "salmon are card games".

Without any stand on anything whatsoever, the claim "salmon are fish" could mean anything whatsoever – that is, it actually means nothing. This is the conceptual problem with systems of beliefs with just one belief (expressed with an appeal to holism): it is impossible to have merely one belief – the belief turns out to be no belief at all. One must acquire a whole web of beliefs for them to have content at all.[5]

The psychological version

Suppose, however, that the conceptual problem can be solved. Alternatively, the problem of the first belief can be formulated as a *psychological* problem: a believer with just one belief cannot understand the content of the belief (even if it had content) because he or she or it lacks the other beliefs, which would anchor the content of the belief in some way. The putative believer is at a loss concerning its content.

Thus, a putative group with just one belief cannot itself understand the content of the belief it putatively has. Arguably, it is not fit to be held responsible, if it is not aware of its commitments. By contrast, the *members* of the group can understand the belief attributed to the group – they can do so against the background of their own more or less shared horizons or webs of belief, in whose context the meaning of the belief is determined for them. The key idea is that once you have a sufficiently large web of beliefs, there's no problem with adding new ones – it is just that one does not get off the ground from zero beliefs. Adding just the first belief on its own cannot succeed.

The assumptions about groups that lead to this problem

We have good reasons not to postulate a putative believer with one belief alone. Some plausible assumptions concerning how groups can come to acquire beliefs do however lead to such a postulate.[6]

First, a group, at the moment it comes to exist, has not yet *itself* formed any beliefs (or other commitments). At some point it adopts its first *self-adopted* belief. If it has beliefs before that, they were generated via some other mechanism. Say, a recruitment committee may start discussing the candidates and form the view concerning two of the candidates that they clearly are not qualified for the job. This may be the first self-adopted belief of the committee: it now holds it as true that the two candidates are not qualified. Whatever the first self-adopted belief is, it has not itself acquired any beliefs before that.

Second, there is a disanalogy to human individuals. For human infants, there is a credible story about how it at first perceptually and practically with its environment forms a web of presentations of some kind, which at some point of development (of conceptual capacities) qualify as a web of beliefs.

The light dawns on all of it gradually, and at some point, the web of presentations qualifies as a web of beliefs, desires and intentions. The needed background web is there when the first (presentations that count as) beliefs are there. At no point of time is there only one belief.

Unlike a human infant, a group has a "mind of their own" only in the sense of commitments. It has not lived for months perceptually and practically in touch with the world, during which it could have formed a web of presentations of some kind, which at some point of development (of conceptual capacities) qualify as a web of beliefs. A committee is simply created, say a recruitment committee, and it has to start adopting beliefs concerning its subject

[5] Seumas Miller (2007, 90) has discussed holism about beliefs in the context of group beliefs. Miller presented an *ad absurdum* argument against Peter French by showing that on the basis of one commitment one must attribute a whole lot of other commitments to the group. My argument against Pettit and related views is that while things might be in order if we could attribute a whole web of beliefs to the group, the strong discontinuity (highlighted by the premise-based procedure in which commitments are adopted one by one) does not allow for it.

[6] Somewhat surprisingly, Pettit denies having a view on what it is for a collectivity to adopt beliefs. "I said and say nothing on what it is for a collectivity to form and have a shared purpose, or to form and have certain judgments and intentions. Presumably that can be analyzed on something like the lines explored in the mutual awareness – approach; it has to do, plausibly, with the conventions, and the associated structures of common knowledge, that prevail in the collectivity. Assuming that there is an established, conventional sense in which a collectivity has a shared purpose, and forms associated judgments and intentions, the fact that it [adopts the premise-driven approach] means that it will display precisely the sort of rational unity required of an intentional subject."(Pettit 2003, 181)

matter, the strengths and weaknesses of the candidates. I will put this point by saying that groups lack a "developmental phase of proto-beliefs", which arguably provides for human infants the required background for the first web of beliefs to have content. It is unclear whether and how the needed background for group commitments is created.

Third, thanks to what I call "strong discontinuity" between the individuals' and the group's views, the group does not automatically inherit its members' beliefs. Typically members have all sorts of conflicting views that do not constitute a conflict in the group's ("official") views. Even shared, mutually known, beliefs of all members do not automatically count as the group's commitments: think of secrets that are in fact known by everyone but not officially by the group: they are not its commitments. All the members may know some juicy gossip about one candidate, but this is their private knowledge. This strong discontinuity has been backed by a forceful argument by List & Pettit, in relation to the so-called doctrinal paradox or discursive dilemma.

This can be illustrated by reference to a committee trying to decide whether it should accept pay-sacrifice, to support measures that have been proposed to eliminate serious danger. The committee has to make up its mind concerning whether there is serious danger, whether the proposal presents an effective measure, and whether the pay-sacrifice constitutes an unbearable loss. There are three members (A, B, and C) whose views on these issues, as well as on the conclusion to draw on their basis, diverge.

	Serious Danger?	Effective measure	Bearable loss?	Conclusion: Pay-sacrifice
A	Yes	No	Yes	No
B	No	Yes	Yes	No
C	Yes	Yes	No	No
A+B+C	Yes (2-1)	Yes (2-1)	Yes (2-1)	**Yes, if premise-driven, No, if not**

List and Pettit argue that this issue can be solved either by using a premise-based procedure, or by using a conclusion-based procedure. In the former, the members vote one by one on whether the group accepts the premise in question. Each premise is supported by two members, but each premise is rejected by one member – different members reject different premises in this case. Therefore, they all agree on the conclusion against the pay-sacrifice. Nonetheless, if they accept the premises that a majority supports, on the premised-based procedure they end up accepting all the premises.[7] Thus, whether or not the group adopts the premise-driven approach affects the conclusion the group reaches. And strikingly, on the premise-based approach, the group ends up endorsing a view that is held by none of the members.

List and Pettit argue that the premise-based procedure (which supports strong discontinuity between the views of the members and the group) is crucial for there being such entities as genuine collective subjects that have beliefs and are fit to be held responsible. Their basic idea is that if a group has beliefs that none of its members have, the thing that has these beliefs must be the group. My argument here is that on the contrary, because of strong discontinuity, the group *cannot* be a genuine believer - as it runs to the 'problem of the first belief'.[8]

[7] "The chairperson will be entitled by the premise-driven procedure to announce on the basis of the premise- votes: "Colleagues, our intention is fixed: we will forego the pay-raise.""(Pettit 2003, 183) This is true, although *no* member had the corresponding intention at the moment the collective intention was fixed. "Such individual intentions will follow on the formation of the group intention, of course, since the group can only act through the actions of its members. But they are not the stuff out of which the group intention is constituted; on the contrary, they are effects that the formation of the group intention plays a role in bringing about."(Pettit 2003, 183-4) As members who accept the premise-based procedure, they each now form a fresh individual intention to do their part in realizing the group intention to accept the pay sacrifice.

[8] Pettit's theory should answer two demands. For the group to count as a subject of beliefs, two requirements need to be met: the group needs (1) a minimally rational mechanism to avoid contradictory beliefs, and (2) a mechanism that can produce beliefs. The first requirement is that the believer must have some kind of minimally rational general disposition, or the presentations do not count as beliefs. Local irrationalities are allowed, but a general disposition is needed. (see e.g. Wedgwood 2007, chapter one). Pettit focuses on this demand, and the premise-based procedure is indeed a meaningful way of answering the challenge.
Secondly, the group subject must have some kind of credible mechanism for producing beliefs that have content, and which the subject can understand. There need not be a phenomenal feel to the beliefs, but the subject must have an access to their content, for it to be the

Furthermore, the premise-based procedure makes the groups in question unfit to be held responsible, as they (as opposed to their members) are unable to be aware of their commitments when they make them. There has to be a new vote before a belief "the group supports forgoing the payrise" can be attributed to the group.

Fourth, there is no other belief- or commitment-generating mechanism that would have generated beliefs or commitments antecedently to the members creating commitments to the group. It may even be an *a priori* truth that beliefs and commitments must be adopted by the believer himself, herself or itself.

But perhaps this is an unnecessarily strong claim. Perhaps it is not *a priori* that commitments must be self-acquired. Perhaps committees could come to existence with some given commitments (e.g. the constitutive aim of selecting the prize-winner; restrictions on what kind of criteria are to be used in the selection process etc.). These are not likely to constitute a sufficient web of beliefs or commitments to serve as the necessary background for contents.

If these four assumptions are true, then at some point in time, the group can have merely one belief (e.g. when the recruitment committee makes a decision – adopts the view – that two candidates clearly are not qualified).

A further suggestion would be that when the first belief is adopted, perhaps a whole network of background beliefs is adopted. The problem is to determine which network, consisting in which beliefs. There is a need for a principled, motivated answer. [9] None seem available, however.

Conclusion

What this article proposes is a general challenge for accounts of group knowledge. First there is the conceptual problem of how the first commitments have content? A related problem arises for accounts of acting and adopting beliefs together, at the member-level as opposed to the group level: how does the joint commitment have content, if there's no background of previous joint commitments providing the background?

And, in its psychological form, if there is only one belief (or other commitment) how can the group as a subject of beliefs understand or know it? The psychological problem can be answered by those accounts that focus on what the members together think and do, or what the operative members think and do. The background webs of these individuals provide them with the needed web against which to understand the content of the joint commitment. The background webs of the members cannot be radically different, or the problem arises again.

One way out is to see groups as objects of an 'intentional stance', as blind and mute centers of normative commitments; the members and relevant others are the authoritative interpreters and score-keepers of those commitments (against the background of their own webs of beliefs) which the group does not understand. Compare this to the distinction between pawns *versus* players of chess. Any pawn as a quasi-agent will be under normative constraints, understood by the players. This, though, would be to give up the view that groups are genuine believers.

Another way out is to try to give a principled answer to which beliefs of the individuals count as the group's beliefs at the moment the group is created. Yet another option may be to say there's no problem with believers with just one belief, say, because beliefs are cashed out functionally. But the problem does seem to concern at least groups with beliefs and commitments whose contents are conceptually structured.

The point of this paper has merely been to introduce the difficulty, and call for attempts to try and solve it.

References

Bratman, Michael (1999) *Faces of Intention.* Cambridge: Cambridge University Press.

Bratman, Michael (forthcoming 2014) *Shared Agency: A Planning Theory of Acting Together,* Oxford: Oxford University Press.

Cohen, L. Jonathan (1992) *An Essay on Belief and Acceptance*. Oxford: Clarendon Press.

Dennett, Daniel (1987) *The Intentional Stance.* MIT Press, Cambridge, Mass.

Fodor, Jerry & Ernest Lepore (1992) *Holism.* Oxford: Blackwell.

Gilbert, Margaret (1989) *On Social Facts,* London, New York: Routledge.

Gilbert, Margaret (2013) *Joint Commitment.*

subject of that belief. The problem with Pettit's premise-based procedure is that while it would guarantee (1) it makes (2) impossible to achieve.

[9] Argumentatively, one may at this stage make a concession: *unless* an authority has managed to grant the group with sufficient web of background beliefs for the group's commitments to have content, then the group will encounter the 'problem of the first belief'.

How we Make the Social World, Oxford: Oxford University Press.

Hakli, Raul (2010) Group Beliefs: Studies on the Nature and Logic of Collective Doxastic Attitudes. Philosophical Studies from the University of Helsinki 32. Helsinki: University of Helsinki.

Miller, Seumas (2007) "Joint Action: The Individual Strikes Back," in S. L. Tsohatzidis (ed.) *Intentional Acts and Institutional Facts: Essays on John Searle's Social Ontology*. Dordrecht: Springer Press, 73–92.

Pettit, Philip (2001) *A Theory of Freedom.* Oxford: Oxford University Press.

Pettit, Philip (2003) "Groups with Minds of Their Own," *Socializing Metaphysics*, ed. F. Schmitt, Lanham, MD: Rowman and Littlefield.

Quinton, Anthony (1975) "Social Objects," *Proceedings of the Aristotelian Society* 75: 1–27. Rovane, Carol (1998) *Bounds of Agency.* Princeton.

Schwitzgebel, Eric (2008) "Belief', *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition), Edward N. Zalta (toim.),
URL = <http://plato.stanford.edu/archives/fall2008/entries/belief/>. Tuomela, Raimo (1992) "Group Beliefs", *Synthese* 91, 285–318.

Tuomela, Raimo (2007) *The Philosophy of Sociality: The Shared Point of View.* Oxford: Oxford University Press.

Tuomela, Raimo (2013) *Social Ontology*. Oxford: Oxford University Press. Wedgwood, Wedgwood, Ralph (2007) *The Nature of Normativity*. Oxford: Clarendon Press.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

LANGUAGE, SUBJECTIVE MEANING AND NONLINGUISTIC INSTITUTIONAL FACTS

Romulus Brâncoveanu
University of Bucharest
e-mail: brancoveanu@ub-filosofie.ro

Abstract:

This article comparatively explores Searle's conception of society, which prioritizes language and intentionality in producing social things and Max Weber's conception of social action as human behavior, in which the acting individual attributes subjective meaning to his or her behavior by orientation to the behavior of others. My aim is to show that the "nonlinguistic institutional facts" which in Searle's terms seem to emerge in the absence of any constitutive rule linguistically expressed can be described in Weber's terms of attaching a subjective meaning to individual behavior. In this way, we may add a minimal sociology to Searle's conceptual apparatus in order to grasp contingent and historical dimensions of the functioning of institutions.

Key words: social ontology, subjective meaning, John R. Searle, Max Weber, institutional fact, social action, status function declarations.

Introduction

Synthesizing a theoretical journey that began with *Speech Acts* (1969) and culminated in *The Construction of Social Reality* (1995), in his latest book, *Making the Social World. The Structure of Human Civilization* (2010), John R. Searle develops a complete conceptual apparatus of a social ontology, including basic concepts as *status functions declarations*, *collective intentionality*, *deontic powers*, *constitutive rules*, and *institutional facts*. This apparatus is devoted to the construction of a social ontology in which society is not only dependent but also derived from the mental phenomena of individual human beings. Social things are produced by language, collective intentionality and human behavior, and subsist only as experienced by human subjectivity in the same mode of existence as pains, tickles or other such mental entities (Searle 2006, 14).

