

Sociopolitical Engagement and Scientific Value Freedom

The View from the Left Vienna Circle

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Introduction

The reevaluation of the philosophies of science of logical empiricism has been underway for several decades among historians of analytic philosophy and philosophy of science.¹ Increasingly it has interested not only contemporary anti-metaphysicians but also feminist and anti-racist philosophers.² What attracts them is what has taken historians the longest to recover and impress upon the philosophical public at large (where it still has not resonated fully). This is the fact that by some of the members of the Vienna Circle their philosophy of science was regarded as closely related to ongoing struggles for the social, economic, and political transformation of society.³ In later years, versions of this engaged perspective were also promoted under the heading of “scientific humanism.”

Unsurprisingly, this recent reappraisal of Vienna Circle philosophy has not been wholesale. One doctrine commonly attributed to logical empiricists has proven particularly rebarbative: scientific value freedom, often summarized as intending to safeguard objectivity by the demand that “social, ethical and political values should have no influence over the reasoning of scientists” (Douglas 2009: 1). (Epistemic values such as truth, coherence, and explanatory power are viewed as presupposed by science and as such uncontested.)⁴ Consequently, the Circle’s left wing, which pressed the politically critical and transformative agenda, stands accused of

¹ Logical empiricism (aka logical positivism or neopositivism) was a philosophical movement that originated in 1920s Austria (the Vienna Circle around Moritz Schlick) and Germany (the Berlin Group around Hans Reichenbach). In its Anglophone exile from Nazism, it laid much of the foundation for post–World War II analytical philosophy of science but fell out of favor in the 1960s.

² See, e.g., Okruhlik 2004, Longino 2006, Yap 2010, Bright 2017, Dutilh Novaes 2020, and LaVine 2020. The misconceptions of S. Richardson 2009 have been addressed in Uebel 2010 and Romizi 2012 and are not revisited here.

³ Most prominently so by its so-called left wing: Rudolf Carnap, Philipp Frank, Hans Hahn, and Otto Neurath.

⁴ The radical challenge to that distinction is briefly considered below.

doctrinal inconsistency. As described, value freedom proscribes the type of value-laden engagement that is demanded by contemporary feminists and anti-racists.

Investigating the matter demands close attention to the content of the doctrine of scientific value freedom in context and its understanding by Rudolf Carnap and Otto Neurath. What is at issue is not, of course, whether science can or should be used to broadly speaking political ends by building on or implementing its results in policies or administrative measures: It obviously can, has, and will be. The question is whether we should conceive of considerations pertaining to its (potential) use as external or internal to science.

The standard way to think of value freedom is to locate any concern with values other than epistemic ones outside of science itself. This proscribes as unscientific all investigations that take account of nonepistemic values both in the evaluation of hypotheses and with regard to their potential applicability. A different way of conceiving of value freedom focuses solely on the results of scientific investigations. It proscribes certain types of statement being issued as scientific ones, that is, as justified by scientific reasoning. As explained later, this approach to value freedom is considerably less restrictive. Note also what informs the standard view of value freedom. The demand that scientific activities remain uninfluenced by nonepistemic values is meant to ensure that science remains unbiased by perspectival partialities, renders reality unfiltered by subjectivity, and stays “objective.” According to this view, science does not “do” subjective perspectives but seeks a “view from nowhere.”⁵ Also at issue for the standard view therefore is whether this traditional conception of objectivity ought to be upheld. By contrast the narrower version of value freedom has no commitments of this sort.

Unless further specified, denials of scientific value freedom could mean the denial of either of these versions or both, but it is the former version that is commonly under discussion in the Anglo-American literature. Evaluations of the Vienna Circle’s position on the matter (especially that of its left wing) have long suffered from inattention to the differences involved. My discussion draws on the distinctions just made and explores an overlooked combination of positions. I begin by detailing the apparent dilemma faced by the Vienna Circle advocates of scientific humanism and then ask whether Neurath offers a promising way out. This leads to specifying his and Carnap’s distinctive understanding of value freedom

⁵ See Nagel 1979 and relatedly Williams 1978; for cogent opposition, see Fine 1998.

and then to investigating whether their noncognitivism is as detrimental to their project as many have claimed it is. My point is that it isn't. The meta-ethical differences between many current feminist and anti-racist theorists and the proponents of the left Vienna Circle's "scientific world-conception" do not condemn activism of the sort advocated by Neurath and Carnap to incoherence.

