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REPLY

Wittgenstein and Foucault: The limits and possibilities of constructivism

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Marshall argues that Wittgenstein's social constructivist view of mathematics is not idealistic, relativistic or subjectivistic but rather is 'non-idealistic and objective'. Wittgenstein is not idealistic because he attacks the prioritising of mental states over linguistic accompaniments of those internal states. What he emphasised is not intuition or mental process but the use of language. This, says Marshall, is an objective criterion, for although mathematics is ' invented' rather than ' discovered', it is independent of the individuals who use it as are the criteria of the truth and falsity of its propositions. It is thus non-foundational in the Russellian/Fregean senses. Objectivity is guaranteed by understanding mathematical objects within a formal system. Truth in this sense depends on correct derivation in terms of the rule structure of the ' language game' relative to a 'form of life'. Truth is thus 'internal to a scheme'.

I would like to highlight some issues which seem to me relate to (1) the central differences between radical and social constructivism, and (2) the extent to which the problem of relativism is really overcome by Wittgenstein. I will introduce comparisons between Wittgenstein's social constructivism and that of Foucault. I will also consider some of the contributions of Foucault to the constructivist debate.

Social and individual constructions

The distinction between 'individual' and 'social' is clearly central to the difference between radical constructivism and social constructivism. Radical constructivism's model of society, if we can speak of such, is simply an aggregation of individuals, there being no recognition of distinctions between the individual and the collective, or between structure and agency. In the radical constructivist view of knowledge acquisition, then, there is no recognition of the structural dimensions of knowledge development. Each individual is seen as constructing their knowledge themselves. This is a far cry from the model of society adopted by the social constructionists, amongst whom Wittgenstein is one, and Vygotsky, Foucault and Gramsci could be considered others. This group do not share the ontological, methodological or epistemological individualism of radical constructivism. For these writers there is agreement that explanations about individuals cannot be solely in terms of statements about individuals. They maintain a commitment to a model of society based on a distinction between structural processes and individual agents, and they would argue that a varied list of structural factors, including 'society', 'forms of life', 'history', 'discursive formation' or even 'mode of production' constitute important dimensions of social reality. Methodologically they tend to be holists as opposed to individualists, seeing the explanation of any event or process as dependent on its social, historical or cultural location. The consequences of ontologically privileging society over the individual include (1) that the contents of an individual's mental representations are social in origin, and (2) that cognitive functioning cannot be fully explained in terms of individualistic mental constructions.

Idealism

In terms of classical German idealism which posits the primacy of the mind over the world, Wittgenstein is clearly not an idealist. For Wittgenstein, intuitivism or approaches to learning based on internal mental constructions neglect the importance of language as a socially objective structure relative to a 'form of life'. While this avoids classical idealism, it is open to being criticised in relation to a different form of idealism. This criticism is often made by marxists against Wittgenstein and consists in the notion that language is prioritised over the material forms of reality such as technology, labour, or production, or, as a marxist might say, that 'superstructure is being given priority over base'. A similar criticism to this has also been directed at Foucault, especially in relation to his earlier writings where discourse was considered as an autonomous realm separate and largely unaffected by material practices. In The Order of Things (1970), as Ian Hacking (1979: 41-42) summarises it, Foucault maintained that systems of thought were "anonymous, autonomous and rule governed" elaborating a view of the "production of things by words" (Barrett, 1988: 130). During the later 1970s when he wrote Discipline and Punish (1977) and The History of Sexuality (1978), Foucault sought to address the criticisms that discourse was considered in isolation from practice. In the later works, where he was interested specifically in the processes of institutional surveillance and control, he sought to de-emphasise the autonomy of discourse and emphasise its relation to material practices in the world. As he explained in an interview,

> I believe one's point of reference should not be the great model of language and signs but that of war and battle. This history which bears and determines us has the form of a war rather than a language: relations of power, not relations of meaning. (Foucault, 1980: 114)

Foucault's increasing interest in the relations of discourse to practice paralleled his increasing recognition of the importance of power as it affects the development of discursive formations, meaning that all knowledge structures (or 'language games') are systems of 'power/knowledge'.

> There is no power relation without the correlative constitution of a field of know ledge nor at the same time any knowledge that does not presuppose and constitute at the same time power relations. (Foucault, 1977: 27)

By progressively becoming concerned to explicate how material practices shaped discursive systems, Foucault sought to avoid charges of 'cultural idealism'.

