REFLEXIVITY, RELATIVISM, AND SELF-REFUTATION

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Abstract: In this paper, I will examine whether the reflexivity thesis of David Bloor’s Strong Programme in the Sociology of Knowledge is self-refuting. I will argue that even though the relativism in the Strong Programme is self-refuting, I do not think Bloor’s reflexivity thesis implies relativism. By looking at the case of determinism, I intend to show that we can and should treat the reflexivity thesis independently of relativism. Therefore, the reflexivity thesis is not necessarily subject to self-refutation objection.

Keywords: Strong Programme in the Sociology of Knowledge, reflexivity thesis, relativism, determinism, self-refutation

INTRODUCTION

My main argument in this paper is that even though relativism is self-refuting, the reflexivity thesis of David Bloor’s Strong Programme in the Sociology of Knowledge does not imply relativism, and thus can be
freed from the charge of self-refutation. In the first section, I will describe the main tenet and the four theses of Bloor’s Strong Programme. In the second section, I will discuss Bloor’s and Mary Hesse’s defense of the Strong Programme against self-refutation objection. In the third section, I examine Robert Nola’s self-refutation charge against Strong Programme in the light of Bloor’s and Hesse’s defense. After that, my objection to Nola’s argument about the implication relation between relativism and reflexivity thesis will be presented in the fourth section.

THE MAIN TENETS OF THE STRONG PROGRAMME IN THE SOCIOLOGY OF KNOWLEDGE

David Bloor (1942-), a sociologist of science and the leading figure of the Edinburgh School, writes his book *Knowledge and Social Imagery* (1991) out of discontent that even though sociologists have conducted enormous investigations into a large variety of beliefs in society, they stop short at investigating the nature and content of scientific knowledge. They seem to doubt the suitability of the sociological approach they have employed in their works to investigate the content of scientific knowledge. It is as if they believe that there is something special about the rationality, validity, and objectivity of science that are beyond the grasp of empirical research. That is why the investigation of the nature of scientific knowledge is mainly brought about by philosophers with their non-empirical approach. According to Bloor, this reluctance on the part of sociologists only shows that they have not drawn the full implication of their naturalistic approach.¹

Bloor in his works encourages sociologists not to refrain from investigating and explaining the content of scientific knowledge. He believes that the nature of scientific knowledge is not beyond the grasp of empirical research. That is why sociologists should also investigate the content and nature of scientific knowledge in fostering the full implication of their naturalistic approach. To Bloor, investigating knowledge with a natural-

¹ David Bloor, *Knowledge and Social Imagery: 2nd Edition* (Chicago and London: The University of Chicago Press, 1991), pp. 3-4.
istic approach means sociologists should take as knowledge whatever people in a given community consider as knowledge. He does not talk about knowledge in the normative sense of the word, such as in the sense of justified true beliefs. As a natural phenomenon, knowledge should be understood simply as “beliefs which people confidently hold to and live by”. Bloor then introduces four basic theses of this so-called “Strong Programme”. He calls it a “Strong Programme” to distinguish his proposal from what he calls a “Weak Programme” in which the content of scientific knowledge is excluded from the works of sociology. Those four basic theses of the Strong Programme in the Sociology of Knowledge are as follows:

1. It would be *causal*, that is, concerned with the conditions which bring about belief or states of knowledge. Naturally there will be other types of causes apart from social ones which will cooperate in bringing about belief.

2. It would be *impartial* with respect to truth and falsity, rationality or irrationality, success or failure. Both sides of these dichotomies will require explanation.

3. It would be *symmetrical* in its style of explanation. The same types of cause would explain, say, true and false beliefs.

4. It would be *reflexive*. In principle its patterns of explanation would have to be applicable to sociology itself. Like the requirement of symmetry this is a response to the need to seek for general explanations. It is an obvious requirement of principle because otherwise sociology would be a standing refutation of its own theories.”

I will restrict my discussion in this paper to the last thesis, the reflexivity thesis. Here I find the reformulation of this thesis by Robert Nola particularly helpful. He conceives the reflexivity thesis as a particular instance of causality thesis, that is causality thesis applied to the four theses

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2 Bloor, *Knowledge and Social Imagery*, p. 5.
3 Bloor, *Knowledge and Social Imagery*, p. 7. Italic mine.
of the Strong Programme themselves. If the causality thesis can be formulated as “for any person x, and for any belief (or set of beliefs) p such that xBp [x believes in p], there is some condition involving x, C_x such that C_x causes xBp”, then the reflexivity thesis can be formulated as “there are some persons x who believe the four tenets of SP [Strong Programme] and there is a particular condition C’_x such that C’_x causes xB(SP) [x believes in the Strong Programme]”.