A Promising Program Threatened

In his autobiography Carnap reported:

All of us in the Vienna Circle took a strong interest in the political events in our country, in Europe, and in the world. These problems were discussed privately, not in the Circle which was devoted to theoretical questions. I think that nearly all of us shared the following three views as a matter of course which hardly needed any discussion. The first is the view that man has no supernatural protectors or enemies and that therefore whatever can be done to improve life is the task of man himself. Second, we had the conviction that mankind is able to change the conditions of life in such a way that many of the sufferings of today may be avoided and that the external and the internal situation of life for the individual, the community, and finally for humanity will be essentially improved. The third is the view that all deliberate action presupposes knowledge of the world, that the scientific method is the best method of acquiring knowledge and that therefore science must be regarded as one of the most valuable instruments for the improvement of life. In Vienna we had no names for these views; if we look for a brief designation in American terminology for the combination of these three convictions, the best would seem to be "scientific humanism." (1963b: 82)

Most readers of the present volume will regard the points made here as rather obvious, but not perhaps Carnap's elaboration:

It was and still is my conviction that the great problems of the organization of economy and the organization of the world at the present time, in the era of industrialization, cannot possibly be solved by "the free interplay of forces," but require rational planning. For the organization of economy this means socialism in some form; for the organization of the world it means a gradual development toward a world government. (1963b: 83)

Yet even Herbert Feigl – not a member of the left wing but more closely associated with the liberal Moritz Schlick – stressed the need for intervention in his own post-World War II manifesto for scientific humanism: "Cooperative planning on the basis of the best and fullest knowledge available is the only path left to an awakened humanity that has embarked

on the adventure of science and civilization.” (1981/1949: 377) Yet whether they differed over the kind of intervention needed, all Circle members presumably agreed with Feigl’s conclusion:

[S]cience, properly interpreted, is not dependent on any sort of metaphysics . . . a mature humanism requires no longer a theological or metaphysical frame either. Human nature and human history become progressively understood in the light of advancing science. It is therefore no longer justifiable to speak of science *versus* the humanities. Naturalism *and* humanism should be our maxim in philosophy and in education. A Scientific Humanism emerges as a philosophy holding considerable promise for mankind – *if* mankind will at all succeed in growing up. (1981/1949: 377)

Note that what Carnap and Feigl called “scientific humanism” is clearly an expression of values. While Carnap separated such concerns from the “theoretical” discussions in the Circle meetings (and Feigl most likely followed him in this), it is questionable whether the scientific humanist stance could remain a wholly “private” matter.

Consider Carnap’s own Preface to the *Aufbau* and the collaborative pamphlet “The Scientific World-Conception: The Vienna Circle,” two publications from the late 1920s, and Feigl’s own manifesto of 1949. While the *Aufbau* celebrates “an inner kinship” “between the attitude on which our philosophical work is founded and the intellectual attitude which presently manifests itself in entirely different walks of life,” including “movements which strive for meaningful forms of personal and collective life, of education, and of external organization in general” (Carnap 1967/1928: xviii), the collaborative pamphlet speaks of an “inner link” between “attitudes toward questions of life” and the “scientific world-conception” of the Vienna Circle, with the former including “endeavors toward a new organization of economic and social relations, toward the unification of mankind, toward a reform of school and education” (Verein Ernst Mach 2012/1929: 80–81). Not only Neurath (see Neurath 1928; 1931; 1932a) but also Carnap advertised “the struggle *we wage* against superstition, theology, metaphysics, traditional morality, *capitalistic exploitation of workers*, etc.” (2013/1934: 177, emphasis added, my translation). More obliquely, Feigl’s North American manifesto – uniting pragmatists, naturalistic realists, scientific empiricists, and others – signaled its social relevance by its historical reference: “All these trends of thought and many others converge in a broad movement that one may well be tempted to regard as the twentieth-century sequel to the Enlightenment of the eighteenth century” (1981/1949: 367). What characterized the