In this article I comparatively explore Searle's conception of society, which prioritizes language and intentionality in producing social things, and Max Weber's conception of social action as human behavior, in which the acting individual attributes subjective meaning to his or her behavior by orientation to the behavior of others. My aim is to show that the so-called "nonlinguistic institutional facts" (Searle 2010, 93), which seem to emerge in the absence of a constitutive rule linguistically expressed, and also the whole variety of actions associated to institutional facts of this sort, can also be described in Weber's terms of attaching a subjective meaning to individual behavior. I consider that in developing this cross-description we may add a minimal sociology to Searle's conceptual apparatus in order to grasp contingent and historical dimensions of the functioning of an institution. In order to argue my case, I have selected only certain parts of the two theories; those regarding the way in which the nature of subjectivity is described and analyzed and those regarding the methodological aspects of Searle' project and the ontological dimension of Weber's theory. I consider the selected parts to be of interest because it is subjectivity that is at stake when both authors discuss the reality and subsistence of real life. The methodological and ontological aspects are important because an emphasis on them can justify a parallel discussion on two theories belonging to different areas of knowledge. In the sections "At the beginning was the word" and "Weltanschauung or methodological program?" I give an account of Searle's vision

about the subjective constitution of social entities and the importance he attaches to the compatibility between his social ontology and the basic facts outlined by natural sciences. On this basis, I maintain that Searle's conception manifests some appropriateness to the methodological programs of the social sciences as they emerged at the end of the 19th century and the beginning of the 20th. My view is that this similarity can legitimate bringing Weber's conception of social action (which I present in the section "At the beginning was the deed") near to his social ontology. At the end of the article, I conclude that we can add to Searles's conceptual apparatus of social ontology a minimal sociology consisting in Weber's definition of social action in order to grasp the real functioning of an institution in the real social world.

At the Beginning Was the Word

Searle's project of social ontology is a naturalistic one. In fact, it extends a kind of scientific realism based on the natural sciences to social ontology and from here to the social world. Searle calls his conception *external realism*, differentiating it from plain objectivism, which considers the independence of the world from the subject, the independence from any conscience, as a criterion for existence. Searle's external realism admits the concrete existence of certain entities such as pain, emotions, thoughts etc., subsisting only as representations in the brains of humans and animals. By his external realism, Searle validates the image of the world given to us by the natural sciences (actually, by scientific realism), but puts in brackets the possible contributions of the social sciences to social ontology.

According to Searle's external realism, we live in one world whose foundation is made up of elementary particles moving within force fields. In this one world there are things like "consciousness, intentionality, free will, language, society, ethics, aesthetics, and political obligations" (Searle 2010, 4) whose mode of existence should be clarified by a social ontology. Searle believes that social ontology has to fulfill at least two requirements in order to be compatible with the picture that scientific realism gives us of the world. The first requirement is that social ontology not multiply, despite the diversity of phenomena, worlds. The social world is a part of one world, a world in which there are particles, atoms, cells, DNA, consciousness, intentionality, etc., outlined by science (natural sciences) and not a separate world. (Searle 2010, 4) The second requirement is that social ontology correspond to "the basic facts" as they are depicted in physics, chemistry, and evolutionary biology or the natural sciences more generally. The goal of this social ontology would be to show "how all the other parts of reality [*as the social world entities*] are dependent on, and in various ways derive from the basic facts" (Searle 2010, 4), i.e. the atomic theory of matter and the evolutionary theory of biology. In Searle's view, this dependence of the social world on basic facts should not be interpreted as reductionism. The territory of dependence still must be placed at the levels of the individual human mind and behavior, for one should admit that it is nonsense to believe that, for instance, political constitutions directly depend on the basic atom theory, although perhaps in the case of biological evolution such a dependence would be arguable to the extent that the normative could be interpreted as a product of evolution and natural selection: "social institutions such as governments and corporations are dependent and derived from the mental phenomena and behavior of *individual human beings*" (Searle 2010, 4). It is possible to thus add a sort of a third requirement regarding ontology to the first two: ontological individualism. Now, the preconditions for a social ontology are: a principle of ontological economy which prohibits multiplying worlds (but not their principles, as we will see), a principle of society's dependence on basic facts as they are depicted by natural sciences, and a principle of ontological individualism for the existence of social facts which argues that their support - one way or the other - must be the brains and behaviors of human individuals.

Meanwhile, the social ontology proposed by Searle should be a discipline of analytic philosophy, along with philosophy of language and philosophy of mind. Social ontology would differ from philosophy of social sciences, as well as social and political philosophy, which do not value language sufficiently and do not take it as a basis for their theoretical research (Searle 2010, 4). Social ontology or philosophy of society, the second name used by Searle for his theory, has to be an entirely new philosophical discipline. From Searle's point of view, philosophical disciplines are not static and timeless and their dynamics generate new topics and

research directions, as shown in the example on analytic philosophy in the late 19th and early 20th century, when philosophy of language emerged (Searle 2010, 5). This new philosophical discipline should be devoted to the study of nature and the mode of existence of social phenomena "to the study of the nature of human society itself: what is the mode of existence of social entities such as governments, families, cocktail parties, summer vacation, trade unions, baseball games and passports?" (Searle 2010, 5).

However, Searle's project of social ontology or philosophy of society does not share the heroic tradition of a philosophy which aims to start from scratch. Searle pays full appreciation to the natural sciences. He seems to think that they provide a picture beyond any doubt of what the universe looks like. In contrast, Searle does not give importance to social sciences or to the philosophy of social science, believing that we need a philosophy *for*, rather than a philosophy *of*, social sciences. He believes that just as physics and chemistry can tell us nothing about the nature and the mode of existence of cocktails, Obama's presidency or the nature of the upcoming 2014 FIFA World Cup in Brazil, neither social sciences, nor the philosophy of social sciences can tell us anything significant about them, though, of course, sociology, anthropology, economics, political science, and linguistics typically claim that only they are entitled to state anything about social events, US elections, the FIFA World Cup or language; although perhaps they cannot tell us anything so fundamental that social ontology must take account of. In any case, we could accept that there are good reasons to believe that social sciences do not tell us anything as well secured and proven about the nature and modes of existence of society as theories of natural sciences tell us about the universe, or we could just simply think that the mode of existence of social phenomena is exclusively the domain of an ontological research program related to social sciences, but deprived of any relevant links to social sciences and their philosophy.

An equally plausible hypothesis would be that some of these social sciences would have something to say about the mode of existence of social phenomena and that we might take account of it. (I will not bring up here the question of the possible contributions of the philosophy of social sciences to social ontology.) Yet Searle does not totally ignore the succession of thinkers, philosophers, and scientists in the field of the social, from Aristotle to David Hume, Jean - Jacques Rousseau and Adam Smith to Habermas and Foucault, or the authors of the grand sociological theories of the end of the 19th and early 20th centuries and later, especially Emile Durkheim, Max Weber, Georg Simmel, and Alfred Schutz, who had an interest in social ontology. Searle maintains that the great weakness of their theories is the lack of acknowledging, understanding, theorizing and interpreting the prime role that language plays in society, because they "took language for granted" (Searle 2006,14). This account of language as a characteristic of society among others is not indicated by Searle as a condition which, once repaired, can bring social sciences and social philosophy on the right track, but only as a cause of their definitive failure to achieve a complete understanding of how society exists. Language can exist without social institutions, while social institutions could not exist without language (Searle 2006, 14). Epistemic prioritization of language over any other element of the social world could be a minimal requirement for those disciplines interested in a real knowledge of society, but this does not mean that any social science should be confined to researching the role of language or revisiting its problems from this point of view. Traditions of research in social sciences may have not prioritized the role of language in the formation of social institutions, although no one can deny that social sciences pioneered the study of social institutions and provided the first conceptual devices for investigating them. Searle believes, however, that at the beginning was the word and afterwards deeds arose: "God can create light by saying: 'Let there be light!' Well, we cannot create light but we have a similar remarkable capacity. We can create boundaries, kings, and corporations by saying something equivalent to 'Let this be a boundary!' 'Let the oldest son be a king!' 'Let there be a corporation!'" (Searle 2010,100).

Weltanschauung or methodological program?

Yet at least a part of the project of social ontology, as Searle conceives it, refers to similar issues discussed by philosophies of Kantian inspiration and the social sciences (political economy, sociology, historiography, and

psychology, etc.) in the late 19th and early 20th century. Here I would mention only two such issues: the ontological status of social things and the possibility of a scientific knowledge of society. For example, along with the discussion about the methodological differences between natural sciences and social sciences, sociologists of that time outlined social ontologies taking account of requirements derived from a concept of knowledge modeled in accordance with the method of natural sciences. In sociology, major methodological programs of scientific study of society, such as those of Emile Durkheim, Max Weber, and Vilfredo Pareto, contained plenty of discourses regarding the ontological gap between society and nature, and the ontological specificity of society. These discourses analyzed the possibility of scientific knowledge of society by means of the method of natural sciences seen as the universal scientific method, as Durkheim and Pareto attempt, or by constructing and using a special method dedicated to the social sciences, the method of understanding, as Weber proposed. While Durkheim understood social facts as any other natural objects, Weber argued that social actions are constituted at the level of human subjectivity by attributing subjective meanings to behavior. Considering objectivity the highest characteristic of an empirical science, Weber emphasized that a scientific method for social sciences must research the subjective meanings that acting actors attach to their behavior just as any arid facts. By his method of understanding Weber projected the ontological subjectivity of human action in terms of scientific objectivity, i.e. just in those terms that Searle adopted for his conception of external realism. The possible association of Weber with a social ontology of this sort might be more likely legitimate, as long as Searle does not seek to formulate in his social ontology a general vision of the world, a *Weltanschauung*, remaining content with the development of a kind of methodology. In this way, Searle argues that in contrast to mountains, molecules or other natural objects that are ontologically objective "pains, tickles, itches, emotions, and thoughts have a mode of existence that is ontologically subjective in the sense that they only exists in so far they are experienced by human or animal subjects" (Searle 2006,14). In this sense, he emphasis that we can *objectively* know such objects existing only as subjective representations even though the kind of facts about which one have epistemically objective knowledge are themselves all, at least to a degree which we need to specify (Searle 2006, 15). Anyhow, Searle does not ask questions about social being, the social or something similar, but about how we can objectively know a reality that is subjectively constituted: The question is not, How can there can be an epistemically reality which is subjective? But rather, *how can there be an epistemically objective set of statements about which is ontologically subjective?* (Weber 2012, 18).

If so, the possible objection that bringing up methodological aspects of research in social sciences, in a framework in which metaphysical matters and assumptions and limitations of the discussion have no relations to the theories and methods of social sciences, has not the necessary strength to deny any legitimacy to a discussion of Searle's social ontology in the context of the methodological dimension of social sciences. One might counter that in this way social ontology could be assimilated among other methodological programs in the social sciences, a program that comes with its own method of conceptualizing social facts, but obviously this does not hold. After all, as long as Searle's social ontology has explicit realistic assumptions arguing that the discussion of the scientific method in sociology, which actually involves society as an object built in a neo-Kantian manner, moves away from its original premises which are secured by the realistic assumption of a reduction to the basic facts. I could agree with this argument, but it is not real, because Searle often constructs the object of his research in such a manner. Relating to this kind of argument, I emphasize that bringing up the methodological profile of Searle's social ontology does not entail that the project has an empirical ambition of the kind claimed by social sciences, for instance the objective to provide theories in order to guide empirical research.

Thus, we can agree that some ideas of Searle's social ontology support a methodological interpretation. For example, as the mentioned sociological theories have adopted the method of natural sciences as the model of scientific method, Searle considers the ontologies of natural domains constructed by natural sciences as a model for social ontology. In his view this model must adopt a basic unit or a unique principle for the construction of a social ontology. Consequently, Searle describes the construction of his social ontology as "based on

exactly one principle ... The enormous complexities of human society are different surface manifestations of an underlying commonality. It is typical of domains where we have a secure understanding of the ontology. In physics it is the atom, in chemistry it is the chemical bond, in biology it is the cell, in genetics it is the DNA molecule, and in geology it is the tectonic plate. I will argue that there is similarly an underlying principle of social ontology" (Searle 2010, 7). Moreover, the ideal of theoretical simplicity is a perennial one, but it is also considered a hallmark of the success of any theoretical construction by both the philosopher and the scientist. Not only philosophers strive to deduce all things from a unique principle, but also scientists in natural sciences believe that all reality eventually could be reduced to a few simple equations. In this sense, Searle thinks like a scientist. He does not refer to the simplicity of the principle as a value external to his theory (though he often appreciates with the eye of an esthetician the formal aspect of mental phenomena and the elegance of the structure of speech acts (Searle 2010, 15 - 16)), but as to a methodological ideal that social ontology must adopt, once secured in those areas where there is a firm knowledge of reality. In this context conceptual analysis appears to Searle as the best way to carry out a project in which the construction of society moves from simple to complex. But how might Status Function Declaration, the principle of his social ontology, as Searle argues, be considered, in a methodological sense? Yet, Searle rejects the idea that his naturalism means the reduction of reality to bricks – elements or logical constructions. The uniqueness of principle does not appear to him to be relative to a particular conception of society, but a definitive acquisition of knowledge in natural sciences we need to take into account: there is a huge difference between baseball games, $20 bills and national elections, but their underlying structure is the same, a simple thing, he says (Searle 2006,16).