**SOME DEFENSE AGAINST SELF-REFUTATION**

For reasons that I will discuss in section four, Nola views the reflexivity thesis to imply relativism, a position that he charges to be self-refuting. Bloor himself explicitly claims to endorse some form of relativism. However, in a paper co-authored with Barry Barnes, they deny a form of relativism which suggests that all beliefs are equally true or equally false. Instead, Bloor endorses a form of “methodological relativism” which suggest that all beliefs should be explained in the same way regardless of whether those beliefs are true or false. With this, he wants to object to an approach by Imre Lakatos where rational and scientific beliefs are explained by appealing to the observance of logic and scientific standards whereas errors and irrational beliefs should be left to sociological explanation. For example, if we assume an inductivist logic of science, we would explain why scientists believe in p by referring to the fact that a good amount of evidence has been gathered to suggest the likelihood of p. If we assume Popperian falsificationist logic of science, we would say that scientists believe in p because p has great empirical content, it prohibits a huge amount of possible events, it produces risky predictions and survives falsification attempts in experiments. In this kind of approach, the

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4 Nola, “The Strong Programme for the Sociology of Science, Reflexivity, and Relativism,” in *Inquiry* vol. 33, no. 3 (1990): pp. 273-296, p. 276.
5 Nola, “The Strong Programme for the Sociology of Science,” p. 278.
6 Barnes and Bloor, “Relativism, Rationalism, and the Sociology of Knowledge,” in *Rationality and Relativism*, eds. Martin Hollis and Steven Lukes (Oxford: Basil Blackwell, 1982), pp. 21-47.
7 Bloor, *Knowledge and Social Imagery*, p. 158; cf. Barnes and Bloor, “Relativism,” pp. 22-23.
role of sociological explanation is constrained to only account for events where scientists deviated from the logic of science. In other words, sociology of knowledge is constrained to the sociology of error. In contrast, all beliefs call for sociological explanation in Bloor’s view, regardless of whether those beliefs are true or false, rational or irrational. What the symmetry thesis is meant to do is precisely to counter such Lakatosian kind of approach. To demand that “the same types of cause would explain, say, true and false beliefs” means that we are not allowed to explain true beliefs by appealing to one type of cause, namely reason and scientific methods, while explaining false beliefs by appealing to another type of cause, psychological and sociological factors in this case. Furthermore, Lakatosian approach and the like are grounded on a teleological vision of knowledge in which it is assumed that truth and rationality are natural goals of human beings and we have natural tendencies toward them. Thus, once we face the truth, we will naturally believe in it. Our adoption of true and rational beliefs is simply explained by their being true and rational. No sociological and causal explanation is needed. Bloor does not deny that such a teleological vision of knowledge is possible and self-consistent. For his proposal to stand, it is not necessary for the teleological vision to be rebutted. The test of whether we should favor teleological vision or his causal-sociological framework lies in which framework is more fruitful in guiding research.

In his adoption of relativism, Bloor has anticipated the charge of self-refutation. It is argued that if a belief is caused, particularly socially caused, then it is bound to be false. Given that the Strong Programme promotes a reflexivity thesis in which its claims apply to itself, then the belief in the Strong Programme must also be caused. If this is the case, then, the self-refutation objection states, the Strong Programme must also be bound to be false. According to Bloor, this self-refutation argument is based on a misleading Baconian intuition which suggests that causal factors would only distort human comprehension of nature while the uncontaminated

8 See Imre Lakatos, The Methodology of Research Programme: Philosophical Papers Volume 1 (Cambridge and New York: Cambridge University Press, 1978).
9 Bloor, Knowledge and Social Imagery, pp. 11-13.
use of human faculties will lead to true knowledge. Against such intuition, Bloor cites several findings suggesting that the natural working of human faculties does not necessarily produce true knowledge. For example, research shows that a certain level of anxiety and hunger allows one to learn better and absorb information more effectively compared to when one is in a neutral state of low anxiety and hunger. Thus, Baconian intuition is not maintainable. “Whether a belief is to be judged true or not”, Bloor concludes, “has nothing to do with whether it has a cause.”