Enlightenment, of course, was the ambition to bring the advance of theoretical knowledge to bear on liberating people from the shackles of traditional prejudice, religious dogma, and political tyranny.⁶

It is possible to discern in the “inner link” or “kinship” that Carnap and Neurath perceived between their philosophy and contemporary movements for social and economic change a purely epistemic ideal, what I have elsewhere dubbed “intersubjective accountability” (Uebel 2020): assertions about what is and could be the case have to be backed by intersubjectively available evidence. It is also possible to regard Feigl’s new enlightenment in related terms. It is inconceivable, however, that Carnap, Neurath, or Feigl would not have noted that using science to improve human life conditions in support of the movements mentioned earlier also requires nonepistemic judgments of value to be made about what should be the case. So the question arises: Is making such judgments a proper part of science and its philosophy?

Despite their sympathy for his scientific humanism, contemporary activist scholars would judge Feigl’s conception of it to be invalidated by the standard picture of value-free science. For Feigl, all value involvement appears to be on the side of applied science. “Scientific knowledge itself,” he declared, “is socially and morally neutral.” (1981/1949: 375). Carnap also, on first impressions, only offered the standard noncognitivist, neopositivist diagnosis. Value questions are external to science and of an entirely different type. Unlike statements of fact, value statements are devoid of “cognitive” meaning, that is, they are not truth-valuable or truth-apt.

As regards superstition, theoretical questions are at issue. It is possible to disprove by scientific means the assumption that prayers or charms can prevent hail storms or railway accidents. However, whether somebody is in favor of or against cremations, in favor of or against democracy, in favor of or against socialism, that is an issue of adopting a practical attitude, not of theoretical proof. By theoretical means one can only determine here that this or that institution brings with it these or those hygienic, economic or cultural consequences. . . . *Scientific considerations do not determine the goal, but only ever the pathway to the goal adopted.* (Carnap 2013/1934: 177–178, emphasis in original, my translation)⁷

⁶ For recognition of the need of Enlightenment thought to renew itself with every generation, see Frank 1949/1917.

⁷ Carnap’s remarks in his first Bauhaus lecture of October 1929 are fully consonant (“Wissenschaft und Leben,” RC 110-07-49, Archive of Scientific Philosophy, Hillman Library, University of Pittsburgh).

It seems that for Carnap, too, the shared enlightenment perspective which his talk of the “inner kinship” designated was limited to the epistemic ideal of intersubjective accountability. Did he also then subscribe to the standard conception of value freedom which bars nonepistemic values from science entirely?

Neurath to the Rescue?

It is at this juncture that one is advised to consult Neurath’s philosophical work.⁸ Like Carnap’s, it combines anti-foundationalist holist empiricism and metatheoretical constructivism, but it also promises to give political engagement in science a clean bill of health.⁹ Quite apart from his non-reductive naturalism,¹⁰ what is particularly attractive is Neurath’s pioneering work on argumentation, now standard in the feminist literature, that legitimates appeal to “contextual,” that is, nonepistemic, values in central areas of science.

Powerfully proposed in the post-positivist literature by Helen Longino (1990) and widely adopted since, it was previously employed by members of the left Vienna Circle, as early as Neurath (1928) and as late as Frank (1957). Known as the argument from underdetermination, it builds on Neurath’s and later Quine’s generalization of a conclusion of Pierre Duhem’s to all suitably abstract scientific theories. This was the idea that the theories of theoretical physics are underdetermined by empirical evidence: Testing them requires auxiliary theories that themselves resist direct testing. It follows that alternative but logically incompatible theories are able to account for the very same data. It is in the gap between evidence and theory this opens up that Neurath’s and Frank’s logical empiricism and Longino’s “contextual empiricism” locate the logical space that allows scientists to appeal to tiebreakers that are nonepistemic in the following sense. Their employment allows the scientists to settle on a theory or hypothesis to work with but does not distinguish them as epistemically superior to its competitors.

