On Popper, Problems and Problem-Solving: A Review of Cruickshank and Sassower’s *Democratic Problem-Solving*

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Democratic Problem-Solving: Dialogues in Social Epistemology (2017), edited by Justin Cruickshank and Raphael Sassower, offers a thought-provoking take on a range of issues of dialogue, democracy and reasoning in the social sciences and beyond. Jana Bacevic (2017) has usefully summed up the orientation of the book in her review, and raises important questions about the relationship between epistemic democracy and liberal democracy that I do not, unfortunately, have any worthwhile answers to.

This review focuses instead on issues the book very helpfully raises about the modes of reasoning in natural science, social science and in society more generally. In particular I want to focus on the core notions of ‘problem’ and ‘problem-solving’ that are discussed in this volume, and will do so from a perspective that, as with some of the contributors, is sympathetic to the approach of Popper. I will be reconstructing aspects of the discussion between Cruickshank, Sassower and Isaac Ariel Reed, and then suggesting one way it could be taken forward in relation to the concept of normativity.

Setting Problems

Let me start, then, with the question of ‘problems’ in the natural sciences and beyond. My initial observation would be that in Democratic Problem-Solving there is discussion of at least three ‘settings’ within which problems could be located—one is within the natural sciences, the second is within the ‘research problems’ of the social sciences, and the third is in society more generally. The general thrust of Cruickshank’s analysis is that the idea of problems and problem-solving is applicable in all of these domains. In this respect he is following, and developing, the ideas of Popper and also those of John Holmwood, who has defended the importance of the concept of problem-solving for both natural and social scientific analysis (see e.g. Holmwood, 1996).

Of course the term ‘problem’ could be taken in different ways, and it will be useful to consider how Cruickshank uses it in his fascinating chapter ‘Anti-Authority: Comparing Popper and Rorty on the Dialogic Development of Beliefs and Practices’ which sets the agenda for the book. To explore this, let us start with Cruickshank’s account of Popper’s problem-solving epistemology:

For Popper (1963, 1972, 1999), if it is accepted that knowledge is fallible, then it follows that one should always seek out better interpretations and explanations of reality. To do this, existing solutions to problems in ethics, science, politics, and so on, need to be subject to criticism, with new solutions to the problems found then being subjected to criticism and eventually replaced by new solutions, in a never-ending critical dialogue (6).

What comes through in this quote, as I interpret it, is a focus on problematizing as much as on problems. That is to say, the encouragement here is to be oriented to critique and to perpetual overturning—to making things problematic. And this is consistent with Cruickshank’s

1 Perhaps this sympathy arose, in part, because I grew up in New Zealand ‘of all places’ (Sassower, 28).
orientation throughout the book which focuses very much on questions of critique and how one can avoid wrongly foreclosing criticism. It should certainly be noted that Cruickshank does refer to a more specific usage of Popper’s, referring to the latter’s concern with “practical problems in our environment” such that when we resolve problems we have adapted successfully—temporarily—to this environment (6). However, this usage is rarely discussed beyond the core opening chapter, with the general treatment of problem being a sense of ‘something that has been problematized by certain actors’ (to put it in my own words).

What about the idea of a ‘solution’, or ‘problem-solution’? In Popperian terms, a solution could be seen as a successful ‘adaptation’ but, as mentioned, this idea does not receive extensive treatment by Cruickshank (or indeed other authors) in the book. The same is true of the idea that problem-solving has a connection to the pragmatist concern with ‘usefulness’ (7). The implication of that link seems to be that we will have more useful knowledge once a problem is solved, but this is not really taken further. Rather, the idea that is probably most extensively used in the book is the notion that problem-solving has the potential for ‘alleviating harm’ (xiii).

This provides a broad orientation to the debate insofar as much of the ensuing discussion is about the harms of neo-liberalism and how they might be responded to. However, it is doubtful that this could be used to account for what problem-solving in the natural sciences is about, and should probably be seen as one particularly important kind of problem-solving. It could be said, then, that what a problem-solution involves is left fairly vague in the book. In one sense this chimes in with the orientation of the discussion towards criticism and problematizing. Given the overall focus on open-endedness the very idea of a solution could be considered to be potentially suspect. A solution might be taken to imply a resting place, a stopping place, whereas the orientation that Cruickshank is promoting is precisely the opposite, a form of permanent restlessness.