Some people might think that this claim I just cite is obvious, not to say trivial. Surely, whether “water is \( \text{H}_2\text{O} \)” is true or false in nature has nothing to do with what causes scientists to believe so. It requires a far from mainstream philosopher to disagree with this point. Or, perhaps Bloor is merely attacking a strawman here. He conceives the self-refutation objection as taking “as its premise their central idea that causation implies error, deviation or limitation.” As I will argue in the next section, this is an inaccurate way of framing the self-refutation objection.

Another defense for the Strong Programme against self-refutation argument comes from Mary Hesse. She formulates the self-refutation argument as follows: “Let P be the proposition ‘All criteria of truth are relative to a local culture; hence nothing can be known to be true except in senses of ‘knowledge’ and ‘truth’ that are also relative to that culture’. Now if P is asserted as true, it must itself be true only in the sense of ‘true’ relative to a local culture (in this case ours). Hence there are no grounds for asserting P.” Her objection is that such a self-refutation argument demands

10 Francis Bacon, an early modern philosopher, is prominent for arguing that a true knowledge of nature can only be obtained after human minds have been cleansed from any biases that would only distort how nature should be understood. See Francis Bacon, *The New Organon*, eds. Lisa Jardine and Michael Silverthorne (Cambridge and New York: Cambridge University Press, 2000).

11 Bloor, *Knowledge and Social Imagery*, pp. 14-18.

12 Or at most we can say that Bloor only has an outdated form of self-refutation objection in mind for in fact he cites some 1950s philosophers in construing what he takes to be the self-refutation objection.

13 Bloor, *Knowledge and Social Imagery*, p. 17.

14 Hesse, *Revolutions and Reconstructions in the Philosophy of Science* (Bloomington and London: Indiana University Press, 1980), p. 42.
grounds in some absolute sense for P whereas the point of the Strong Programme is to stop asking for such absolute grounds. To her, “if P is asserted, it is asserted relative to the truth criteria of a local culture, and if that culture is one in which the strong thesis is accepted, then P is true relative to that culture”\(^{15}\). Thus, to say that something is true always means that it is true relative to the social circumstances of the asserters. There is nothing self-refuting nor self-contradictory here from Hesse’s perspective. Whether we have an absolute criterion of knowledge or relative criteria of knowledge is a metaphysical question in which no self-contradiction is implied by both alternatives.\(^{16}\)

**THE SELF-REFUTATION OBJECTION REMAINS**

Nevertheless, Nola argues that even in Hesse’s defense, relativism implies a self-refutation. Hesse’s assertion of P inevitably appeals to an absolute notion of truth. As mentioned above, Hesse states that proposition P is true relative to the culture of the asserters. However, the proposition “P is true relative to that culture” is an absolute truth about what is true relative to that culture.\(^{17}\) For an illustration, imagine there are some people who believe that the universe is approximately seven thousand years old and they live in a community where creationism is widely held. Within the relativist framework, we may say that the statement “the universe is approximately seven thousand years old” is true relative to that culture where creationism prevails. Nonetheless, the statement, or the meta-statement, we just make that “the statement ‘the universe is approximately seven thousand years old’ is true relative to that culture where creationism prevails” is not relative truth, for it makes a claim about what would be true if creationism is accepted as true in a social community. In other words, this judgment appeals to an absolute notion of truth. In this sense, relativism is self-refuting.

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15 Hesse, *Revolutions and Reconstructions*, p. 42, italic mine.
16 Hesse, *Revolutions and Reconstructions*, pp. 43-44.
17 Nola, “The Strong Programme,” p. 290.
I tend to be on the side of Nola in this issue. I think any argument to justify relativism would in the end presuppose a notion of absolute truth, at least for the truth of the argument itself. To say that truth is relative is to say that in any time and any place truth is relative and this is a truth claim with absolute nature. Note that in the argument above, Nola does not object to relativism because it is false. He does not deny relativism on the ground that if a relativistic perspective is applied to relativism itself, then it implies the falsity of relativism. Thus, Bloor’s defense against the self-refutation argument I mentioned above cannot save relativism and the Strong Programme from the charge of self-refutation. There is no indication in his paper that Nola endorses a Baconian intuition where social influence would mean distortion of our knowledge. Thus, I suggest that the self-refutation argument is best understood not as an argument that relativism implies the falsity of relativism itself, but as an argument that in a relativistic claim for relative truth, the notion of absolute truth, that is non-relativistic truth, has already been presupposed.