⁸ That Carnap and Neurath are of one mind on this issue is argued in Uebel 2005. On Neurath’s philosophy in the round, see Cartwright et al. 1996, Cat 2019, and Howard 2019.

⁹ Contrary to popular misconceptions of logical positivist philosophy, secure atomistic foundations for scientific knowledge were never sought by Neurath, nor by Carnap after his long debate with Neurath in the early 1930s. Given their holistic fallibilism of Quinean proportions (see Carnap 1937/1934: 318–319), the tools to reflect on our knowledge claims in metatheory were also not given but had to be constructed for the purpose.

¹⁰ Neurath’s “physicalism,” far from asserting a crude materialism, only served to bar dualist speculations; see Uebel 2019.

Traditional philosophy of science informed by such Duhemian holism had recognized the gap and sought to address it by employing various background theories (e.g., of perception and scientific instruments) and background assumptions that allow for the assessment and legitimation of evidential relations between the data at hand and a given theory (e.g., the data's relevance and strength). Yet contextual empiricism also recognizes that among those "auxiliary" or background assumptions, nonepistemic ones figure, sometimes long unnoticed or neglected: Here "contextual values" enter. To safeguard the probity of scientific reasoning, therefore, Longino proposes a procedural conception of objectivity. It is not its production of supposedly perspectiveless representation that distinguishes scientific inquiry as objective, but rather the fact that its knowledge claims are subject to comprehensive criticism of all their presuppositions and assumptions, both evidential and conceptual. Transformative criticism has the task to uncover, uproot, and replace previously unnoticed, unwarranted assumptions.¹¹

Neurath's views on how theories are chosen are highly congenial: "Poincaré, Duhem and others have adequately shown that even if we have agreed on the protocol statements,¹² there is an unlimited number of equally applicable, possible systems of hypotheses. . . . We select one of the systems of statements that are in competition with each other. The system thus selected is not, however, logically distinguished" (1983/1934: 105, translation amended). Neurath remained unspecific about the means by which such a choice is made. It is tempting therefore to invoke a notion he introduced when he criticized Descartes' sharp distinction between foundationally grounded theoretical and pragmatically oriented practical thinking. For Neurath, the distinction between abstract and action-oriented thinking was not an epistemologically categorical one:

We have seen that in many cases, by considering different possibilities of action, a man cannot reach a result. If he nevertheless singles out one of them to put into operation, and in doing so makes use of a principle of a more general kind, we want to call the motive thus created, which *has nothing to do with the concrete aims in question*, the auxiliary motive, because it is an aid to the vacillating, so to speak. (1983/1913: 4, emphasis added)

¹¹ Whereas Longino's discussions tend to focus on assumptions of evidential relevance higher up in chain of reasoning leading to the acceptance of hypotheses, Neurath focused on the considerations governing the admittance of observational data; see Neurath 1983/1932b and Uebel 2009. Both types of scrutiny are required.

¹² Protocol statements are statements of evidence, typically of intersubjectively observable states of affairs.

Neurath's point was that, given that "the differences between thinking and action are only of degrees, not kind," that both abstract and action-oriented thought must proceed from uncertain ground, it follows that "thinking too needs provisional rules," that abstract thought also needs rules "which have to be applied as long as one has not reached complete insight" (1983/1913: 2–3). He concluded that scientific thinking is clarified by recognition of the notion of auxiliary motives.¹³ As he noted, the simplest form of an auxiliary motive is to have one's action decided by drawing lots, but his more general formulation deserves notice: Auxiliary motives have "nothing to do with the concrete aims in question." Transposed from practical to theoretical thought, this means that an auxiliary motive does not, in and of itself, make it more likely that the theoretical aim of thought, truth, is realized. Adopting an auxiliary motive allows a decision to be taken in virtue of its singling out one utility (one particular type of information wanted about the issue at hand) as determining how the inquiry will proceed. In consequence, both epistemic virtues (coherence, simplicity) and nonepistemic criteria (practical utility) are there to be invoked to select one among the empirically equivalent theories.¹⁴