Objectivity, truth and relativism

For Wittgenstein, mathematical propositions are 'objective', and truth criteria are unambiguous in the sense that there is a correct way of proceeding, and correct and incorrect answers to be obtained. Yet the notions of objectivity and truth here are simply conventional, and this itself is not uncontentious. Truth, in this sense, depends simply on the correct derivation from the syntax of the system, or, in Donald Davidson's phrase, it is "truth relative to a scheme" (Davidson, 1985). So too with 'objectivity' - it is an objectivity guaranteed by a formal system. The important question which remains unanswered, however, is what guarantees the rationality of the formal system. This is a question to which I believe Wittgenstein has no real answer. Truth and objectivity are secure but only ' relative to a scheme' and the central problem of historical relativism is not overcome.

Can such a problem be overcome with reference to Foucault? For Foucault, like Wittgenstein, all know ledge structures are socially and historically constructed. What distinguishes the two approaches, however, is that, while Foucault's approach is also inherently anti-foundational, he demonstrates a greater appreciation of the importance of history and power and of the messy interactions between social structure and discourse than did Wittgenstein. Objectivity is largely a function of power relative to the instantiation of a discourse within a particular social historical formation. In this sense, while objectivity is guaranteed by a rule ordained by the hegemonic code, Foucault's analysis too can be criticised on the grounds of relativism for it is unable, on the surface,

to provide any extrahistorical conception of rationality capable of grounding a particular discourse, or ' language game' or 'form of life' or 'regime of truth'.

Like all historicists Foucault's approach attempts to describe history while denying the existence of historical laws, of a constant human nature, of subject centred reason or of any absolute or trans historical values. Building on the epistemological work of Bachelard and Canguilhem, Foucault is interested in explaining the discontinuities, breaks, and ruptures that signal fundamental changes in discursive systems. He is also interested in the interrelations and entanglements between discursive formations and the various political, economic, social and ideological practices that form the social structure. Foucault approaches ideas and values not in terms of absolute norms of truth and good but as the expression of a specific age, culture or people. If such values, ideas, or knowledge systems are functions of historical conditions in which they emerge, then they may change with changes in those conditions, and no possible evaluation of their value or truth in general is possible.

The apparent relativism of such an anti-foundational view is a problem which Foucault sought to address in his later writings. In his interviews published in 1980, he puts the view that not all discipline-based knowledge can be assessed in the same way and suggests that the epistemological 'armature' of a discipline can mature and become more objective in history. This notion parallels his later views on 'the self, which he maintained could gain increased 'objectivity' and ' detachment' by progressively extricating itself from the developing social structure in the course of its development (Foucault, 1986; Deleuze, 1988: 106-107).

In my view, Foucault's approach suggests a much more historically grounded concept of objectivity than is present in Wittgenstein. When Foucault compares medicine to psychology, for instance, he states that "medicine has a much more solid scientific armature . . . but it too is profoundly enmeshed in social structures". The natural sciences like theoretical physics or organic chemistry also have 'solid scientific armatures'. Although they are also affected by power relations in the larger society, Foucault recognises that the relations between social structure and the discipline "can be difficult to untangle". With respect to forms of knowledge like psychiatry, however, Foucault (1980: 109) maintains

> the question is much easier to resolve, since the epistemological profile is a low one and psychiatric practice is linked with a whole range of institutions, economic requirements and political issues of social regulation.

Foucault as constructivist

The nature and extent of Foucault's constructivist claims vary according to the knowledge discipline being examined, and to the specific propositions being made. In relation to the social sciences, the constructivist claims are stronger than in relation to the natural sciences. Foucault is prepared to make distinctions between different disciplines and recognises some as having more 'solid armatures' and of being more 'mature' in their development than others.

In relation to disciplines like psychiatry, Foucault makes strong constructivist claims. Disciplines like psychiatry can, in Foucaultian terms, be represented as discourses which, rising in the nineteenth and early twentieth centuries, defined new ways of relating to the world, new means of administrative control, and new ways of defining and talking about people. They produced new boxes to put people in, new labels, new categories and classifications which became inscribed in the practices of daily life and in the organisational and institutional structures of society. As new developments in technology produced new ways of addressing social problems, new patterns of normalisation and new bases for social authority were established. The very emergence of the knowledge discipline, says Foucault, became implicated in producing the conceptions of normality they claimed to uncover. Hence the human sciences formulate ways of organising the world and, in doing so, position people in relation to the categorisations and classifications theory construct. The

human sciences, "the dubious sciences", although contributing little knowledge about human beings, have attained massive importance and power in society (Foucault, 1973). In his conception they have become complex strategic constructs and forms of domination.