Although problems and problem-solving are treated in this fairly broad, open-ended way by Cruickshank, Reed nevertheless expresses doubts about the value of these concepts in his well-argued chapter ‘Science, Democracy and the Sociology of Power’. Reed formulates particular concerns about whether it is justified to take the idea of ‘problem solving’ from the natural sciences and apply it elsewhere. In relation to social scientific knowledge, Reed questions whether the problem-solving framework associated with Popper’s thought will be able to cope with certain features of society such as the ‘looping kinds’ discussed by Ian Hacking or the ‘concept dependence’ discussed by Roy Bhaskar.

In relation to social problems, Reed has even greater concerns. For one thing, he points out that there is a large literature on the construction of ‘social problems’ which identifies the importance of selectiveness and framing in defining what is taken to be a problem in society.

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2 For Cruickshank, criticism can be foreclosed in various ways including the treatment of knowledge as ‘justified’, the invocation of ‘authority’ to support a knowledge-claim, and the presentation of solutions as ‘technocratically’ necessary.
For another thing, Reed points out that the sort of scientistic orientation one may associate with Popper’s problem-solving can actually contribute to normatively doubtful social outcomes. That is to say, the invocation of the scientific status of expert judgements, e.g. where a psychiatrist’s expertise is used to characterise a type of individual as problematic in legal deliberations, involves a problematic exercise of authority.

Cruickshank’s response to Reed (‘Criticism vs Dogmatism’) is based on the idea that Popper’s thought can be divided into the dogmatic and the critical. For Cruickshank, the dogmatic Popper was inclined to fetishize aspects of science as exemplifying critical rationality and was not prepared to submit these to critical appraisal themselves. By contrast, the critical Popper would allow criticism free rein, including that directed at science and its existing methods. Cruickshank argues that the critical Popper can usefully address the issues raised regarding the distinctiveness of the social world and the framing of problems. We shall now examine each of these in turn.

In relation to the distinctive features of the social world, Cruickshank contends that whereas the dogmatic Popper might insist that a scientific analysis of the social world must involve the use of hypothetico-deductive reasoning, the critical Popper would allow that methodological tools and arguments are also up for criticism and revision. This would mean that for the critical Popper it could be perfectly appropriate to question the value of hypothetico-deductive reasoning in relation to the social sciences and replace this with other alternatives as appropriate, such as a focus on the qualitative investigation of meaning.

I would like to briefly mention here an alternative response that could be made to Reed’s critique, based in the work of John Holmwood and Alexander Stewart (1991). Their Explanation and Social Theory (1991) is a rich book which discusses many facets of sociological thought, but one of the key arguments is that the idea of a fundamental difference between natural and social science is based on a problematic understanding of the role of meaning and practical activity in each activity. Once this understanding is rejected, there are much greater continuities than notions like ‘concept-dependence’ or the ‘double-hermeneutic’ might suggest. For Holmwood and Stewart, problem-solving can be undertaken perfectly consistently across the social and natural sciences. I do not have space to say more about it here, but the approach of Explanation and Social Theory is certainly worthy of attention.

Normative Framing

Let’s move on, then, to Cruickshank’s response to the issue of social problems and their framing. Cruickshank’s key move is to clarify that his approach to problem-solving is entirely consistent with the idea that problems are normatively framed. Indeed, Popper himself, in his critical mode, admitted this. Cruickshank states that:

… any proper recognition of the role of intersubjective norms entails the need to study how intersubjective norms have, and will, shape what are perceived as problems and what are perceived as solutions (86).
This emphasis on the importance of framing and normativity in relation to problems and solutions also seems to be accepted by Sassower who, in a later chapter, discusses their importance:

The reason to focus on frames of reference has already been fully articulated by sociologists, behavioural economists and psychologists: the way a problem is framed predetermines the range of possibilities for its solution. (197).