REFLEXIVITY THESIS AND RELATIVISM

According to Nola, we can derive relativism of the Strong Programme from its reflexivity thesis. At least we can find two arguments for this in his paper. Firstly, suppose that sociologists, following the Strong Programme, have investigated a great amount of scientific knowledge and been able to identify the causes of this knowledge. Similar to any other scientists, sociologists attempt to formulate a general theory of theory building from these findings and let us suppose that they succeed in doing so. The resulting theory would then also be knowledge, though a philosophical and methodological one in nature. Then, the reflexivity thesis tells us that the claims of sociology of science should also be subject to social-causal explanation. It means that our philosophical theory of theory building has some social causes too to identify. “Thus”, Nola argues, “even philosophical doctrines come and go according to the flux of social causal conditions. This is relativism in vengeance.”18

18 Nola, “The Strong Programme,” pp. 281-282.
Whether true philosophical doctrines should be timeless or not is beyond the scope of this discussion. My objection to this argument is that even if philosophical doctrines are in flux, it does not imply relativism. It is even particularly true in the case of methodological theory. In the history of philosophy, many philosophers of science were preoccupied with formulating timeless demarcation criteria, such as the verificationism of Logical Positivism and falsificationism of Karl Popper. Nowadays, philosophers seem to agree that those attempts fail at providing a necessary and sufficient condition for demarcating science from non-science. Larry Laudan declares “the demise of the demarcation problem” for this reason. However, some philosophers of science after Laudan keep trying to formulate a demarcation criterion and many of them have abandoned the idea of a timeless demarcation criterion. They make this shift for the simple reason that science itself is not timeless but ever-changing. Yet they do not end up with relativism. In fact, they ardently oppose relativism. In a similar vein, why don’t we allow the theory of theory building to change given how humans acquire knowledge is also changing? Thus, simply because “philosophical doctrines come and go”, it does not mean relativism.

Nola formulates another argument for the entailment of relativism from the reflexivity thesis as follows: “Relativism and reflexivity come together when we consider how SP applies to itself. The element of reflexivity is clear. Some social condition of is causally responsible for ’s belief in SP. If we treat ’s belief as the same as ’s belief, or relative to, (as relativists are, wrongly, wont to do) then the reflexivity becomes: SP

19 Larry Laudan, “The Demise of the Demarcation Problem,” in Physics, Philosophy and Psychoanalysis: Essays in Honor of Adolf Grünbaum, eds. Robert S. Cohen and Larry Laudan (Dordrecht and Boston: D. Reidel Publishing Company, 1983), pp. 111-127.
20 See for example Sven Ove Hansson, “Cutting the Gordian Knot of Demarcation,” in International Studies in the Philosophy of Science, vol. 23, no. 3 (2009): pp. 237-243; Massimo Pigliucci and Maarten Boudry, “Introduction: Why the Demarcation Problem Matters,” in Philosophy of Pseudoscience: Reconsidering the Demarcation Problem, eds. Massimo Pigliucci and Maarten Boudry (Chicago and London: The University of Chicago Press, 2013), pp. 1-6.; Martin Mahner. “Science and Pseudoscience: How to Demarcate after the (Alleged) Demise of the Demarcation Problem,” in Philosophy of Pseudoscience: Reconsidering the Demarcation Problem, eds. Massimo Pigliucci and Maarten Boudry (Chicago and London: The University of Chicago Press, 2013), pp. 29-44.
is true for \( x \) relative to \( C_x \). Thus relativism.”\(^{21}\) In dissecting this argument, I think we should put into a bracket the idea of relativism before we proceed further. We should first view the reflexivity thesis only insofar as what it asserts. Recall that the reflexivity thesis tells us that “its [Strong Programme’s] patterns of explanation would have to be applicable to sociology itself.”\(^{22}\) At this point, we only have the idea that people’s belief in the Strong Programme must also be caused by social factors. There is nothing in this thesis to suggest that we should treat “\( x \) believes \( p \)” as the same as “\( p \) is true for, or relative to, \( x \)” in the way Nola’s argument suggests. We can allow this move and the conclusion that the reflexivity thesis implies “SP is true for \( x \) relative to \( C_x \)” only if we have assumed the idea of relativism in the Strong Programme beforehand. Then, by following the reflexivity thesis, we apply relativism to the Strong Programme itself. Yet it seems that the reflexivity thesis in itself does not imply relativism. The reflexivity thesis in itself only implies that people’s belief in the Strong Programme must be socially caused. Only if we add relativism in conjunction with the reflexivity thesis do we have the conclusion “SP is true for \( x \) relative to \( C_x \).” Indeed Bloor embraces both the reflexivity thesis and relativism, but I think the bridge between those two must be identified somewhere else. The reflexivity thesis in itself is not sufficient to imply relativism.