For Neurath and Frank, the gap argument was the point at which their logical empiricist epistemology joined forces with John Dewey's pragmatist attack on spectator conceptions of knowledge (thinking of knowledge as faithful copying). Their conception of how to accommodate nonepistemic values in scientific theorizing has considerable appeal to contemporary theorists who also, however, question whether Neurath and Frank went far enough. For many activist scholars, the gap argument is but the first step toward their rejection of the idea of value-free science: They also embrace the "entanglement" of fact and value (Putnam 2002). Rejecting the principled separation of fact and value and claiming their categorical indistinguishability on epistemic grounds is said to allow for the full truth-valuability of value statements.¹⁵ Precisely due to this entanglement, science in conditions of underdetermination and partial ignorance is said to be unable to avoid value questions when decisions about hypothesis acceptance must be taken. In challenging the distinction between

¹³ Uebel 1996: 135–136. This reading of Neurath's auxiliary motives is employed also by Okruhlik 2004, Howard 2009 and 2019, Stuchlik 2011. Frank went further than Neurath in explicitly noting values to be involved in theory choice (Frank 1957: 354); for discussion of the opposition he faced see Howard 2003: 61–63.

¹⁴ Cf. Longino 2016.

¹⁵ For different versions of such value cognitivism see, e.g., Anderson 2004 and Brown 2013.

epistemic and nonepistemic values the entanglement thesis undermines all conceptions of scientific value freedom, but whether this further challenge must be granted is itself highly questionable.¹⁶

Yet consider how Neurath's and Frank's position looks from another radical variant of philosophy of science that, it has been noted, has begun to merge with empiricist feminism (like contextual empiricism), but has its own controversial history: feminist standpoint theory.¹⁷ Where the former can be regarded as originally concerned simply with providing a framework the acceptance of which would make for better and truly objective science (overcoming biases undetected by standard accounts of objectivity), the latter was formulated as a political theory aiming to legitimate interventions in and disruptions of "business as usual." Here let's adopt a formulation of standpoint theory by Alison Wylie that renders earlier controversies irrelevant:

It is an explicitly political as well as social epistemology characterized by the thesis that those who are marginalized or oppressed under conditions of systemic inequity may, in fact, be better knowers, in a number of respects, than those who are socially or economically privileged. Their epistemic advantage arises from the kinds of experience they are likely to have, situated as they are, and the resources available to them for understanding this experience. Feminist standpoint theorists argue that gender is one dimension of social differentiation that makes such an epistemic difference. (2012: 47)

Standpoint theory starts from a normative position: It provides an epistemology for social cognition that contests the findings and theoretical presuppositions of traditional value-free philosophy of science *as part of* a general struggle for justice and equality.

Both Kathleen Okruhlik (2004) and Don Howard (2019) plausibly identify Neurath as a standpoint theorist of an older variant, namely of Marxist persuasion. Both cite his "Personal Life and Class Struggle":

The workers who lack a rich bourgeois education, can become superior to the bourgeois precisely in the field of social life in that they have a greater understanding for social connections and can apply even a smaller amount of knowledge more significantly. Marxism shows the proletarians who are engaged in the class struggle what is especially important to know; and it preserves adherents from the often disorganized educational endeavour of

¹⁶ For defenses of the distinction of epistemic and nonepistemic values, see Steel 2010 and Lacey 2017; see also Blackburn 2013 on disentangling thick concepts.

¹⁷ For further details see Intemann (2010), whose suggestion of large-scale convergence appears widely accepted now.

bourgeois enlightenment, which from the outset sees in merely increasing knowledge something worth striving for as such. (1973/1928: 292–293)

Howard aptly comments:

It is precisely the oppressed status of the working classes that affords them a privileged epistemic status, more clearly grasping social relations and seeing the lie in rationalizations of bourgeois privilege, rationalizations the falsity of which bourgeois thinkers cannot see as lies because their class status places them in an epistemically disadvantaged state. They cannot see through those lies because their doing so would undermine the power and prerogatives of their own class. Neurath's philosophy of science in action thus paints a picture of politically engaged, indeed revolutionary science in service to the achievement of justice. (2019: 51)

Neurath's commitment to the cause is unquestionable. (If Carnap had still been inclined to writing polemics engaging with issues of the day – as he did early on¹⁸ – this would be equally evident in his case.) But is Neurath's position more consistent than Carnap's appeared to us earlier? Moreover, is his own position up to the task?