Thus, Cruickshank’s response to Reed’s challenge is to readily admit that problems and solutions are normatively framed, and Sassower seems to agree with this.\(^3\)

Cruickshank’s responses to Reed allow him to defend the idea that ‘problem-solving’ can be usefully retained across the domains of natural science, social science and wider social life, because it has shed narrowly scientistic connotations, instead being connected with permanent open-ended critique and an up-front (rather than concealed) normative orientation. I find these arguments valuable and persuasive, but it seems to me that the idea of normativity can be analysed further in a way that articulates with, and develops a little further, what a Popperian orientation to problem-solving might entail. This is the approach that I want to follow in the remainder of this review.

A typical sociological concern with normative framing involves an argument that we need to identify cases where this has been concealed and naturalized, with the intention of showing that other framings are possible. And, indeed, this kind of point is explored in Democratic Problem-Solving (e.g. 87). However, a somewhat trickier issue is to then analyse how to decide between one framing and another, once the range of possibilities is before us. One way to treat this—which could be seen as Weberian—is to see the choice of frame as a commitment in some fundamental sense.

On this approach there is no way to assess normative frames, there can be no reasoned argument for one rather than another—rather, one just has to commit to a frame and work on this basis. It’s not obvious to me that any of the participants of this volume accept this view and I would say that there are good reasons for not doing so. After all, if what a person takes to be a problem is a matter of commitment then it’s not at all obvious why anyone else should be moved by it. What is a problem in my framing can be a boon in your framing and there is nowhere further to go in the discussion. This view gets even less appealing if we take it through to the question of problem solutions. It suggests that even if we share a view of the problem, our normative commitments may operate such that what seems a very good solution to me seems a very bad solution to you with there being no way for reasonable discussion to impact upon the disagreement.

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3 Insisting that normative framing is made clear is also a way to stop the kind of unproblematized reliance on expertise that Reed discusses drawing on Foucault’s work.
As already mentioned, I don’t see the authors of Democratic Problem-Solving explicitly adopting the ‘commitment’ view of the normative framing of problems and solutions. But is there an alternative expressed? I think Cruickshank does put forward another way of looking at this issue. He states:

> The terms used to define problems—which will always be normative with those norms always having traction—will need to be assessed through the democratic co-production of knowledge, taking time, to work with many agents to change values and reframe problems (88-89).

Although there is disagreement between Cruickshank and Sassower in the volume about whether the latter’s views have elements that stifle a democratic orientation, at least in parts of his argument Sassower also seems committed to such a view. He states the following of the Popperian approach:

> Perhaps the main lessons from this way of thinking about solving problems are that we should listen as much as we talk, that we should read more than we write and that we should consider global options when choosing local policies (238).

I agree with both writers that the democratic co-production of knowledge is a laudable idea and is valuable to pursue. However, I wonder if it can be usefully supplemented by a further sense of what is involved in debating about problems and problem-solutions. One reason for doing this is to try to think about what engaging with others might involve. After all, even though democratic, open discussion is surely welcome, there is a question of how to engage in this discussion in a way that neither unreasonably imposes on others nor simply submits to their framings. The contributors to this volume clearly all have views about what is problematic and not problematic in contemporary society. Assuming that they are not all speaking for democratic co-produced collectives it could be useful to think about how they formulate what they see as problematic and how that can be related to the views of others.

In a debate with others, how can we think about engaging with different framings without either imposing a perspective or resorting back to the notion that the choice of framings is a matter of commitment? Take for example a topic which is debated in a very interesting way within the volume, neo-liberalism. How can there be a reasonable discussion between a critic of neo-liberalism who sees the problem of people in poverty as one of a failure of the state to intervene sufficiently and an enthusiast for neo-liberalism who sees the problem as the failure of the state to get out of the way and let people look after themselves?

**Popperian Problems and Problem-Solving**

I want to suggest that there is a broadly Popperian way to expand on the notion of problems and problem-solving which can make a useful contribution to thinking about engagement with those who have different framings to us. To begin with, as Cruickshank points out (13), for Popper and his followers contact with the world is not direct, rather we interact with it...
through a theory/set of understandings. ‘Framings’ will be a crucial part of these understandings. The question is, then, how to have a reasonable engagement with those who do not start from the same set of understandings/framings as we do.