At the beginning was the deed

As a philosophy of society, Searle's social ontology needs to also move beyond conceptual analysis and become a philosophy of action, in fact a philosophy of collective action: "to understand society, you have to understand human collective behavior. Collective human behavior is a manifestation of collective intentionality, and to understand this you have to understand individual intentionality" (Searle 2010, 26). For this transition, Searle takes intentionality as like a bridge between mind and action. The traditional concept of intentionality, predominantly individualistic, is not entirely satisfactory for the establishment of social things as long as social things are collective, that is, shared with others. Searle thinks that there must be a symmetrical correlation between intentionality and object, and in this case individual intentionality has to meet individual action; and collective intentionality has to meet collective action. He makes use of collective intentionality for two reasons. He does not accept as a mode of existence of a collective either the idea of inter-subjectivity, which he finds has no support in basic facts, or the idea of social interaction (or even something of the sort of *societas* or *forms*, which Simmel (1977,16-18) speaks about, likely to be able to constitute a base for collective action, as he defines it). In his view, the social arises only through language and subsists only in the minds of people, and therefore the introduction of any foreign element outside language and mind with a role in the constitution of social facts contradicts the starting point. Searle thus remains, in the analysis of intentionality, faithful to his naturalistic project whose objective "is not just to explain the nature of human society but to show how its features are both consistent with natural and developments from the basic facts" (Searle 2010, 42). For this he needs to assume that neural processes possess logical properties, "exactly the same logical properties as those of the thoughts, because they are simply the neurobiological realization of the thoughts" (Searle 2010, 42). In this way, intentionality is somehow naturalized, and thinking is considered as natural as digestion (Searle 2010, 43). Searle argues that there is a fundamental difference between sentences such as "I believe" and "We believe" or "I want" or "We want". The latter communicate collective intentions and this collective intentionality is what explains the possible development of assignments of functions declarations about things and people of form "X counts as Y in context C", the primary element of his understanding of society. The assignment of function is the capacity to attach functions to objects and people by virtue of declarations supported by collective intentionality (Searle 2010, 13-15). Moreover, collective intentionality ontologically

precedes even the logic of language, because it must be something like collective intentionality that allows dialogue, the making of promises, and the undertaking of commitments (Searle 2010, 50). In this way, Searle interprets elements that are usually treated as concrete forms of social interaction as conditions for the manifestation of intentionality. These become a kind of forms of cooperation or very general conditions or forms which precede language and therefore can be thought as devoid of content. In order to argue the mind-intention-action continuum, besides the distinction between collective intentionality and individual intentionality, Searle also distinguishes between prior-intention and intention and proposes a systematic analysis of the way in which intentions turn into bodily behaviors (Searle 2010, 33 - 35). In order to preserve the principle which I called ontological individualism that states that the connection between the basic facts and minds occurs only in individual brains, Searle maintains that all intentionality, whether collective or individual, exists only in individual human brains (Searle 2010, 44).

I do not wish here to start a discussion about the aspects of collective intentionality. Research on collective intentionality has achieved new ground and has already achieved remarkable outcomes, especially in its recent period. My opinion is that we can accept such intentionalist nominalism, in the last instance likely unsatisfactory for a methodological individualist, but we cannot ignore a possible constitution of collective actions, one that matters both for methodological and ontological individualisms. Such a possibility is suggested by Max Weber in his writings, especially in some methodological essays (Weber 2012, 4 - 94) and the monumental "Economy and Society" (Weber 1978).

Weber's conception of society has a constructivist profile. The conceptual apparatus of his sociology functions around the concepts of social action, subjective meaning, ideal type, axiological neutrality, and understanding covering all the domains of society, from economy to law, government, values system, and religion. Weber's theory reduces all kinds of relationships and institutions to individual behavior (Schutz 1967, 5-6). For Weber, social action defined by reciprocal orientation of acting actors in the process of attaching subjective meanings to their behavior explains the emergence and maintenance of society. Weber conceived social action in inter-subjective terms, but as we can see, individual minds and individual behaviors are those which embody the subjective meanings attaching to social actions. For Weber it is not the word which makes the world, but the individual action, i.e. the deed.

Weber was interested in the relation between mind and action in the context of his attempt to build a scientific empirical method based on understanding, adequate to the specificity of social phenomena. Reflecting of this relation, he admitted that "a sort of "chemistry" if not "mechanics" of the psychic foundations of social life would be created" (Weber 1949, 75). In Searle's terms, he asked the question about the possibility of the relation between social phenomena and the basic facts. Weber thought, at the same time, that an approach of this sort would not have any worth for "the study of the cultural meaning" of social phenomena:

> Let us assume that we have succeeded by means of psychology or otherwise in analyzing all the observed and imaginable relationships of social phenomena into the same ultimate 'factors,' that we have made an exhaustive analysis and classification of them and then formulated rigorously exact laws covering their behavior. What would be the significance of these results for our knowledge of the *historically* given culture or any individual phase thereof, such as capitalism, in its development and cultural significance? As an analytical tool, it will be as useful as a textbook of organic chemical combinations would be for our knowledge of the biogenetic aspect of the animal and plant world (Weber 1949, 75).

He also rejected the ideas formulated by the German historical school of economy, as well as those of the very beginning of phenomenological philosophy, which posited that the subjective mode of existence of representations of social objects is ontologically different from that of natural objects, and mind has thereby aprivileged access to their knowledge, given by their similarity. In contrast to these positions, Weber (2012, 23 n.2) argued that "there is a fundamental, not only logical, but *intuited* ontological difference between 'complete interconnectedness' of all (human) psychical objects of knowledge and inanimate nature that can be explained 'analytically'". He also believed that "we

can find 'interaction' and 'complete interconnectedness' in exactly the same sense and exactly the same degree in the domain of inanimate nature as in that of inner experience (if we accept the fundamental difference between these two [domains n.]) *as soon as* we attempt to acquire knowledge of an *individual* phenomenon in its full, concrete intensive infinity; moreover, closer reflection shows us that there are 'anthropomorphic' elements in all areas of investigation of nature" (Weber 2012, 23 n.2).

All of the above arguments lead us to the idea that Weber's approach to the mode of existence of social entities within human minds is somehow similar to that of Searle's. It is true that Weber does not have a naturalist conception of society, if by this we mean a positivism which extrapolates the vision of natural science, or what it is believed to be, over the social phenomena. But he is not a hermeneutical philosopher either. He starts from the fact that the social sciences are sciences that need to know the phenomena of social life from the angle of their cultural significance and therefore he distinguishes social sciences form natural sciences as having their own method, that of understanding. For Weber social actions have a determinant subjective component and social sciences must provide a specific answer according to this subjective component. But this does not mean that social sciences as conceived by Weber are non-empirical. They must be sciences of the concrete reality *(Wirklichkeitswissenschaften)* (Weber 1949, 12) because if we exclude value judgments from our approach, social facts will appear to us as any other arid facts whereby "... prostitution is a cultural phenomenon just as much as religion or money. All three are cultural phenomena *only* because and *only* insofar as their existence and the form which they historically assume touch directly or indirectly on our cultural *interests* and arouse our striving for knowledge concerning problems brought into focus by the evaluative ideas which give s*ignificance* to the fragment of reality analyzed by those concepts" (Weber 1949, 81). For Weber, picturing the subjective sense of behavior and capturing the way in which people behave in the framework of values existing in society means to acquire objective knowledge of the *real* human realm. The essential aim of his method of understanding was to attain in an epistemically objective way the subjective meaning that people attach to their actions. Weber explained the emergence and maintenance of social life on the basis of this reciprocal orientation of actors in attaching a subjective signification to their behavior during action. In order to understand the maintenance of social relationships and various forms of communities and institutions he also used the probabilistic concept of chance which expresses the probability of an action to be repeated by acting individuals (Weber 1978, 59 n.13). As we have seen, Weber does not define social action only by intentionality, be it individual or collective, but also by the reciprocal orientation of actors in performing their actions, irrespective of whether we are dealing with an orientation at the time of the action to behavior of other concrete actors, or an orientation that can be described as past patterns, commands, values, and so forth.

Beside the similarities and differences mentioned above, which do not absolutely divide the two theories, the role ascribed to language in constitution of society really divides them. Weber had a special interest in language, but not in Searle's terms. He was interested in the historical and social aspects of language in the apparition and development of a certain form of community, in the role of language in the conceptualization method in sociology, but also in the concrete aspects of acts of speaking. From this point of view, Weber adhered to the position of some philologists of the time who where in favor of research into the way of "speaking of every individual", because comprehension of the unlimited diversity of speech is that which can contribute to a real understanding of the rules of language (Weber, 1949, 104). In this sense we could talk about a certain reluctance on the part of Weber regarding the possibility of expressing a collective intentionality in language. For Weber usual speech acts might have no contribution to the understanding of social activity. He wrote regarding some attempts to derive concepts of sociology from the various ways in which social actors explain themselves that "the use of undifferentiated collective concepts of everyday speech is always the cloak of confusion of thought and action. It is, indeed, very often an instrument of specious and fraudulent procedures. It is, in brief, a means of obstructing the proper formulation of the problem." (Weber 1949, 81) For Weber, there is no special relation between the fact of uttering something about the world and the intentions of social actors. Language has no priority in understanding society and it is the task of the

sociologist to construe by sociological tools, particularly by the ideal types method, the subjective meaning attached by actors to their behaviors. Nevertheless, taking account of how actors transpose in language the subjective meaning attached to their actions could be a point of departure.

On the other hand, Weber assumed individual and collective intentionality in generating social action. The property of social action to have attached a subjective meaning corresponds to a sort of intentionality: "We shall speak of 'action' insofar as the acting individual attaches a subjective meaning to his behavior - be it overt or covert, omission or acquiescence. Action is 'social' insofar as its subjective meaning takes account of the behavior of others and is thereby oriented in its course" (Weber 1978, 4). So, Weber acknowledges both individual and collective intentionality but in his interpretation intentions by which individuals attach subjective meaning to their behavior intend not only their object, i.e. the subjective meaning they attach to their behaviors, but also the behaviors of others. In fact the subjective meaning is generated by the behaviors of others. For Weber intentions as social intentions (intended subjective meaning) are never deprived of social content.

Nonlinguistic institutional facts and the subjective meaning

Searle's conceptual apparatus encompasses all social life. We can use it as a magnifying glass in order to look at social phenomena, describe, explain and understand them. Where ambiguity appears, Searle construes ad-hoc hypotheses meant to adapt the theory and clarify the misunderstandings which would occur.

One such ambiguity concerns the main concept of Searle's social ontology, that of institutional facts. In Searle's conceptual apparatus the concept of institutional facts is placed at the intersection of his conception of the subjective and representational mode of existence of social entities, the role of language in the construction of social things, and his conception of the mechanism by which social reality is created and maintained in existence. In his view, in order to exist, institutional facts require a language sufficiently rich to be used in speech acts by which constitutive rules having the form "X counts as Y in the context C" are uttered as Status Function Declarations about people and things, assigning them with status functions which people and things do not naturally have. These Status Function Declarations carry with them deontic powers such as rights, duties, obligations, requirements and so on, and produce institutions within which acting people are enabled with individual and collective intentionality and who in some way preserve chains of activities and live lives composed for the most part by institutional facts. As a result, there are no institutional facts without language, constitutive rules and, obviously, people who institute and repeatedly follow the constitutive rules.

Yet Searle affirms that in certain cases we can observe the existence of some institutional facts, essential for social life, such as money, corporations, property, government, and marriage (Searle 2010, 95) that seem not to be created by the scheme with three primitive notions his conceptual apparatus presents: collective intentionality, the assignment of functions, and a language rich enough to make possible the formulation of Status Function Declarations as constitutive rules. Searle names these *nonlinguistic institutional facts*. In such cases, he believes that it is hard to see their linguistic fundaments and reformulates various aspects of the theory of language, the Status Function Declaration, speech acts and deontic powers, etc., in order to show that even in such cases the linguistic representations or something similar exists or is involved (Searle 2010, 19 -20), and so his conceptual design is valid.

Regarding nonlinguistic institutional facts, two problems seem to be important: first, the inexistence of clearly formulated constitutive rules for various existent institutional facts, i.e. we can observe institutional facts without there being a preexistent institution; and second, the ontological status of institutional facts in which there are no external objects to assign the status functions, but only subjective representations within the individual minds of those who recognize and accept such entities (for example, corporation) (Searle 2010, 20-21, 98).

Searle (2010, 92-123) devoted an entire chapter to solve these difficulties in applying his conceptual

apparatus to concrete social life institutions like money or corporations. I think the refinement of his concepts in this context proves the capacity of his theory to capture not only the structure of social reality, but also its details. I also think that these difficulties relating to nonlinguistic institutional facts appear because, in the relation with the concrete institutions of social life, first of all, his theory makes no real distinction between the *creation* and the *maintenance* of institutions and, second, the continuity of institutions is interpreted as requiring the permanent presence of collective intentionality expressed linguistically or in another way.

The maintenance and the continuity of an institution cannot be reduced to the creation, that is, to linguistic aspects. Searle discusses this problem by asking himself how we can achieve the creation of institutions just by "words, words, words" (Searle 2010, 108). His answer is that this is a problem of recognition and acceptance of institutions. If they work, then the institutions are produced in various forms. Both recognition and acceptance have not only a cognitive and linguistic dimension, as Searle tends to reduce them to, but also a contingent and historical one expressed by social actions. For example, Searle mentions that there is "no general answer to the question of why people accept institutions" (Searle 2010,109) such that, sometimes, institutions "have to be backed by police and military force" (Searle 2010, 109), and for an important number of cases people do not exactly understand what is going on (Searle 2010, 109). We can conclude that in such cases we need sociology for a picture of how institutions work in social reality. I do not make any suggestion in favor of attaching to Searle's conceptual apparatus a whole sociology with its own concepts and theories about the functioning of institutions in a real social world, although Searle himself lists a variety of institutions from government to parties which suggests that this sociology would be possible. I intend to suggest only that a minimal, very restrained and abstract sociology could be attached in order to open the conceptual apparatus to real institutions. This minimal sociology could be Weber's definition of the way in which individuals attribute subjective meaning to their behaviors through orientation to the behavior of others.

A typical example of how such a sociology can be used could be that given by Searle with regard to the institutional facts that seem to not be linguistically instituted. In Searle's example, people continue to recognize the vestige of a wall which had been built around a perimeter of huts as a border without linguistic formulation as an institutional boundary. He refers to this process of recognition as a collective one, but, nevertheless, this case can be described in an individualist methodological way, such that the acting individuals attach a subjective meaning to their behavior, that is, not crossing the boundary, unless authorized, only by attaching a subjective sense to their behavior and act in relation to others. They need no language, but only a symbolic representation to come forth by attaching a subjective action to behavior in such a mode. Weber's definition can be also used as sociology in cases in which there are no things or people supporting the status function allocated by declaration of money, corporation, etc. For example, Weber defines money "as a means of exchange which the actor accepts in payment because he orients his action to the expectation that a large but unknown number of individuals he is personally unacquainted with will be ready to accept it in exchange on some future occasion" (Weber 1978, 22). In this sociology, the expectation and the orientation of action are sufficient for the status function of money to work, without any other support or special declaration.