Okruhlik voices concern about Neurath's appeal to auxiliary motives. Appreciative of the fact that they allow value-driven decisions inside of science, she worries whether this construction is robust enough to sustain the value commitments it facilitates – and whether it takes the values in question seriously enough. She points to the role of auxiliary motives as “randomizing devices” (suggested by Neurath's talk of casting lots and rolling dice) and contrasts that with decisions taken “non-randomly” by activist scientists who do as activist scholars deem fit (Okruhlik 2004: 63). As we will see, Okruhlik's is not merely a difference of emphasis. There is a further worry. Auxiliary motives seem to be the wrong vehicles altogether to facilitate nonepistemic value input into science:

[T]hose elements of Neurath's social science that seem to us most overtly political or value-laden do not arise from employment of auxiliary motives but from Neurath's version of Marxist standpoint epistemology. Standpoint theory and the auxiliary motive do not yield to easy assimilation because auxiliary motives come from (and remain) outside science, while it appears that, for Neurath, Marxist social science just is the form that the scientific world-conception takes in the social sciences. (Okruhlik 2004: 64)

To be sure, Neurath's Marxist social science was not grounded by an auxiliary motive but by his belief that “[o]f all the attempts at creating a

¹⁸ See, e.g., Carnap 2022/1918 discussed in Uebel 2012 and Damböck 2022.

strictly scientific unmetaphysical physicalist sociology, Marxism is the most complete" (1973/1931: 349). For Neurath, doing Marxist sociology followed from the ideal of anti-metaphysical social science itself. Yet this does not show that the auxiliary motive does not come into play at other junctures in social scientific reasoning, for instance when cases of underdetermination need resolving. Neurath's one example of this suggested opting for one of the empirically equivalent hypotheses or prognoses about the historical situation faced on the grounds that doing so provided the broadest base for collective action (1973/1928: 293). Here strategic class war considerations served as an auxiliary motive: an interpretation that was not only plausible on its own but also acceptable to the comrades was what was required. Okruhlik's conclusion that "Neurath's standpoint theory is not really a departure from or a rival to [his] empiricism" (2004: 64) nevertheless suggests a major drawback. Neurath "did hold to the empiricist dogma that puts values outside the domain of meaningful discussion. It is this dogma that may constitute the biggest difference between Neurath and feminist philosophy of science" (Okruhlik 2004: 67). The spoiler is a dogma of empiricism that even Quine shared: ethical noncognitivism.

By contrast, Howard sees no problem with the way Neurath resolves the gap argument. "For the purposes of understanding Neurath's philosophy of science in action, what is most important is his argument about the role of the auxiliary motive, for this is what provides legitimation for Neurath's politically engaged science" (Howard 2019: 64). Rather than see in it a coded stance on meta-ethical matters, he reads it as a description of all too commonly misunderstood problem situations:

It is noteworthy that Neurath terms these factors auxiliary *motives*, not reasons. He means deliberately to make this an issue about the psychology of judgment and not pure reason alone. Neurath's epistemology of science is a kind of naturalistic epistemology. What he gives us here are supposed to be psychological and, thus, scientific facts about how reason operates, not a priori norms. Still, our recognizing the role of auxiliary motives has normative implications because of the widespread failure to discern or admit the work that such motives do. (Howard 2019: 53)

Howard's endorsement of Neurath's model of politically engaged science does not speak to the charge that noncognitivism undermines the rationality of his political engagement. Instead, Howard stresses that "since, in the end, we must choose on the basis of nonempirical factors, we enhance the intellectual integrity of science by frankly asserting the agendas that motivate science in action" (2019: 54). This leaves Okruhlik's challenge

open – for from Neurath’s understanding of Marxism no rejection of noncognitivism follows.¹⁹