In making strong constructivist claims, as he did in his earlier writings, Foucault held that the objects of which the discourse spoke were themselves constituted by the discourse, that once distinctions were made, new realities effectively came into being; that is, that the types of objects of a domain "were not already demarcated prior to the discourse but came into existence only contemporaneous with the discursive formations that made it possible to talk about them" (Rousse, 1994: 93).

In his later writings and interviews, Foucault sought to qualify the general nature of his constructivist claims in relation to the issue of realism (Foucault, 1980: 108-110). Not only were distinctions introduced between different disciplines and between knowledge claims within disciplines, but in that disciplines constructed knowledge, and did so within distinct boundaries and limits, Foucault became ever more sensitive to the independent status and autonomy of material practices (Foucault, 1977, 1978, 1980; Smart, 1983; Poster, 1984).

Foucault's constructivism is thus similar to what Hacking (1986: 236) calls "dynamic nominalism". It is a constructivism that, while recognising the generative potential of discourses in its relation to the world, also recognises the variations that may exist in relation to different domains of enquiry and different know ledge forms, recognises as well the existence of real world structures and practices and the limits and boundaries within which constructions can take place, and yet also recognises that there are numerous kinds of know ledge claims (about types of human beings, for instance) that come into being hand in hand with our invention of the categories labelling them.

With reference to this last type of knowledge claim, Hacking (1986) looks at the issue, central to the constructivist's heart, of 'making up people', and examines, using Foucaultian insights, some of the different ways, and different theories, by which people in different ages have been constituted as types. Starting with Arnold Davidson' s observation that there were no perverts before the latter part of the nineteenth century, Hacking goes on to consider the constitutive categories of 'multiple personality' (invented, he claims, in 1875), 'split personality' (invented in the same period) and 'possession' (a common form of renaissance behaviour that died long ago but still survives in a few German villages). While these are different ways of 'making up people', and indicate the pertinence of the constructivist thesis when considered in a sociological sense, it cannot be asserted in any unproblematic sense that individual people simply choose to become 'splits' or 'multiples' or 'possessed' (although in some instances conceivably they could do so). These are social categories, and in any period the hegemonic form will constitute the dominant code. As the criteria of truth and falsehood are internal to the scheme, making comparative evaluations between 'splits' or 'possessed' is not possible for they are terms from different 'discursive formations', 'language games', frameworks, etc.

While no readily apparent solution to this relativism is suggested by either Wittgenstein or Foucault, it seems to me that the only progress out of this impasse can be made if one asks how discursive formations relate to the real world, and whether discourses do not survive or die depending upon their usefulness to particular societies at particular times. I do not mean by this suggestion to license a conception of history in the sense that whatever has survived must have done so because it is useful and therefore better, for it may well not be useful tomorrow, or it may have already outlived its functional importance and thus constitute a residual and disappearing category. What is being suggested is a point I have taken from Ian Hacking, that discourses are in a constant process of testing themselves in terms of practice in history, and further that the mere existence of 'discourses' or 'language games' does not necessarily therefore suggest relativism. As Hacking (1986: 150) puts it,

> It has taken millennia to evolve systems of reasoning... Some of our once favoured styles of reasoning have turned out to be dead ends and others are probably on their way. However, new styles of reasoning will continue to evolve.

Looked at in this way, the historicity of our own styles of reasoning in no way makes them less objective or less rational. Rationality and objectivity are related to context. Discursive systems have histories. Some work better than others, are more useful, or continue 'to deliver the goods'. While the truth claims associated with any particular discipline (eg. mathematics) may be internal to the formalised structure, this does not mean that human beings cannot exercise rational judgement related to their being in the world. Hacking (1985: 151) believes this when he says,

> There are good and bad reasons for propositions about nature. They are not relative to any thing. They do not depend on context.