References

Searle J. R., (1969) *Speech Acts: An Essay in the Philosophy of Language*, Cambridge: Cambridge University Press,

Searle J. R. (1995) *The Construction of Social Reality*, New York*:* The Free Press.

Searle J. R. (2006) "Social Ontology: Some basic principles", in *Anthropological Theory*, 6 (12), 12–29.

Searle J. R. (2010) *Making the Social World. The Structure of Human Civilization*, Oxford, New York: Oxford University Press.

Simmel, G.(1977) *The problems of a Philosophy of History*, New York: Free Press.

Weber, M. (1949) "'Objectivity' in the social science and social policy" in , Max Weber *The Methodology of the Social Sciences,* translated and edited by E. A. Shils and H. A. Finger, Clencoe, Ilinois: The Free Press, 49–112.

Weber, M. (1978) *Economy and Society. An outline of the interpretative sociology*, edited by G. Roth and C. Wittich, Berkeley, Los Angeles, London: University of California Press.

Weber, M (2012) "Roscher and Knies and the logical problems of historical economics", in *Collected Methodological Writings*, edited by H.H. Bruun and S. Whimster, translated by H.H. Bruun, New York: Routlege, 3–94.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

FROM LOGO-KOSMOS TO TECHNE-KOSMOS IN THE ONTOLOGY OF THE HUMAN

Mihai D. Vasile
Institute of Philosophy and Psychology "Constantin Rădulescu-Motru"
of the Romanian Academy
e-mail: mdvasile@yahoo.com

Abstract:

The author tries to prove that Plato's theory of thecreation of *kosmos* by Demiourgos as conforming to a pre-existing model – namely "ho LÍgos" – by way of the possession of a peculiar art, *i.e*. "to-know-how", has a contemporary correspondent in the image built by science of the universe. Even the emergence of evil in such a rational and ordered universe has a replication in the religious myth of Lucifer's rebellion.

The paper is intended to show that, in the history of post-modern culture, three periods of global life are known as characterized through the connection between science, philosophy and religion.

The first is described in the dialogue *Timaeus*, where Plato imagined the creation of the world by Demiourgos, according to the Logos: "Cosmos was forged by a model – *Logos* – which can be designed with reason – Nous"; "Once he saw that the universe is moving and living, born as holy habitation of the immortal gods, begotten of the Father who was seized by delight and rejoicing. He had thought about how to make it even more like the model – *Logos*. And how this model – *Logos* – is an eternal creature, Demiourgos tried to perfect the universe, in this regard also"; "He has made a smooth body, uniform and equal everywhere from centre, whole and absolutely right-down, composed of perfect bodies". Ptolemy, drawing on an Aristotelian conception of time and eternity, developed, in his *Almagest*, a vision of the cosmos founded on the ideas of Aristotle's *Physics* describing a geocentric universe full of symbols. But this universe could not be brought to the eye as improved, as a universal astronomical system limited by the firmament of the fixed stars beyond which Christian theology has placed Paradise and Hell.

The second period can be described through what Max Weber says about modernity, a process of "*Entzauberung* der Welt", dramatically accelerated since the scientific revolution of Galileo, accomplished by the globalization of the mechanistic empire, by replacing Aristotelian and Thomist space, which is closed, limited and heterogeneous, by a homogeneous infinite space. Meta-science that favoured the emergence of modern scientific revolution is related to the logos problem of evolution and its solutions, where the core terminology means equally *reason, rationality, science*, and at the same time *speech, word, verb*, having religious or transcendent connotations but secularised in an historical horizon.

The contemporary period – the third, the end of the second and the beginning of the third millennium – is placed under the heresy of the solidarity between science and technology, characterized by the technefication of science designating a process whereby techniques are predominant in traditional research methods, opening an age of cybernetic heresy.

Key words: *logos*, reason, *kosmos*, science, evil, model theory, myth of mega-machine, God, Golem.

Modern man lives in a disillusioned world, abandoned by *mythos* and *logos*, Max Weber says, where technocratic reason reduces all events to reasonably recognizable causal sequences and spaces and objects to pure matter without anything supernatural, spiritual or magical. This process of "Entzauberung der Welt"[1], which is essentially a

[1] *Max Weber*, Die protestantische Ethik und der Geist des Kapitalismus, *in: Max Weber*, Gesammelte Aufsätze zur Religionssoziologie*, Bd. I, Tübingen, Mohr Siebeck, 1920, S. 17-206, p. 95: „Jener große religionsgeschichtliche Prozeß der* Entzauberung *der Welt, welcher mit der altjüdischen. Prophetie einsetzte und, im Verein mit dem hellenischen wissenschaftlichen Denken, alle* magischen *Mittel der Heilssuche als Aberglaube und Frevel verwarf, fand hier seinen Abschluß"*

progressive dissociation between the material and immaterial, between the physical and metaphysical, is originated early in the history of humanity but has accelerated dramatically since the seventeenth century when the scientific revolution, inaugurated by Galileo and in order to fulfill the contemporary technocratic empire by globalization, replaced Aristotelian space, closed, limited and heterogeneous, with a homogeneous and infinite space. Discputes concerning the ordered universe highlight the modern ideal of knowledge, namely to discover a hidden reality under facts, events and processes, in order to establish a precise mathematical relationship between real data, without any express premeditation of this fundamental purpose[2]. The ultimate goal of science is thus identical to that of metaphysics (and theology, by the way), namely to provide a single theory able to describe physical reality as a whole ordered universe (*kosmos*), *i.e.* a logocosmical "Weltbild".

The transition from logocosmos to tehnecosmos occurs through the scientific revolution, via an event for which Galileo holds a great responsibility. As Alexandre Koyré assessed: We have already mentioned Siderus Nuncius of Galileo's, work whose influence and significance were not appreciated at the moment, but that announced a series of strangest and most important discoveries than all which have ever given to man to do before. And today when we read we cannot feel the impact of the unheard message novelty[3]. Galileo's trial thus takes on symbolic importance as ushering in a new era of unlimited faith in a triumphant rationality which is believed able to solve all the mysteries of creation and render an account of the ultimate nature of things.

Starting from here, we can formulate the general characteristics of tehnecosmos. In a tehnecosmical universe (technically-ordered universe) real space is considered as infinite and homogeneous, covering all the real and excluding any reference to "a beyond"; beyond all space is space. Consequently, explanations of the origin and evolution of the world cannot appeal to a non-spatial immaterial field, but must use exclusively mechanical and technical laws, in natural causal chains of science for such explanation, to the detriment of any other explanation. As an example, even the current Big Bang hypothesis is not interested in the causes of the initial explosion, but in what happens right after, from the physical point of view[4]. In tehnecosmos, the scientific discourse is the only legitimate one, competing and constantly removing the legitimacy of any other forms of speech, those which speak, for example, about soul, the sublime, or moral or religious purposes, etc. In tehnecosmos, a natural event A (cause), while preceding natural event B (effect), is sufficient to explain the total event B without the need for an appeal to an immaterial dimension.

Causality is reduced to a ratio of succession between two moments of time[5]. In such a space, time is automatically infinite (without beginning and without end) and can make no sense, because nothing brings something new, and everything that happens is already contained in the preceding: the cause contains and fully explains the effect. At the scale of the universe as a whole any chance intervention is excluded, the only event that may happen is a malfunction, as required by the third law of thermodynamics when the heat death of the universe is asserted. In such a space, the separated movement of being is unthinkable because there is only mechanical or inertial movement[6]. And even being in itself does not make sense, "for nothing excludes a possibility of being more radical than infinite space"[7].

The tehnecosmical "Weltbild" figures the universe as a vast well-oiled machine, turned by chance that only an accident can stop, which can be exploited unscrupulously as operating any machine. Nature being in total objectivity can only be the object of scientific study, having as result a rational exploitation, but practically never as an object of disinterested contemplation. Finally, the scientific method, so successful in nature, does not wait to be applied to the human being, conceived itself as a more sophisticated machine, but quickly reduced to a series of determinism (psychological, sociological, genetic, etc.) by the so-called sciences of the human.

In technecosmos, all causal series are presented as logical and mathematical equations (the great dogma of empiricism), and form the basis of the dominant discourse: the scientific discourse. This speech is not bound by anyone, because it is the speech of objectivity (the object speech discourse opposed to one subjectively held by a subject). It is not addressed to anyone in particular, and it is there-

(p. 95); cf. *şi Max Weber,* Essais sur la théorie de la science*, trad. de l'allemand par Julien Freund, Paris, Plon, 1965, p. 336.*

[2] Stephane Lupasco, *La Physique macroscopique et sa portée philosophique*, Paris, Vrin, 1935, p. 9–12.

[3] Alexandre Koyré, *Du monde clos à l'univers infini*, trad. de l'anglais par Raissa Tarr, Paris, Gallimard, 1973, p. 115–116.

[4] Steven Hawking, *A Brief History of Time*, New York, Bantam Books, 1988, p. 26–27.

[5] Jan Marejko, *La Cité des morts: l'avènement du téchnocosme*, Lausanne, L'Âge de l'Homme, 1994, p. 94.

[6] Jan Marejko, *Dix méditations sur l'espace et le mouvement*, Lausanne, L'Âge de l'Homme, 1994, p. 119.

[7] *Ibid*., p. 121.

fore impossible to be answered. Consequently, Socratic dialogue succumbs in tehnecosmos and the search for truth can only take the form of the scientific method, and even truth itself can be conceived only as scientific truth.

In excess, scientific and technological privilege threatens to cause a major rift in the horizon of contemporary culture provided and described by the English writer C.P. Snow as an exclusive disjunction between two cultures[8]. It is about, on the one hand, the humanist culture of the spirit sciences (*Geisteswissenschaften*), which significantly reduces science to the order of practical action and, on the other hand, natural sciences (*Naturwissenschaften*) as an expanding empire of what is called *tehnecosmos*, that inoculated deeply into the consciousness of the scientific community and of the educated public, too; the idea of excellence, precision and accuracy as the core values and distinctive scientific knowledge associated with Auguste Comte's famous phrase: *savoir c'est prévoir, donc pouvoir*. Accepting the superiority of scientific knowledge entails the recognition of the eminently practical essence of the finality of science, embodied in the constitution of the tehnecosmical empire.

The humanistic and anti-scientist orientation of contemporary philosophy, which seems to confirm the tear produced bySnow, is supported by philosophers of the first magnitude. Thus Qrtega y Gasset expresses very well this way of looking at science, in anti-intellectualist terms, reducing it to its pragmatic aspects, showing that the goal of positive science is to provide the best means to act on things and that scientific truth is the intellectual precipitate of practical utility[9]. In this way, science is itself degraded because it expresses the longing to dominate being.

In return, René Thom argues that theoretical science must remain an integral part of spiritual culture, thus challenging the legitimacy of the union between science and technology, between scientific explanation and its technical application, in order to illustrate the understanding of natural phenomena in relation to their main prediction and the technical control of objective science: "Between the two fundamental goals of science – to understand the world and to act on it – I think it should rather subordinate the second to the first. Many people believe that these two purposes can be harmonized and even that they go together: in order to be sure we understood correctly we must realize pragmatic checks because we cannot act effectively in a situation that we do not understand perfectly. I do not believe in this kind of 'harmony default': in reality, there are many situations for which understanding and action are quite fundamentally separable"[10].

The challenge of spiritual significance to theoretical science, especially the role of its alienating technical application, is developed more directly and accurately by Herbert Marcuse, one of the most violent criticisms of contemporary industrial civilization. Marcuse argues convincingly that modern physics was dissolved in technical artificiality and that the very concept of *physical reality* reduced theoretical science's relationship with nature to a relationship of manipulation and control, all by immanent and instrumentalist character of the precise method of the science of nature. This scientific rationality has been operational since it was developed in the instrumental and technicist horizon, driven by the imperative rule, separated from the aesthetics of reason, from art, free play and imagination courage, abandoning itself to the rational explanation of possibilities[11].

The contemporary rapport between science and technology is substantially changed, because of the technefication of science designating a process whereby techniques become predominant in the traditional methods of building a scientific theory.

Jacques Ellul was among the first to fully realize the impact and the importance of science technefication. Using this term, he as argued that: "scientific work was overtaken by technical work in such a position that science is no longer conceivable without its corollary technical knowledge ... The very fact that such techniques are advancing with great rapidity requires appropriate scientific progress and a general acceleration"[12]. Ellul argues that science has become an appendage of technique to such an extent that, where there are no technical tools, science cannot advance. Sometimes Ellul uses the word *science* in the sense of *traditional science*, not in order to distinguish the contemporary science of technique, but to show that such a separation cannot be made. Thus he says: "the relationship between science and technology is much less accurate when considering interdisciplinary areas of science that

[8] C. P. Snow, *The Two Cultures and The Scientific Revolution*, New York, Cambridge University Press, 1959, p. 11.

[9] J. Ortega y Gasset, *Was ist Philosophie*?, Deutsch von Karl August Horst, München, Deutscher Taschenbuch Verlag, 1968, p. 41.

[10] René Thom, *Paraboles et catastrophes*, Paris, Flammarion, 1983, p. 55.

[11] Herbert Marcuse, *L'Homme unidimensionnel*, trad. de Monique Witting revue par Vauteur, Paris, Les Éditions de Minuit, 1968, p. 191–192.

[12] Jacques Ellul, *The Technological Society*, trad. John Wilkinson, New York, Alfred A. Knopf, 1973, p. 9.

has no boundaries. Where does biological technique begin and where does it end? Sociology and modern psychology can be called technical, since the application of these sciences is technical in all... or another example, the economic techniques are the very substance of economic thought"[13].