Like Carnap, Neurath dismissed normative ethics as cognitively meaningless. Already very early on he declared that “a moral demand can never be proved” (1973/1912: 119): He agreed with Hume’s denial that norms follow logically from facts. He also argued against utilitarianism as a general principle of social organization for, without an arbiter or dictator, “it is not possible to create an order of life which takes account of different *views* as to the best distribution of pleasures, as would have to be the case with the *pleasures* of each in a purely utilitarian world” (1973/1912: 122, emphasis in 1912 original). Kantian deontology fared no better, with the categorical imperative a ready object of scorn: “how should we demarcate a discipline as ‘ethics’ if God is eliminated? Can we make a meaningful transition to a ‘command in itself’, to the ‘categorical imperative’? We could just as well introduce a ‘neighbor-in-himself without a neighbor’” (Neurath 1983/1932a: 79).

Neurath then was in no better position to argue for socialism than Carnap – if socialism was understood as an ethical position. But as he did not understand it so, no contradiction obtained for him. Yet Okruhlik’s challenge remains alive as a pragmatic one. As a social scientist, Neurath could argue the case that a radical reorganization of socioeconomic relations is more likely to improve the lot of the proletariat than a continuation of business as usual and therefore is to be recommended if such improvement is desired – but not that it should be desired. This may appear too weak a stance. Is noncognitivism then as detrimental to political activism as many contemporary critics, such as standpoint theorists, claim when they charge it with putting values “outside the domain of meaningful discussion”?

The Appropriation of Weberian Value Neutrality and Value Relevance

The most commonly discussed version of the doctrine of value freedom forbids taking account of nonepistemic values in science generally, especially in theory evaluation. It is also this version that is under attack in the currently most commonly discussed counterargument to the doctrine, the argument from inductive risk.²⁰ Roughly, accepting a finding or theory

¹⁹ Neurath rejected the philosophical, expressly ethical dimension that Max Adler tried to impress on Austro-Marxism (see 1973/1928: 297).

²⁰ For a recent installment of the debate see Douglas 2017 and Betz 2017.

means to certify it as reliable for use by third parties, yet since virtually all findings are only ever reached on a balance of probabilities, their acceptance involves a judgment that the risk of harm caused by inductive failure is low enough to be neglected. Unsurprisingly, no consensus regarding this argument has been reached, resistance turning on whether risk assessment properly falls to the scientist investigating a hypothesis or to the agents or agencies seeking to make use of the findings. Yet like the gap argument, albeit along a different route, the argument from inductive risk seeks to show the entanglement of science with value questions.

For better or worse, Neurath and Carnap appear to have neglected the argument from inductive risk.²¹ They were exercised by the possibility of unchecked intrusion of political-ideological values into science. With this concern and the very broad outlines of their response they agreed with Max Weber. Now relations between members of the left Vienna Circle and Weber and his legacy (he died in 1921) were very complex. As economists, Neurath and Weber sparred repeatedly in the *Verein für Sozialpolitik*, jointly attended the 1917 meeting of the German Youth Movement at Burg Lauenstein as critical “elder statesmen,” and encountered each other again during Neurath’s trial in postrevolutionary Munich in 1919. As philosophers, Neurath and Weber took contrary stands on the materialist conception of history and in the socialist calculation debate (about whether rational economic planning is possible in a socialist commonwealth); Neurath also remained opposed to Weber’s interpretive sociology, forever suspicious of seemingly idealistic tendencies.²² Given furthermore that Neurath was concerned with what the conception of scientific value freedom provided freedom for, as opposed to Weber’s concern with what it proscribed, it is perhaps not surprising that Neurath did not advertise his understanding of value freedom as a version of Weber’s – especially as he also had to cleanse it of metaphysical accretions. Carnap fell in with Neurath’s take on the matter.²³

Weber’s version of value freedom concerns the results of scientific investigations: It bars a certain type of value statement from being issued as justified by scientific reasoning. Importantly, Weber did not forbid all

²¹ As noted in Magnus 2013, the argument is not original to Rudner 1953 but goes back to James 1896.

²² See Uebel 2018 and 2022.