Gramsci makes a similar claim when he distinguishes between 'good sense' and 'folklore' as being the two elements of 'common sense'. By such a distinction Gramsci attempted to resolve the impasse of relativism in the context of historicist and anti-foundational conceptions of the emergence and development of knowledge. For Gramsci, 'good sense' was the criterion of evaluation generated by experience, whereas 'folklore' was knowledge handed down from generation to generation simply on the basis of custom or tradition. The task of educators was to instil 'good sense' and eradicate 'folklore'.

Some commentators believe that Foucault was approaching a similar conception of the relation between discourse and practice in his later writings (Deleuze, 1988; Gutting, 1989, 1994). Certainly in his later writings, as I have stated above, he moderated the general nature of his constructivist claims and became more sensitive to the constraining nature of the real world and to the overall complexity of the interrelationships between discourse and the practice. What distinguishes Foucault' s constructivism and differentiates his position from empiricism and positivism is that whereas those perspectives assume the possibility of an immediate pre-given correspondence between discourse and the world, Foucault, while not denying such a possibility, problematises it. He became increasingly sensitive to the way in which knowledge became untied from its condition of origin or from the practices it pertains to and claims to explain. Such a non correspondence has been described by Smart (1983: 94) as a routine feature of positive significance requiring analysis in each particular instance. A similar point is made by Gordon (1980, cited in Smart, 1983: 95), who summarises Foucault's position in the following way:

> Our world does not follow a programme, but we live in a world of programmes, that is to say in a world traversed by the effects of discourse whose object . . . is the rendering rationalizable, transparent and programmable of the real.

For Foucault, not only is the discipline structure of knowledge constructed in history but that discourse has a 'constructive potential' in bringing new realities into existence. Just as labelling theories and 'social problem' perspectives once maintained that social realities are conditioned and even created by the labels we apply, Foucault claims that many of our categorisations, including those concerning our own subjectivity, are constructed in history. Giving names to things is one aspect of this process of constitution. As Foucault (cited in Hacking, 1986: 226) says:

> We should try to discover how it is that subjects are gradually progressively, really and materially constituted through a multiplicity of organisms, forces, energies, materials, desires, thoughts, etc.

With relation to the constitution of subjectivity, Foucault advances a strong constructionist programme which can be distinguished from the 'weak' constructivist programme of labelling theories and 'social problem' perspectives. In his strong claims as they relate to the subject, Foucault takes objects like the body and focuses on how conceptions of subjectivity are created, or invented in history. His claims have influenced many researchers advancing constructivist theses. Hence Armstrong's The Invention of Infant Mortality (1986) Nettleton s Inventing Mouths (1994) where she advances a strong constructivist position, arguing that 'the mouth with teeth is not a pre-existent entity but an object that has been realised through the discourse of dentistry'; or Rose's Governing

the Soul (1990) where he examines the constitution of persons or subjects by the psy-professions in various political contexts.

It is clear that Foucault has inspired many new types of research, and that the social constructivist dimension to knowledge production is important. In many senses the discourse does create the reality - the body analysed for 'humours' will contain 'humours', a body analysed for ' organs and tissues' will contain 'organs and tissues ', a body analysed in terms of 'psychological functioning' is a 'psychological object', a body analysed for 'intelligence' will contain ' intelligence' - and these are important senses in which the ' gaze ' or 'perspective' constructs the object. To focus, as Foucault does, on how the domains of the body become possible objects of positive knowledge and to expose the biomedical roots of modem knowledge as expressions of power/knowledge is surely Foucault's lasting contribution. None of Foucault's claims should offend our realist sensibilities. To the extent that some of his followers appear to do so, in that they speak of the 'invention of mouths', or of 'infant mortality', etc., the ambiguities are resolved once the propositions being advanced are clearly expressed.

Conclusion

In conclusion, I would agree that Wittgenstein's social constructivist view of mathematics avoids idealism and subjective mental state constructivism. While anti-foundational, Wittgenstein is also not sceptical about objectivity or truth criteria. The larger problem of relativism, I claim, has not been overcome, however. By turning to Foucault we can see more clearly the different dimensions of this problem and how it might be overcome b ' although my suggestions should only be regarded as tentative. It is claimed, finally, that Foucault recognises the discursive construction of knowledge and of subjectivity without completely giving up on realism, and he is prepared to alter his claims according to different fields of knowledge. This could perhaps be called 'dynamic constructivism'.

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