From the historical point of view, the technefication of science is the end result of a gradual process of mutual incorporation of science and technology, resulting in what has been called *technescience*. This result is due to the change and convergence of two separate developments. The first is the scientification of technique[14] and refers to the gradual application of scientific theory to technological practice started in a significant way towards the mid-nineteenth century. Second – and totally separate, but parallel to that process – is the technefication of science that began when technological instrumentation and techniques assumed a crucial role in science. When these two processes merged together the difference between science and technology is blurred, if not canceled[15]. Weingart stresses that the process is not in one direction, but that are new emerging *patterns* of two-way influence, because the conditions mutually interfere with each other. Thus, the development of scientific knowledge has reached a point where its explanatory and predictive power expand rapidly increasing to a variety of phenomena, and the technical problems have reached such complexity that their resolution requires the use of scientific methods, particularly theoretical constructions based on systematic experiments and mathematical descriptors. Therefore, Böhme clearly states that "natural knowledge and technology now tend to unify at the level of theory"[16]. The scientification of technology is a late evolving process and began when the industrial process itself, at a certain stage of development, required scientific knowledge and at the same time, when scientific knowledge became a source of new technological processes and industrial development[17].

The technefication of sciences is evident even in the social sciences since the second half of the twentieth century. Using such social engineering sciences ends in a wide range of applied social sciences or political feasibility studies whose research purposes are determined by the requirements of social and political order. These requirements are themselves stimulated primarily by the need to control and drive both armed conflicts and hostilities and maintain the welfare of society. What resulted was a lot of science dedicated to the production of "usable knowledge"[18].

Numerous techniques are available for some degree of quantification but there are the quantification rebel areas that use qualitative techniques or simply non-quantitative ones such as policy analysis techniques or historical research. Unfortunately, however, quantitative techniques used in the human sciences are often a parody of those of other sciences, such as the assessment of the frequency of a word in a literary text to determine its artistic significance. Roman Jakobson's view seems justified that "Whatever verbal problems are treated, the fundamental concepts used by logicians are based on formal languages, while pure linguistics can only proceed from a consistently intrinsic analysis of natural languages. Consequently, formal logic and linguistics treats from totally different angles problems as meaning and reference, intensive and extensive or existential sentences and the universe of discourse, and these two distinct optical modes can be interpreted as two partial, but fair, descriptions, distinguished, by the definition of Niels Bohr, as a relationship of 'complementarity'"[19].

Humanities attempt to take a form derived from basic axiomatic structures, using mathematical methods and procedures of organized science, but fails when faced by the ideal to reduce them to a consistent and rigorous formalism. Limited benefits of ideal formalization are reduced, in the social sciences, to numerical techniques and procedures watched by the trap: "... and God is the Machine".

The iconic image of cyber heresy, as a tool of substituting God and man through machine, is Norbert Wiener' essay *God and Golem*, with the subtitle, *A*

[13] Jacques Ellul, *The Technological Society*, trad. John Wilkinson, New York, Alfred A. Knopf, 1973, p. 9.

[14] Gernot Böhme, Wolgang von den Daele and Wolfgang Krohn, *The Scientification of Technology*, in: *The Dynamics of Science and Technology*, Ed. by Wolfgang Krohn, Edwin T. Layton, Jr., and Peter Weingart, Dordrecht, Boston, D. Reidel Publishing Company, 1978, p. 219 *sqq*.

[15] Peter Weingart, *The Relation between Science and Technology*, in: *The Dynamics of Science and Technology*,..., 1978, p. 279.

[16] Gernot Böhme, Wolfgang van der Daele and Wolfgang Krohn, *op. cit*., p. 239.

[17] Peter F. Drucker, *The Age of Discontinuity*, New York and Evanston, Harper and Row, Publishers, 1969, p. 12 *s.u*.

[18] Charles E. Lindblom, David K. Cohen, *Usable Knowledge: Social Science and Social Problem Solving*, New Haven and London, Yale University Press, 1979, p. 62.

[19] Roman Jakobson, *La lingvistique*, in: *Tendances principales de la recherche dans les sciences sociales et humaines*, Mouton/UNESCO, Paris, La Haye, 1970, p. 509.

Comment on Certain Points where Cybernetics Impinges on Religion. Here the author redefines the concept of God as omnipotent and omniscient, through the paradox "May God cannot?"[20] Consequently, the relationship between Creator and creature – that between God and man – is redefined "in the image and after the likeness" (*Genesis*, 1: 26), as relations among machines "that are very well able to make other machines in their own image and likeness". Similarly, Lucifer's rebellion and the fall of man is redefined as a game between Creator and creature – based on the *Book of Job* – as a competition among machines able to learn from their own belligerent experience[21], self-programmed to play to victory by defeating the opponent, irrespective of any other consideration than to win, so that victory is pursued at all costs, even to the point of exterminating the camp of the initiator of the game – in this case the rebel Lucifer, or man – if the condition to survive is not explicitly provided in the definition of victory through the rules by which the game was scheduled[22].

This is why it is desirable to have a consistent metaphysical theory of technical practice, as Langdon Winner considers, one that is able to demonstrate how technological development involves restructuring activity forms of social and moral organization that govern the understanding and everyday life behavior. It thus may lay the foundation for a new concept of the individual and social determinism by building a technical system involving human beings as operating parts of a whole for the reconstruction of relationships and social roles. "Even the simple act of using machine types, techniques and available systems, generates models (patterns) of activities and expectations that soon become 'a second nature' to us ... Thus, our world soon becomes one where the phone, automobile, electric light are forms of life that it would be hard to imagine life without them"[23].

New tech life forms are so radically different from traditional ways of life that they fundamentally alter the conditions of life itself. Theorizing new tech forms of life – that is to say, developing a consistent philosophy of technology – should begin, as Winner says, with a critical examination of the nature and significance of artificial aids to human activity due to the fact that "highly sophisticated artificial systems began competing with political institutions as sources of power, order, authority, loyalty in ways previously unknown ... engaging fully in conditioning moral and political life"[24].

In many conferences and in the philosophical studies published in the volume entitled *Schritte über Grenzen* (*Across the Frontiers*), Werner Heisenberg goes beyond popular science approaching the edge of epistemological meditation with the "Copenhagen Interpretation" of quantum theory. His analyses develops an authentic contemporary philosophical investigation of the conditions of contemporary technescience re-folded into physical reality in a way that transforms it beyond an "internal matter" of physics, in an "essential ambiguity" worthy of being studied by means of philosophy in particular through the assumptions of its Kantian "Platonism".

In substantiation of his *Weltanschauung* about physical reality that defines its essential philosophical conception, Werner Heisenberg ontological assumption is based on the unitary ordered nature: "Attempts were made to discover the details of natural processes by means of experiments, to observe them objectively and to understand the laws governing them. Scientists tried to formulate relationships mathematically, and to arrive at «laws»" which would hold without restriction in the entire cosmos. In this way they finally managed to harness the forces of nature to man`s purposes The magnificent development of mechanics, of optics, thermodynamics and heat technology are all eveidence of the power of this approach"[25]. Consecutive methodological problem is the access to the primary and fundamental reality, and the epistemological one, if the access occurs (only) by contemporary science and technology: "Even the phrase «description of nature» lost more and more of its original significance of a living and meaningful account of nature. Increasingly it became to mean the mathematical description of nature, *i. e.*, an accurate and concise yet comprehensive collection of data about relations that hold in nature"[26].

Heisenberg is well aware that the development of natural science, from Galileo and Newton , is absolutely linear and consistent, and that in fact, its technical consequences has altered the face of the

[20] Norbert Wiener, *God and Golem*, Massachusetts, The M. I. T. Press, Cambridge, 1964, p. 6.
[21] Norbert Wiener, *God and Golem*, Massachusetts, The M. I. T. Press, Cambridge, 1964, pp. 16–17.
[22] Norbert Wiener, *God and Golem*, Massachusetts, The M. I. T. Press, Cambridge, 1964, p. 60.
[23] Langdon Winner, *Technologies as Forms of Life*, in: R. S. Cohen and M. W. Wartofsky (eds.), *Epistemology, Methodology and the Social Sciences*, Dordrecht Reidel Publishing Company, 1983, p. 254.
[24] Langdon Winner, *op. cit*., p. 251.
[25] Werner Heisenberg, *The Idea of Nature in Contemporary Physics*, in: Werner Heisenberg, *The Physicist`s Conception of Nature*, transl. by Arnold J. Pomerans, London, Hutchinson&Co. Publishers, LTD., 1958, p. 10.
[26] *Ibidem*, p. 11.

earth, so that "In our age, however, we live in a world which man has changed so completely that in every sphere – whether we deal with the tools of daily life, whether we eat food which has been prepared by machines, or whether we travel in a countryside radically changed by man – we are always meeting man-made creations, so that in a sense we meet only ourselves"[27]. The problem is – Heisenberg says – if knowledge thus obtained has any value, because science has methodically separated the authenticity from the truth and, although medicine has succeeded to eliminate the risk of global epidemics, and science, as a whole, while providing sufficient knowledge for contemporary technique in order to achieve distant goals such as conquering outer space or genetic transformation of the human species, knowledge has darkened the divine image in man, so that "technical progresses are nothing but ... , a desperate attempt to make the inferno to be a quite enough pleasant residence".

And although Heisenberg controversy with himself continues with a plea for a possible implementation of "**Unum, bonum, verum, aeternum, absolutum**", the scientist leaves to insinuate in the background the image of the old Chinese Confucian, who, although built irrigation channels in his vegetable garden, used to wet with pail for ethical reasons: "whoever uses machines does all his work like a machine. He who does his work like a machine grows a heart like a machine, and who carries the heart of a machine in his breast loses his simplicity. He who has lost his simplicity becomes unsure in the strivings of his soul. Uncertainty in the strivings of the soul is something which does not agree with honest sense. It is not that I do not know of such things; I am ashamed to use them"[28].

References

Böhme, Gernot, Wolgang von den Daele and Wolfgang Krohn (1978) *The Scientification of Technology*, in: *The Dynamics of Science and Technology*, Ed. by Wolfgang Krohn, Edwin T. Layton, Jr., and Peter Weingart, Dordrecht, Boston: D. Reidel Publishing Company, 1978.

Drucker, Peter F. (1969) *The Age of Discontinuity*, New York and Evanston: Harper and Row, Publishers.

Ellul, Jacques (1973) *The Technological Society*, trad. John Wilkinson, New York: Alfred A. Knopf.

Hawking, Steven (1988) *A Brief History of Time*, New York: Bantam Books.

Heisenberg, Werner (1958) *The Idea of Nature in Contemporary Physics*, in: Werner Heisenberg, *The Physicist`s Conception of Nature*, transl. by Arnold J. Pomerans, London: Hutchinson&Co. Publishers, LTD., 1958.

Jakobson, Roman (1970) *La lingvistique*, in: *Tendances principales de la recherche dans les sciences sociales et humaines*, Mouton/UNESCO, Paris: La Haye, 1970.

Koyré, Alexandre (1973) *Du monde clos à l'univers infini*, trad. de l'anglais par Raissa Tarr, Paris: Gallimard.

Lindblom, Charles E., David K. Cohen (1979) *Usable Knowledge: Social Science and Social Problem Solving*, New Haven and London: Yale University Press.

Lupasco, Stephane (1935) *La Physique macroscopique et sa portée philosophique*, Paris: Vrin.

Marcuse, Herbert (1968) *L'Homme unidimensionnel*, trad. de Monique Witting revue par Vauteur, Paris: Les Éditions de Minuit.

Marejko, Jan (1994) *La Cité des morts: l'avènement du téchnocosme*, Lausanne: L'Âge de l'Homme.

Marejko, Jan (1994) *Dix méditations sur l'espace et le mouvement*, Lausanne: L'Âge de l'Homme.

Ortega y Gasset, J. (1968) *Was ist Philosophie*?, Deutsch von Karl August Horst, München: Deutscher Taschenbuch Verlag.

Thom, René (1983) *Paraboles et catastrophes*, Paris: Flammarion.

Snow, C. P. (1959) *The Two Cultures and The Scientific Revolution*, New York: Cambridge University Press.

Weber, Max (1920) *Die protestantische Ethik und der Geist des Kapitalismus*, in: Max Weber, *Gesammelte Aufsätze zur Religionssoziologie*, Bd. I, Tübingen: Mohr Siebeck.

Weingart, Peter (1978) *The Relation between Science and Technology*, in: *The Dynamics of Science and Technology*, Ed. by Wolfgang Krohn, Edwin T. Layton, Jr., and Peter Weingart, Dordrecht, Boston: D. Reidel Publishing Company.

Wiener, Norbert (1964) *God and Golem*, Massachusetts: The M. I. T. Press, Cambridge.

Winner, Langdon (1983) *Technologies as Forms of Life*, in: R. S. Cohen and M. W. Wartofsky (eds.), *Epistemology, Methodology and the Social Sciences*, Dordrecht: Reidel Publishing Company.

[27] *Ibidem*, p. 23.

[28] Werner Heisenberg, *The Idea of Nature in Contemporary Physics*, in: Werner Heisenberg, *The Physicist`s Conception of Nature*, transl. by Arnold J. Pomerans, London, Hutchinson&Co. Publishers, LTD., 1958, p. 20.

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

DISRUPTIVE INDIVIDUALS AND PROSPECTIVE ETHICS

Sorin –Tudor Maxim
"Ștefan cel Mare" University of Suceava, Romania
e-mail: maximsorintudor@yahoo.com

Abstract:

Throughout the history of philosophical thinking, ethics has almost never been associated with ontology because the moral approach is about the action while the ontological approach is about the being. The prospective approach confers to moral philosophy a genuine ontological direction, an ontology of the human, since it aims at identifying the problems of (human) existence, which no longer describes "what should be" but mostly "what can be", thus anticipating the ways of human existence in a future world.

The challenges raised by disruptive innovations and the environmental issue require the critical eye of moral philosophy regarding the impact of technological progress is having in redefining the human condition of tomorrow's society; all the more so as we are facing a regrettable backwardness of moral progress, which does not seem to keep pace with the spectacular changes in science and technology. The wisdom of ethical reflection refers to a feeling of concern for both present and future humanity as a whole,relating not only to immediate reality but, especially, anticipating what might happen.