This is where the concept of problem is useful, in my view. Within the work of Popper and his followers there is a strong emphasis on the way in which no attempt to understand and frame the world is able to produce a fully consistent account of all known relevant evidence. In other words, there is a strong focus on anomalies, on that which does not fit with a particular framing of the world. Although it would be questionable to argue that this is the only meaning that Popper gives to the idea of a ‘problem’, it is, in my view a core meaning, that is central to* The Logic of Scientific Discovery*(2005 [1934]) and is also taken up by writers like Lakatos (1970) in analysing the natural sciences and Holmwood (1996) in analysing the social sciences. Furthermore, this can also provide us with one way of thinking about what a ‘problem solution’ involves—the reconstruction of a particular framing/set of understandings of the world to remove an anomaly and produce a more coherent take on the subject-matter. Of course, in keeping with Cruickshank’s remarks about continuous criticism, the removal of an anomaly is not a final resting point for the defender of a framing/set of understandings. There will always be new anomalies to reflect on and wrestle with.

In my view, these Popperian ideas of problems as anomalies and solutions as coherence-expanding reconstructions give us one helpful way of thinking about how to have a critical but non-impositional dialogue with those who frame social (and other) problems in different ways (for further discussion see Kemp, 2012). This is to engage with the framings of others and try to identify what is anomalous from within the way the other is presenting it rather than attempting to simply impose a contrary framing. Taking this further, a participant in the dialogue might also argue that the identified anomaly could be resolved if the person whose views they are critiquing reconstructed their framing in a way that was consistent with the first participant’s own views. To give an example of this kind of approach, a critic of neo-liberalism might argue that poverty cannot be avoided simply by the state getting out of the way because there are countries where the state offers very little if any support and yet there is still grinding poverty. In such an argumentative move, these examples are being presented as an anomaly to the neo-liberal viewpoint. The critic could go on to argue that there have been cases where impoverished groups were supported by the state in a way that actually provided them with the capacity to then look after themselves. This would cast doubt on the opponent’s views and suggest another way to look at the issue.

It would be foolish of me to suggest that any politically engaged actor would be quickly won over by such arguments. In that respect, I find Cruickshank’s concept of ‘critical slow dialogues’ a very persuasive one. As Cruickshank usefully observes:

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4 There are some important challenges in spelling out what a more coherent response involves, and I have doubts about the way that Popper and Lakatos deal with this issue. I have a go at an alternative in Kemp (2017).
People may be emotionally, ethically and politically committed to their ideas, as well as under political or institutional pressure to support certain sets of ideas (36).

As such, change may well take time. Of course, dialogues are also two-way, and an interlocutor is likely to hit back that the critic’s own position contains anomalies, laying down a—reasonable—challenge that these need to be addressed. In this way, engagements of this kind are two-way and provide challenges to both parties.

Although we cannot expect speedy results, this way of thinking about problems and problem solutions may contribute to understanding how to have a critical engagement without this involving either an under-motivated choice between framings or the imposition of an alternative viewpoint. It is worth noting, I think, that in using the ideas of problem/anomaly and problem-solution in this way I am not denying the normativity of the framings of actors. What I am denying, though, is that normativity involves a commitment that is untouchable by reasoning processes. Normatively-shaped claims generate anomalies which can be critiqued.

This review has surely gone on long enough, so I will just briefly recap the main thrust of it to conclude. The animating issue of the review was how the notions of ‘problems’ and ‘problem-solving’ were addressed and debated within Democratic Problem-Solving. I was sympathetic to Cruickshank’s view that these notions can usefully be applied in the natural sciences, the social sciences and to wider social issues as long as the role of normativity is admitted. However, I argued that the idea of normativity could usefully be further explored to help think through the character of dialogue and criticism. I made some initial arguments in this direction, including the suggestion that connecting problems with the idea of anomalies provides a ground for critical appraisal of normative framings. This allows us to avoid seeing such framings as either commitments outside the realm of reason or impositions on others. I see the arguments made in this review as sketching out a further way to extend the kind of Popperian orientation that Cruickshank and Sassower defend very nicely in Democratic Problem-Solving.

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References