It might be worth noting that there is an ambiguity here as to what kind of relativism Bloor embraces. At one point he explicitly states his adoption of “methodological relativism” which simply consists of the idea that “all beliefs are to be explained in the same general way regardless of how they are evaluated.”\(^{23}\) At another time, he seems to adopt relativism similar to Hesse where if a proposition is true, it is true only relative to a particular culture. Consider for example his assertion in a co-authored paper with Barry Barnes that a relativist “accepts that none of the justifications of his preferences can be formulated in absolute or

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\(^{21}\) Nola, “The Strong Programme,” p. 294.

\(^{22}\) Bloor, *Knowledge and Social Imagery*, p. 7.

\(^{23}\) Bloor, *Knowledge and Social Imagery*, pp. 158-59.
context-independent terms. In the last analysis, he acknowledges that his justifications will stop at some principle or alleged matter of fact that only has local credibility.” Bloor and Barnes even make reference to Hesse’s work which they consider “thoroughly demolished” self-refutation argument. It should be clear that the later form of relativism is much stronger than the former. I will call Bloor’s “methodological relativism” as “weak relativism” whereas his version of relativism closer to Hesse’s position as “strong relativism”. As to the weak relativism, Bloor explains that it asserts nothing more than what has been asserted in the symmetry thesis and the reflexivity thesis. However, I do not think these theses are sufficient to imply strong relativism. When I argue above that the reflexivity thesis does not imply relativism, what I have in mind is strong relativism. It is the form of relativism that philosophers are mostly concerned about. Furthermore, Nola argues that we can derive this strong relativism from the causality thesis in general. Recall that the first phrase of Hesse’s formulation of relativism states that “All criteria of truth are relative to a local culture”. Since the theses of the Strong Programme are concerned with beliefs and do not mention the word “truth”, we should rather pay attention to the “criteria of truth” as the beliefs to be explained rather than truth per se. Nola then substitutes “criteria of truth” in the place of “beliefs” in his formulation of the causality thesis. Now we get “for all person $x$ of a given community and the criteria of truth (‘C of T’ for short - whatever they be) believed in that community, there are social conditions $C_x$ which causes belief in C of T, i.e. $CT(C\text{ of }T)$. $C_x$ causes $xB(C\text{ of }T)$.”

Given that $CT(C\text{ of }T)$ implies that our criteria of truth are inevitably determined by social circumstances, then any judgment regarding truth and falsity can only be relative to particular social settings. Further detailed analysis of this argument is outside the scope of this discussion. The point to note here is that even if we grant that Nola succeeds in establishing the

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24 Barnes and Bloor, “Relativism,” p. 27.
25 Barnes and Bloor, “Relativism,” p. 23n6.
26 Bloor, Knowledge and Social Imagery, p. 158.
27 Hesse, Revolution, p. 42
28 Nola, “Strong Programme,” p. 289.
bridge between the causality thesis and relativism, still the reflexivity thesis, which is only a special instance of the causality thesis, is not sufficient to imply strong relativism. My main concern in this paper is about this relation between the reflexivity thesis and relativism. The causality thesis in general might or might not imply strong relativism, but the narrower reflexivity thesis does not.

The case I want to make here is that we can have the reflexivity thesis without having relativism. This is the case with determinism. Determinism suggests that every occurrence has been causally determined by some factors. All human behaviors are causally determined by the neural states in the brain. Human behavior to believe in something is not excluded from this claim. Applying the reflexivity thesis here would mean that people’s belief in determinism is also causally determined by their neural states, which in turn might be causally determined by social circumstances. Proponents of determinism would welcome this conclusion and it seems that no philosophers ever charged determinism with relativism along with its self-refutation objection. I think it shows that we can treat, and should treat, the reflexivity thesis independently of relativism. The reflexivity thesis is after all not unique to the Strong Programme.

CONCLUSION

The point I want to argue in this paper is that since the reflexivity thesis does not necessarily imply relativism, we can free the reflexivity thesis from the shortcomings of relativism, including the charge of being self-refuting. We might or might not be able to derive relativism from the general causality thesis but not from the narrower thesis of reflexivity. In short, I agree that relativism is self-refuting, but the reflexivity thesis is not.

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