Key words: *prospective ethics, disruptive innovation, digital era, eco-efficiency, ecological balance*.

1. A current approach regarding being

Ethics is often denied the status of an ontological approach because while ontology reflects on existence, on what should manifest as a being – "what is" – the moral theoretical concern regards "what should be", adopting an ideal approach, which therefore transcends the existential field. Ontology analyzes the light that uncovers the "being" of all things and of the human spirit itself (Plato), while ethics, by studying "what should be", is a theory regarding *action* and not being. However, Jürgen Habermas proposes an eccentric understanding of the world, based on the distinction between a *life-world* and *the world*, a distinction which is difficultly assimilated by the ontological approach to existence as existence. This view allows "towards external nature, not only an objective attitude, but also an attitude that complies with the rules, namely an expressive attitude; towards society, not only an attitude that complies with the rules, but also an objective attitude, namely an expressive one; and towards inner nature, not only an expressive attitude, but also an objective one, namely an attitude that complies with the rules" (Jürgen Habermas, 2000, p.131). The eccentric understanding of the world is defined as a complex structure of the perspectives that regard them both. "However, what is crucial to our problem is the fact that, together with the development of these structures, we obtain the key for achieving our long-desired moral studies by means of the logics of development" (Ibid., p.133). Habermas believes that prospective ontogeny, which leads to an eccentric understanding of the world, can be explained only in relation to the development of the appropriate interaction structures between the human observer and the world. Introducing the observer perspective initiates the creation of a social world, and, for all those who belong to it, a *social world* is "made exactly of the rules that determine which interactions belong to the totality of authorized interpersonal interactions"; all the actors for which such a set of rules is valid belong to the same social world. The concept of social world cannot be understood apart from an attitude that complies with the rules; as such, any ontological view regarding the social should consider this specific reality. "It is an ontological error to seek for the profound specific of our being, as man in the human nature itself. Biologically, physiologically, as a manifestation of the living and together with the infinite multiplicity of

life's forms of existence, the *essence of man's natural human being* is in itself.... But as investiture with humanity, we only exist in and through the relationship with the Other, which is approved by moral norms and rules" (Maxim, 2010, p 14). This simple emphasis has the merit of painting the understanding of *our human existence* in a new light, which decisively embraces an ethical horizon.

2. Arguments for prospective ethics

The prospective function provides moral philosophy with a genuine ontological direction – it is obviously an ontology of the human – as it aims at identifying the problems of a future human existence, and does not only regard "what should be", but mostly describes "what could be", since it does not contradict the evolution of the present social phenomena, thus anticipating the ways of human existence in a future world. In fact, prospective ethics aims at raising the classical question (also regarding what happens to future humanity): "Wouldn't it be wiser to *take reality for what it is*, namely to admit its indispensability, rather than to judge it by a measure that does not exist, that is to compare it with an ideal world?" (Christine Le Bihan, 1999).

Ethically anticipating the possible ethical problems that our existence will face in the years to come is absolutely necessary in a world whose "normality" is change and stability increasingly appears to be only the "accident" such as the transitory one from an information society to a knowledge society - .

Preparing for change becomes an act of genuine social responsibility, being the condition for avoiding serious risks for humanity and identifying those moral implications of progress, especially disruptive innovation, which can control – or at least postpone – the adverse consequences of the intemperate application of technological achievements. Prevention means being prepared[1].

3. Ethics and disruptive challenges

The term "disruptive" was proposed by Clayton Cristensen, at first regarding *disruptive technology*, in order to describe a radical change and the consequences of "creative destruction" in relation to existing technologies. The term was subsequently replaced by the new concept of *disruptive innovation*, from the realization that too few technologies had the characteristics mentioned above. Moreover, the act of innovation has a broad individual connotation, while technological progress, be it the result of "disruptive strategies" or not, arises from the action of communities, research communities; thus, moral consequences are regarded in other terms.

A disruptive innovation defines a product or a service that uses a "disruptive" strategy, which is in contrast with "supporting" or "evolution" strategies, in order to unseat existing dominant technologies. "Disruptive innovation is based on the fact itself that it produces a dramatic change in the market, which quickly transforms the current technology into an outdated technology" (Philip Kotler and John Caslione, 2009, p 42); and this disruption creates a turbulence for the human community that is difficult to control.

A commonly defended view by those who are involved in technological innovation – and feel responsible for the possible traumatic consequences of the disruptive strategies on the human community – is that moral progress is not keeping pace with the spectacular changes in science and technology. Some go so far as to wonder whether one should take into account the possibility of slowing or even stopping technological innovation – as if that were possible – before generalized chaos is produced, caused by the continual "changing the rules of the game", at least until ethics is reintegrated within the process of change, by effectively relating to the new realities: "What we must do first is realistically take into account the fact that ethics has a dynamic character".

When new technologies arise, there is commendable concern for solving ethical issues first. Or sometimes it is recommended to put a moratorium on technological development until ethics recovers the lost ground. Both approaches are better than leaving ethics last, after the damage has been done. Even so, we cannot anticipate all the ethical issues that will arise from the development of technology (James H. Moor, 2005, p.118).

Suspicion regarding the possibility of a true "legal vacuum", which creates, for all those involved in these disruptive changes, the impression that everything is possible is not at all unfounded. For example, James H. Moor highlights the fact that: "A typical problem in computer ethics arises because there is a policy vacuum about how computer technology

[1] Being wise does not mean relating only to the present and immediate reality, but especially anticipating what will happen. *Istuc est sapere, non quod ante pedes modost Videre, sed etiam illa quae futura sunt Prospicere* (Terentius, Adelphi)

should be used. Computers provide us with new capabilities and these in turn give us new choices for action. Often, either no policies for conduct in these situations exist or existing policies seem inadequate. A central task of computer ethics is to determine what we should do in such cases, namely to formulate policies that guide our actions" (James H. Moor, 1985, p. 266).

In a significant paper entitled "Chaothics", Philip Kotler and John Caslione identified in the immediate or near future several disruptive technologies that will raise serious questions and will also represent difficult challenges for current ethical discourse: systems of information services such as "cloud computing" and of generalized interaction between the human user and artificial intelligence (ubiquitous computing); contextual computing systems, the virtualization and unification of information resource networks; augmentative reality; social networks and social software; all these express the characteristic trends of the digital age accompanied by an explosive infusion of individual innovations, as a consequence of the quasi-unlimited access to information, which is specific to a knowledge society.

In this context "disruptive technology can become the ultimate factor of changing the rules of the game, which is able to give birth to chaos in an entire industry, especially for already existing players, who have not paid attention to the small, silent infusions around them until it was too late" (Philip Kotler and John Caslione, 2009, p 42).

One should note and keep in mind several possible unsuccessful or even negative human experiences to which prospective ethics cannot and does not have the right to relate, identifying causes and proposing solutions, *even before the effects have occurred* with predictable – irreversible results: "the sorcerer's apprentice syndrome, manifested as the desire for the intemperate use of science and technology achievements; the deterioration of what we call "the quality of life", as a result of the multiplication of several novel sources of alienation, both at the individual and the group level; the risk of the individuals' excessive attachment to a virtual time-space dimension, ignoring an involvement in the real world, taking responsibility for improving living conditions at the material, and especially the moral and spiritual level; the wrong use of biotechnology information, as it becomes increasingly available as a result of the process of knowledge globalization; irresponsible interference with the nature of the human psycho-socio-biological nature.

If we add to all these a still questionable availability to direct our efforts in order to ensure the preservation of the ecological balance, as an expression of the most authentic human interests, in the medium and long term, we are facing a series of problems which prove that we are not sufficiently prepared to find the optimal situation.

4. Ethics and ecological challenges

The prospective dimension of ethics is all the more important in relation to environmental challenges as any invasive human interference reveals its consequences not necessarily to the present generation, but mostly to future generations, whose wellbeing and quality of life are significantly affected by our present decisions.

Specific literature also points to the fact that serious moral problems arise when one tries to consistently use the distinction between intent – prevision/anticipation – in an ethical judgment from an ecological perspective. On the one hand, a commendable initiative could result in negative consequences – The road to hell is often paved with the best intentions! – On the other hand, there may be situations when you cannot categorically state (in terms of moral judgments, which is a value judgment), if human interests should always come first or if sometimes it is preferable to preserve the "interests" of nature, namely to preserve ecological balance and biodiversity, which are goals that can be considered more important than any human interests.

It is significant that environmental issues, including those regarding the conservation of scarce natural resources, the reduction of pollution and carbon dioxide emissions, which accelerate global warming and climate change, take a central place on the agendas of top-managers, despite the still dominant prejudice that large corporations only or mainly seek for their economic interests. The impact of the lack of conformation of disruptive technologies to the environmental problem on the reserved or even hostile behaviour of consumers, which can go as far as boycotting certain products and services, causes firms to adopt new business models in order to become eco–efficient.

In order to prevent the disruptive or chaotic effects of the environmental issues turbulence, really good companies will ultimately bring together all those who belong to the co-interested categories of a firm – both public entities and private individuals – in order to help create the Economic Enterprise Sus-

tainability type strategy, so that the "green", environmentally efficient solutions ensure an attractive return on the "green" investment. (Philip Kotler and John Caslione, 2009, p 58)

These are the conclusions drawn from the analysis of a McKinsey Quarterly survey of 2008, compared to the previous year, which captures the fact that many more managers (half of those surveyed) increasingly believe that environmental investments are opportunities, not risks, saying that those who move quickly in order to become "eco-efficient", including those who increase their investments in this direction, will be favoured in their competitive positioning on their market segment in the immediate, not distant future.

5. Conclusions

Ever since 1983, during a conference within the XVIII International Congress of Philosophy, the famous physicist and philosopher Mario Bunge, helped by the wisdom of his 64 years and the authority of several decades of high level scientific research, warned the global scientific community regarding the "destructive creativity" of technology in the contemporary world, claiming that in a society which is decisively marked by technological development, the critical eye of moral philosophy is needed.

For a proper assessment of the consequences of the evolution of new technologies, the philosopher proposed the establishment of a specialized field of ethics that reflects on the moral responsibility of all those involved in this process. The concepts of techno-ethics, ethics of technology and bioethics are the result of critically positioning moral thinking regarding this destructive creativity of technology.

The current technological advances provide ways to go beyond the capabilities of human intervention on nature and its living environment in a way that 30 years ago was unimaginable, with extremely serious consequences for all of humanity; this is why we need not only the moral responsibility of the scientists, engineers, businessmen and politicians that the philosopher Mario Bunge speaks about, but also a more pronounced involvement of the public in these issues.

Public opinion, the main "judge" of the moral facts – whether manifested as the "green movement" or as individual reactions, which have become increasingly consistent and numerous – obviously has an extremely important role; therefore, any prospective ethics must aim at *identifying ways of educating* a responsible public opinion, which is able to successfully respond to the challenges determined by the disruptive effects of change.

References

Bunge, Mario (1984). Știință și filosofie (Science and philosophy), Politică Publishing House, Bucharest

Habermas, Jurgen (2000). *Conștiință morală și acțiune comunicativă (Moral conscience and communicative action)*, All Educational Publishing House, Bucharest

Kotler, Philip & Caslione, John (2009) *Chaothics: management și marketing în era turbulențelor (Chaothics: The Business of Managing and Marketing in the Age of Turbulence)*, Publica Publishing House, Bucharest

Le Bihan, Christine (1999). *Marile probleme ale eticii (Major problems of ethics),* The European Institute, Iasi

Maxim, Sorin Tudor (2010) Peripatethice, Pim Publishing House, Iasi

Moor, James H (2005). "Why we need better ethics for emerging technologies" in *Ethics and Information Technology*, 7:111–119

Moor , James (1985) "What Is Computer Ethics?" in *Meta-philosophy*, 16(4)

BALKAN JOURNAL OF PHILOSOPHY. Vol. 6, Issue 1, 2014

Book reviews

Re-visiting Cicero's Lessons: Eloquence, Persuasion and Contemporary Discursiveness

[Review of Constantin Sălăvăstru, *Cinq études sur la rhétorique cicéronienne*, L'Harmattan, Paris, 2013]

Ioan-Alexandru Gradinaru

University "Al. I. Cuza" of Iasi
Department of Sciences of Communication and Public Relations
e-mail: alexandru.gradinaru@uaic.ro

Perhaps one of the most fascinating intellectual journeys is the attempt to build a dialogue with a great personality of the past. In spite of different cultural presuppositions, of different ways of thinking and arguing and in spite of centuries that separate us from him or her, we feel that his or her voice is still active today, and the legacy left behind is not only an historical artifact, but also a source of powerful messages that shape our opinions and interpretative frames. Such an attempt is vigorously accomplished by Romanian rhetorician Constantin Salavastru in his newly published book.

First, Cicero is not a simple choice, nor an arbitrary one: Constantin Salavastru had both aesthetic and educational reasons when he rediscovered the works of the Roman writer. Creating a dialogue with Cicero means offering a fresh perspective on the problem of eloquence, about the elegance of *actio* or about the idea of discursive harmony. In every case, we meet the symbolic movements that are typical for the classical equilibrium between parts, namely the classical aesthetic ideal. Moreover, the author wants to remind the reader – with a special focus on the young reader, who might not be aware of the qualities of the Roman rhetorical tradition – that in spite of the seemingly general lack of style or persuasiveness present in contemporary public debates, we still have valuable models to turn to in order to find inspiration. Second, Cicero is undeniably one of the personalities of the history of rhetoric that probably illustrates best the core values that are usually associated with the field of humanities: the desire for logical argumentation, the belief that reason provides useful tools for solving problems, the commitment to freedom and justice, the continuous effort to understand the deliberative issues of the community.

His interest in the argumentative dimensions of rhetorical discourse allows Constantin Salavastru to skillfully connect Plato, Aristotle, Cicero and Perelman. In fact, this is one prominent feature of the theoretical analysis developed by the author in his previous works, starting with *Rationality and Discourse* (1996), but also found in his *Theory and Practice of Argumentation* (2003), *Logic, Argumentation, Interpretation* (2007) or *Argumentation and Public Debates* (2011). To give just one example, when Constantin Salavastru discusses the difference between the approach favored by Aristotle and the approach favored by Cicero, he justly identifies a subtle element of distinction: "the Aristotelian approach has an evident *cognitive intention*: to understand the way through which we can argue easily starting from the nature and the configuration of our reasoning acts. [...] Cicero's proposition has a *formative intention*: to teach Trebatius how it is possible to discover and to

choose the best arguments in his juridical debates. But, to reach this goal, the ways of the illustrative intuition represent a much better option" (p. 22).

Through a detailed and lengthy discussion of Cicero's *Topics*, the author makes a useful presentation of the argumentative techniques and types of arguments known and discussed by Cicero (for instance, intrinsic and extrinsic arguments, the argument of authority, the argument of similarity). What is also interesting is the fact that in writing his *Topics*, Cicero proves to be not only a talented orator, but also a theorist who is preoccupied with finding the best explanation for the efficient use of arguments, and this is done by making reference to the Aristotelian *loci*. Thus, Cicero's *Topics* reclaim their rightful place in what Constantin Salavastru depicts as "the architecture of Cicero's rhetoric" (p. 28), together with *De Oratore* (55 BC) and *Orator* (46 BC). The distinction between the four types of rhetoric is also a useful tool developed by Constantin Salavastru (argumentative rhetoric, metaphysical rhetoric, textualist rhetoric and poetical rhetoric). Analyzing Cicero's works, Constantin Salavastru reaches the conclusion that all four types are present. This allows us to grasp the fact that "the orators of antiquity were particularly interested in an integral perspective on discourse, they wanted to know and explain what makes the whole speech such an effective tool, sometimes malefic in nature, for influencing others. A totally different option if we compare it with the modern research for which the delimitations, the specific analyses, became a priority" (p. 36).

A special chapter is dedicated to the question of utopia. This comes only natural, as long as anyone who reads Cicero today might think his conclusions seem a little remote from the realities he or she experiences. Constantin Salavastru believes that, on the one hand, we should interpret Cicero's portrait of the ideal speaker in the same line of utopian thinking that includes Plato (the ideal state), Leibniz (the ideal language, *characteristica universalis*) or Marx (the ideal society), thus making Cicero belong to a deeply influential tradition. On the other hand, Constantin Salavastru has a tendency to somehow "naturalize" the idea of utopia, asserting that "we should note that utopias have always accompanied us in our lives, in our relations with others, in our relationship with the whole world. Some of them are ours and only ours, and they make us act: the utopia of always being the first, the utopia of being an encyclopedic spirit at any cost, the utopia of believing in the perfect friendship and so on" (p. 85). The need for an ideal model seems in place in the field of rhetoric and, in fact, this comes down to the projective function of any fictional or ideal structure. Being an ideal orator means trying to fully accomplish the Aristotelian triple condition of ethos, pathos and logos. The discussion concerning the latter Aristotelian terms is actually done twice (here and also in the fifth chapter of the book, where it is related to the concept of harmony), and is coined as being "a situation of oratorical communication" (p. 40), with a special focus on the criteria of discursive performance.

The relationship between philosophy and rhetoric is discussed according to the presupposition that good thinking goes well with good speaking. In fact, as Cicero points out, philosophical "training" is mandatory for the mature speaker. Moreover, classical Roman rhetoric is a constant reminder of the fact that going back to the main sources of philosophical meditation not only offers us a ground for our assertions, but also adds a touch of elegance and clarity. Also, when the orator selects his themes and arguments, philosophical reasoning ensures a solid construction of *inventio*. In the situation of political speech, for example, the need for philosophy cannot be overcome, since the elaboration of the arguments implies philosophical choices. On the other hand, Cicero warns us that the orator must not necessarily be a philosopher, but he must necessarily be familiarized with the fundamental philosophical issues. He has to take care and never forget the fact that there is a huge difference between the language of philosophy and the usual public language of eloquence. Mixing one with the other could lead to errors and misunderstandings. The philosophical language, *per se*, is academic in nature and usually much more technical. Also, Constantin Salavastru reminds us about a certain difference between Plato and Cicero concerning the relationship between the essentialist view of philosophy and the pragmatic character of rhetoric. As we all know, Plato tries, in his *Phaedrus*, to put rhetoric on the truthful and safe path of philosophy, away from the circumstantial option of the sophists. What Cicero notices is the fact that people like Socrates and Plato, knowledgeable and skillful in almost every aspect of sophist wisdom, are the ones to condemn it. Socrates and Plato made full profit out of their talent and information, and they both were great speakers. What a hypocritical way, then, to put the blame on

pragmatism! Another fruitful contribution that we find in *Five Studies about Cicero's Rhetoric* is the problematological interpretation of philosophical discourse. If we are to think of the fact that Constantin Salavastru is one of the researchers that has dedicated a lot of time to the study of Michel Meyer's work, then we can understand why he has chosen the theoretical frame developed by the Belgian author. In fact, problematology has the advantage of showing us that philosophy and rhetoric, together, have the power of imposing certain questions to the public conscience, thus creating situations of *radical interrogativity*. The adaptability and the technical repertoire of rhetoric help the orator reflect on the problematical nature of the subjects that he or she tackles.

The fourth chapter of the book, dedicated to Cicero's remarks on gestures and nonverbal cues, rounds out the findings of the first three. If the arguments and the capacity of the speaker to imagine them were the nucleus of the first section, the projective force of the ideal model constituted the main theme of the second and the relationship between the philosophical imaginary and the effort of the orator the center of the third one, now the focus is on the gestural imaginary. A better understanding of the latter appears when we think about the grounds of using gestures (pp. 137-138), or when we associate the nonverbal behavior of the speaker with certain styles or traditions of public speaking (pp.143-144). Constantin Salavastru proves that against the background of the historical work or of the examples given in *Brutus* lies the ultimate lesson that Cicero gives us and, again, it is still valuable today: any movement or gesture that we make has to be in harmony with the subject, the auditory and the context of our speech. The quest for harmony (discussed in detail in the fifth chapter) is no less than an imperative for the speaker, who thus seeks to create a balanced relationship between the parts of the speech.

The concluding chapter of the book contains a few drops of sadness, well hidden behind the words themselves. First of all, Constantin Salavastru thinks that "a first point of this explanation is related to the *modality of conceiving rhetoric* and its role in Antiquity in comparison with modernity. Antiquity (mainly Greek and Roman) saw rhetoric (and its practical expression, eloquence) as *a reasoning and educational fact* that assumes as goal the formation of the total (harmonious) and complete (having a large perspective on knowledge) man. Modernity saw rhetoric as an instrument of action upon the other in view of transformation" (p. 93). In fact, this is a blend of sadness and nostalgia for times when people would invest more in the quality of their words, in the soundness of their arguments, in the clarity and coherence of their delivery style, in the force of their dialectical fights. It seems that the author tells us that rhetoric is an art and a weapon for more elegant times (to paraphrase a line from a well-known popular fiction movie), that is now mostly used as a sum of techniques and is dried out of its very soul. Rhetoric has not died, but it has transformed into something cooler, objective-focused and almost mechanical in nature. The continuous search for persuasive tools becomes an obstinate behavior, and sets the danger of forgetting the deep relationship between logos, ethos and pathos. And even if we find suitable technical solutions to our problems, we must not live with the illusion that this constitutes enough compensation for what we have (partially) lost: virtuous people and true passions that make us stay together, think of good solutions for our community problems or raise our spirits in times of glory or fall. The five studies offered by this book also represent the author's belief that this spiritual trip back to a main source of our culture would mend some of the wrongs that we have been doing discursively and in societal terms.

Written in a pleasant and mature style, touching all the major themes of classical rhetoric and displaying an enviable erudition on so many subjects, Constantin Salavastru's *Five Studies about Cicero's Rhetoric* is a necessary read for both students and scholars in the field, as well as for every person who is passionate about Cicero and Roman antiquity. We can only hope that the author's vast expertise and dedication will give us, in the form of a future work, the same delightful cultural experience as the present one.

Nickolay Milkov and Volker Peckhous, eds. *The Berlin Group and the Philosophy of Logical Empiricism.* Springer, 2013.

Clark Glymour
Alumni Professor
Department of Philosophy
Carnegie Mellon University
e-mail: cg09@andrew.cmu.edu

This volume is a collection of essays, most of them focusing on philosophers within and around Reichenbach's Berlin group. Inevitably in such collections the quality of the contributions is uneven, but some pieces provide insights that are otherwise not to be found in the secondary literature. The editing can be faulted only for the inconsistency of quotations: in some essays, quotations are in English, in others in German, and in others in English with German footnotes. The breadth of readers would I think prefer the last. Readers may be disappointed that most of the authors write as reporters, without assessment of the views they describe. That may be because what is reported is too thin to support an assessment.

The essays focus chiefly on personal relationships and differences in metaphilosophical viewpoints and general epistemological doctrines, especially differences with Kant or readings of Kant. Some of the essays recount aspects of these viewpoints and differences in some detail, but, with the passing exception of Flavia Padovani's discussion of Kurt Lewin on genidentity, Christian Thiel's devastating essay on Walter Dubislav, and the part of Arkadiusz Chrudzinski's essay on formalization of Gestalt theory by Paul Oppenheim and Kurt Grelling, none of them detail attempts of members of the Berlin group to substantively contribute to mathematics or the sciences, the philosophical ambition for which the Berlin group is best remembered. You will not find any details of Lewin's field theory in psychology, or of Reichenbach's axiomatic for relativity or quantum logic or theory of probability. Critical evaluation of the Berlin group's doctrines and attempted scientific contributions is largely absent except for Thiel's essay. Except incidentally in Andreas Kamlah's remarks on Reichenbach's youthful associations, there is scarce discussion of the political currents of the time or of their role in the relations between Carnap, Reichenbach, and others. So take the volume for what it is and learn what you can from it.

After a valuable introductory survey by Milkov of the relations between the Vienna and Berlin philosophical communities, I learned from Helmut Pulke of the neo-Friesian school of followers of Jacob Friedrich von Fries, an early 19th century Kantian and active anti-Semite.[1] On Kantian grounds, that group--chiefly in Gottingen--which included Leonard Nelson, remembered by Wikipedia at least for the "Grelling-Nelson" paradox, and Paul Bernays, opposed the theories of relativity, and of course physical non-Euclidean geometries. Milkov does not detail their arguments, other than to suggest that they are reminiscent of Kant's Third Analogy of Experience, about which I shall not reminisce. Naturally, Reichenbach saw the neo-Friesians as squarely in the opposition, but Pulke concludes that Fries' philosophy "could have been a stimulating source and point of systematic orientation for Reichenbach" (p. 61). Pulke's remarks on Fries' empiricism notwithstanding, it's hard to see how.

Jeremy Heis' essay is on the influence of Ernst Cassirer on Lewin and the contrast between Cassirer's views and Reichenbach's on almost everything except that philosophy should concern itself with the sciences. Both studied with Cassirer, and Lewin accepted or adapted some of Cassirer's views, while Reichenbach edged away from Cassirer's version of neo-Kantianism and particular epistemological theses. One neglect in this useful essay is notable. For Cassirer the "givenness of 'bare' sensation…proves …to be a fiction" (p. 90), a

[1] See his *Über die Gefährdung des Wohlstandes und des Charakters der Deutschen durch die Juden*, H*eidelberg.* Mohr and Winter, 1816.

claim that Heis contrasts with Reichenbach's opinion at the time, but fails to note that by the publication of *Experience and Prediction* Reichenbach had adopted something very close to Cassirer's view: "bare sensations" are not given; while perhaps not fictions, they are entirely theoretical objects.

Padovani's essay on Lewin and Reichenbach (mostly Lewin) on genidentity is interesting enough to make one want to read Lewin. Or read Lewin again. Full disclosure: I wrote my master's thesis on genidentity. When I presented the bound volume to him, Wesley Salmon, my advisor, asked me only one question: how did I know that was the same thesis he read? Of course, in Lewin's sense of genidentity, it wasn't, but the epistemological aspect of identity through time—how we can know when two appearances are of the same object—is neglected in both Reichenbach and Padovani's Lewin. She gives a clear account of Lewin's thought that interconnected causal sequences could provide a universal time order, and of the influence of that idea on Reichenbach's first proposal in the 1920s for a direction of time. But her presentation of Lewin's attempts to reduce time to genidentical "series" is a bit maddening in its reluctance to comment. Lewin, not fully loose from Kant, assumes a causal order and begs question after question. Missing from her essay is the denouement: Reichenbach's unhappy but prescient attempt in the *Direction of Time* to reduce causal order to statistical order.

I found little in Michael Stolzner's essay on Reichenbach's claimed anticipation of quantum mechanical indeterminism that is not described better in other sources, the *Stanford Encyclopedia of Philosophy,* and Frederick Eberhart' essay on Reichenbach's doctoral thesis.[2]

Kamlah's essay discusses Reichenbach's notion of volition and its connection with his views on free will and ethics. The line is that Reichenbach joined several anti-authoritarian organizations as a student, which bolstered a sense of individual choice that echoed through his conventionalism—for what is a convention but a shared choice?—and into his ethics. The essay is a useful introduction to a part of Reichenbach's thought that is justly neglected. I will do a little injustice. Reichenbach avoided the usual fallacy that quantum indeterminacy implies freedom of the will, recognized that determinism makes "free will" something between a pun and an oxymoron, but insisted on "volitions." Without attempting an analysis of what Reichenbach could have meant—and in fairness there is not much in Reichenbach's writing to guide an interpretation–Kamlah's suggests that Reichenbach was a compatibilist along the lines of Harry Frankfurt. Perhaps he was just inconsistent.

Kamlah is brief, and I think not entirely on point about Reichenbach's ethics. Everyone is free to hold his own moral views and claim they apply to everyone, Reichenbach says, but what Kamlah insufficiently describes is how Reichenbach thought that would produce a stable, just moral code. Reichenbach was a Marxist anti-Hobbesian (although I have no idea if he ever read a word of Hobbes. I bet he read some of Marx.) His Marxism is evident in his remaks in *The Philosophy of Space and Time* where the scientific community is described as producers, like farmers and factory workers. A producing community makes mistakes, leaves things undone, goes awry—the farmers plant Brussel sprouts instead of cabbage, fail to put their equipment away, neglect the soil (my example, not Reichenbach's). Labor groups require supervision and help, best from outside the group. So, too, scientific workers can get tilted and leave things undone, and the task of philosophers of science—also laboring, Reichenbach imagined, as a coherent factor of production–is to take note and help straighten things out where needed. Reichenbach's vision seems to have been of philosophers in agreement functioning as quality controllers, some combination of the clean up crew and the commissars.

Hobbes famously argued that the state of nature is war, each man against each man. Reichenbach seems to have thought that the state of nature is cooperation, tolerable disagreement, and civil conversation. Let's plant a garden and have a beer. While each person may have his own moral code chosen by volition, "social friction"—Reichenbach's phrase—will work out the compromises. Reichenbach's Pollyannaism knowing the horrors of the Third Reich is breathtaking. Perhaps he regarded World War II as social friction.

Thiel's remarkable essay on Dubislav's logic details Dubislav's failed attempts to provide a decision procedure for classical monadic logic, which had already been provided by Lowenheim. Vienna had Godel, Berlin had Dubislav. No contest.

[2] F. Eberhardt, 2011. Reliability via synthetic a priori: Reichenbach's doctoral thesis on probability. *Synthese*, 181: 125-136.

Temio van Zanwijk adds a dense but readable essay on Dubislav's views on transcendental arguments, and Anita Kasabova provides a transitive historical essay on Dubislav on Bolzano.

The essay on Kurt Grelling by Volker Peckhaus evokes a sadness for the man, who accomplished less than might have been hoped of him. One thing he did accomplish in collaboration with Paul Oppenheim was a logical reconstruction of the claims of the Gestaltists, admirably presented by Arkadiusz Chrudzinski.

From the essay by Paul Ziche and Thomas Muller, I learned something of Paul Oppenheim's intellectual background before meeting Carl Hempel. Oppenheim was focused on ordering and unifying the sciences from mathematics to metaphysics, along multiple dimensions, a vision he continued in later years in collaboration with Hilary Putnam, notwithstanding Hempel's criticism that a science of metaphysics was a step too far. I get a sense from Oppenheim's role in several Berlin circle projects that he was much more than a wealthy hanger-on and sponsor, more a significant and talented figure than I had thought.

In "Carl Hempel: Whose Philosopher?" Nikoly Milkov presents a rather annoying account of Hempel's intellectual development. Much of the essay is devoted to discussing other figures, and the essay has its disputable throwaway lines: "Wittgenstein's method of conceptual analysis is what grounds Carnap's (and thus Hempel's) method of explication" (p.304).

On the interesting question of why, in his last years at Princeton, Hempel endorsed Kuhn's historicism, anti-formalism and epistemological relativism Michael Friedman has argued it was the belated influence of Otto Neurath, but Milkov claims it was Reichenbach. Surely, neither. Although until he left for Turkey, Reichenbach was Hempel's thesis director, Hempel fell early under Carnap's sway and never after essayed philosophy of science devoted to analyses and reconstructions of particular scientific theories–Reichenbach's kind of philosophy of science. Until Carnap's English improved, Hempel was Carnap's voice to Anglophone philosophers. Carnap, throughout much of his career, held anti-foundationalist and radically relativist views, with no concern for reliabilist epistemology, and Hempel endorsed those views, sometimes by omission. The aim of science, he famously announced, is explanation, not *true* explanation. Truth, Hempel insisted, is a notion of which science has no need. Judging from his assessment of Thomas Kuhn's contribution to the *Encyclopedia of Unified Science* Carnap seems to have seen *The Structure of Scientific Theories as* an historical vindication of his philosophical views. Hempel's turning point came when Kuhn, with his radical imagination, offered to be Hempel's teaching assistant and did. The teacher became the taught, it all fit together in Hempel's mind, and, much to the shock of his audience just before his retirement there, Hempel gave a public lecture at Princeton endorsing Kuhn's views.[3]

The concluding essay, by Erich Reck, is a disappointing discussion of Hempel's covering law model of explanation, much of it focused on whether Hempel's theory was a Carnapian explication or something else (answer: a Carnapian explication, with addenda), and in passing celebrating Hempel's influence in philosophy of science. That Hempel had such an influence is undeniable, that it has been benign is certainly deniable. Few sentences in 20th century philosophy of science have sent the subject on a snark hunt so well as "The aim of science is explanation."

Since the volume contains no assessment of the work of the Berlin Group—except for Dubislav—I offer mine. Many of these essays reveal the heavy burden the logical empiricists carried from the emanations of Kant's diseased brain.[4] While Reichenbach surely thought he had freed himself from Kant, in the most important respect he never did. Kant changed the game of philosophy of science from contributing to science and methodology to commentary, to clean-up, to "foundations," and throughout his career Reichenbach played Kant's game, the game that dominates philosophy of science to this day. Others in the Berlin group, Lewin, and the not quite competent Dubislav, even Grelling and Oppenheim in their attempts to clarify Gestalt ideas that really needed clarification, had larger scientific ambitions.

[3] My authority is first hand. Hempel was my colleague and neighbor in those years (I mowed his lawn), and while we were not intimate, the families were close enough that my wife, Alison Kost, helped at his bedside while he was hospitalized when we were colleagues again in Pittsburgh.

[4] That Kant had a brain tumor that affected his habits, writing, and manner of thought is no certainty but more than a slur. See J. Marchand, (1997). Was Kant's dementia symptomatic of a frontal tumor? *Revue Neurologique*, 153: 35-39.

Reichenbach offered an axiomatization of relativity on grounds he thought epistemologically legitimate, and did so less well than English writers had already done; he developed an incoherent quantum logic after a coherent one had been offered by Birkhoff, and a probability theory that disappeared in the light shown by Kolmogorov's. In each case, Reichenbach was doing what he took to be semantic and epistemological clean-up, not successfully. We have a saying for that in my home state Montana: Day late, dollar short.

If Reichenbach was not useful to scientific production, at least he was not a hazard. Hempel was, or tried to be. In Hegel's footsteps, Hempel announced the impossibility of a kind of science, or at least technology. For Hegel it was the number of planets, for Hempel it was machine learning. No machine, he announced, could do science because science requires the introduction of novel concepts, and no machine could do *that*. Ironically, DENDRAL, the first commercial machine learning program, deliberately used some of Hempel's ideas on explanation, contributed by Hempel's doctoral student, Gerald Massey.

This volume focuses almost exclusively on the relations of Berlin logical empiricists with other philosophers. Scientists are mentioned—Erwin Schrodinger's correspondence with Reichenbach is discussed briefly, and there is an opaque reference to Max Born, and unsubstantial references to Einstein. But one wonders what the German scientists really thought of the group and its members. (There is a challenging Ph.D thesis in the waiting.) Reichenbach obtained a university teaching position in physics on the footstool of his Axiomatic, but Herman Weyl was all but incensed that the local construction of the work failed to capture global properties of Minkowski space-time. Weyl took Husserl's phenomenology more seriously and acknowledged it in the first edition of *Space, Time, Matter*. John von Neumann pointed out that Reichenbach did not get inertial frames right in special relativity. At best, Einstein seems to have thought of Reichenbach as a valuable cheerleader for relativity, and he was.

If we gave awards to philosophers of science only by their contributions to science, we would need few medals, and for the Berlin group and the Vienna Circle there is a broader and more important judgement. In a time of intellectual, political and moral darkness, they sought enlightenment.

the links between the hermeneutics of science and rhetoric of science.

Comparing this book to some another works of the author (A Passage to the Idea for a Hermeneutic Philosophy of Science, Essays in the Hermeneutics of Science, Critique of Epistemological Reason: Perspectives to Philosophy of Science, Art Criticism and Multiculturalism) at least two minor comments can be made. There can be seen in these books an admirable dedication to developing a valid, original, and coherent version of a hermeneutic philosophy of science. Nowadays this intellectual adventure has significant outcomes, such as the elaboration of the context of constitution, which has already appeared in this book and will play a central role in the next book of the author, entitled The Context of Constitution: Beyond the Edge of Justification.

A Confluence of Cognitive Theories

[A Review[1] of Mihailo Antović's *Linguistics, Musicality, Cognition*[2]]

Dušan Stamenković
University of Niš
Faculty of Philosophy
e-mails: dusan.stamenkovic@filfak.ni.ac.rs ; dukiss@gmail.com

Cognitive science seems to be spreading very quickly in Serbian academic circles, leaving different kinds of trails. Judging by the titles of various papers and books written in the domain of cognitive linguistics in Serbian, we may say that very many particular linguistic phenomena have so far been tackled, but what seems to be missing is a universal overview of the development of cognitive ideas leading all the way down to Lakoff, Johnson, Gibbs, Turner, Fauconnier and others. Mihailo Antović's *Linguistics, Musicality, Cognition* represents a comprehensive study of the interconnected fields of generative linguistics, cognitive semantics, conceptual semantics, and musicolinguistics, as an emerging discipline. One of its most important benefits is that it offers the missing link between cognitive semantics and the other two leading schools of cognitive thought – the generative (Chomskyan) and the conceptual (Jackendoffian). Not only does the author connect them with each other, but he also tries to show that there is a potential for reconciliation between them, which might one day be experimentally confirmed. The basis of the book is the theoretical survey included in the author's doctoral dissertation titled *Optimality and Metaphor Theory in Music and Language Cognition*. The book consists of three segments: (a) Linguistics in cognitive sciences, (b) Semantics in cognitive sciences, and (c) Musicolinguistics in cognitive sciences.

The first part of the book gives us a historical overview of generative linguistics, starting from Chomsky's initial ideas and following its development up to today. He recognizes the fact that this branch of linguistics is still the most dominant one. At the same time, it triggered very many (frequently opposed) ideas, so we may consider it the most inspiring one at the same time. Firstly, the author presents the basic principles of the generative approach to language, after which he summarizes the Standard Theory (ST), the Extended Standard Theory (EST), and the Revised Extended Standard Theory (REST) within the generative paradigm. The author then overviews the Government and Binding Theory (GB) and introduces the minimalist programme (MP), which is later opposed to the theory which holds a special place in the book – Optimality Theory (OT). OT is viewed in regard to its origins, key principles and applications in phonology, morphology and syntax. Moreover, in the concluding chapter of the first section of the book, the author presents us with the ways in which Optimality Theory may be applied to the analysis of Serbian (again in terms of phonology, morphology and syntax).

The second segment of *Linguistics, Musicality, Cognition* investigates the problem of meaning, starting from early semantic theories of English and American philosophers, leading to Chomsky's cognitive revolution, and reaching its climax in the 1970s with the so-called *Linguistics Wars*. This segment largely focuses on what followed – it tracks the development of cognitive linguistics, pioneered by George Lakoff and his followers in the 1980s. A special place is given to Conceptual Metaphor Theory (CMT), which is, along with OT, one of the two more than thoroughly discussed theories in the book. The author first provides an outline of ideas which influenced the development of cognitive semantics:

[1] Prepared as a part of the project *Sustainability of the Identity of Serbs and National Minorities in the Border Municipalities of Eastern and Southeastern Serbia* (179013), conducted at the University of Niš – Faculty of Mechanical Engineering, and supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

[2] Published by Niški kulturni centar (Niš, 2009); 294 pages.

he discusses treating meaning within psychology, the emergence of dichotomies related to language, the issue of categorization, binarity and gradience, as well as the problems of analytic and synthetic knowledge. Meaning is then viewed as a part of generative semantics and MIT's truth-conditional models. What follows is a summary of the key ideas of Jackendoff's conceptual semantics, as well as a brief history of cognitive semantics, serving as an introduction for the key section of the second segment of the book. The section is named *Metaphor Theory in Contemporary Cognitive Linguistics* and it offers a review of the stages of the development of CMT, starting from the influences coming from the past and followed by a summary of the early proposals by Lakoff and Johnson in *Metaphors We Live By*. The idea met criticism from various sides, including Wierzbicka, MacCormack, Jackendoff and Aaron, after which the idea continued its development and reached its peak in 1999 in *Philosophy in the Flesh: the Embodied Mind and its Challenge to Western Thought* by Lakoff and Johnson. Besides this, the author also touches upon the Conceptual Blending Theory by Fauconnier and Turner and contrasts it to CMT. The second segment of the book closes with the author's analysis of Serbian metaphors in the light of the previously presented theoretical models.

The third segment of the book is fully devoted to musicolinguistics, an emerging discipline in modern science, the author being one of the initiators of its development in the region. The term was coined in the 1970s by Leonard Bernstein, an American composer, and the discipline tends to apply the epistemological framework and methodology of cognitive linguistics onto studying mental processes related to music cognition. The answers given by the discipline certainly strengthen the position of cognitive linguistics, as they provethat musicality is yet another capacity that functions in ways similar to those described in cognitive linguistic theories. Within the segment, Antović provides a synopsis of the basic terms in musicolinguistics, accompanied by a history of the discipline, including works of Bernstein, Keiler, Lerdahl, Jackendoff, Raffman, Sloboda, Peretz, and Zatorre. The author then analyzes the contemporary context in musicolinguistics by discussing musical phonology, perception of tone quality and musical competence. What follows are overviews of the positions of OT and CMT in cognitive linguistics. The book's final section sums up conclusions and discusses possibilities for future studies. Its very end sets a hopeful tone, promising that one day the opposed 'forces' in contemporary cognitive linguistics may find a way to collaborate.

No matter which linguistic model we choose, this book serves as a perfect starting point for anyone who wants to find his or her way in contemporary linguistics and musicolinguistics. It represents the first overview of Optimality Theory and one of the best summaries of Conceptual Metaphor Theory written in Serbian. Besides this, one can also sense experimental potential stemming from the book and the author is very likely to confirm this in the coming years. Mihailo Antović, associate professor of cognitive linguistics at the Faculty of Philosophy in Niš (www.filfak.ni.ac.rs) and Head of the Centre for Cognitive Sciences at the University of Niš (www.cogsci.ni.ac.rs), sees vast potential for connecting the existing semantic theories and has already started a number of experimental procedures which ought to contribute to bringing the opposed sides closer to each other. This is why we may expect a number of interesting papers and books from the author in the years to come.