²³ Unlike Neurath, Carnap never referred to Weber in any capacity, but in October 1928 his list of literature read includes Weber’s *Wissenschaft als Beruf* (2012/1919; see Carnap 2022: 748). As Weber there restated his doctrine of value freedom in popular form it is not surprising that Carnap’s first Bauhaus lecture (see note 7) shows striking similarities.

value statements but only unconditional ones – in all modalities, be they purely descriptive (“*x* is good”) or prescriptive (“*x* should be the case”) or expressing commands (“do *x*!”) – and he left conditional ones untouched. Phrased differently, Weber barred categorical imperatives from science but not hypothetical ones. Neurath’s and Carnap’s agreement with Weber on this point is seldom recognized, but the distinction between conditional and unconditional value statements was equally central to the Circle’s noncognitivism – and their version of value freedom – as is clearly documented in Carnap’s autobiography:

In our discussions in the Vienna Circle we were much concerned with clarifying the logical nature of value statements. We distinguished between absolute or unconditional value statements, e.g., one that says that a certain action is morally good in itself, and relative or conditional value statements, e.g., one saying that an action is good in the sense of being conducive toward reaching certain aims. Statements of the latter kind are obviously empirical, even though they may contain value terms like “good.” On the other hand, absolute value statements that speak only about what ought to be done are devoid of cognitive meaning according to the empiricist criterion of significance. They certainly possess noncognitive meaning components, especially emotive or motivating ones, and their effect in education, admonition, political appeal, etc., is based on these components. But, since they are not cognitive, they cannot be interpreted as assertions. (1963b: 81)

Carnap equated the distinction between conditional and unconditional value statements with the distinction between cognitively meaningful and cognitively meaningless ones. For Weber unconditional statements were unscientific, but he did not deny their truth-valuability. This illustrates that one need not be a noncognitivist to accept Weber’s demand for value freedom (he wasn’t one).

Weber held that in issuing unconditional value statements science overreached itself. He could have but did not appeal to Hume or argue explicitly against the naturalistic fallacy of “deriving an ought from an is.” But neither did he merely claim that “it can never be the task of a science of empirical experience to determine binding norms and ideals from which practical prescriptions may then be deduced” (Weber 2012/1904: 101–102):

[T]he problem of establishing facts, demonstrating what is true in mathematics or logic, or uncovering the internal structure of cultural values is entirely *heterogeneous* from the problem of furnishing an answer to the question of [what] is the *value* of culture and of its individual elements, and how one should accordingly act within the cultural community and political groupings. (2012/1919: 346, emphasis in original; cf. 2012/1904: 103)

What made these two sets of problems so different was the fact of moral and political “value pluralism.” What Weber noted as a striking and novel fact of “modernity,” we take for granted as a fact of “multiculturalism.” “The ‘scientific’ advocacy of practical standpoints is impossible . . . (except in cases where one is discussing the means for achieving a goal that is presupposed as a fixed *given*). It is meaningless in principle, because the different value orders of the world are in irresolvable conflict with each other” (Weber 2012/1919: 347, emphasis in original). There is, Weber took it, no evidential standard for which of the many conflicting value judgments should prevail in society. (Neurath’s judgment on utilitarianism as a social philosophy, outlined earlier, converges with this.) For unconditional value statements it is impossible to establish the type of evidence base that is required to sustain claims to objectivity. The question of which social values were to be realized was one to be decided not by science but by civic society and depended on the active engagement of the citizens.

What use then was there for science, indeed social science? Weber’s answer (of which we heard echoes in Carnap earlier) is as follows:

[A]ll that an *empirical* discipline can demonstrate with the means at its disposal are the following: (1) the unavoidable means [to effect a certain goal]; (2) the unavoidable side effects [of doing so]; (3) the resulting competition between a number of different *possible* valuations [on the basis of] their practical consequences. . . . But the question: (1) to what extent a goal may justify the unavoidable means; (2) or to what extent the unwanted side effects may be acceptable, let alone: (3) how to resolve conflicts between a number of goals that one has set for oneself or that are regarded as obligatory, and that collide in the concrete case – even such simple questions are entirely matters of choice or compromise. No (rational or empirical) scientific procedure of any kind whatsoever can decide them. *Our* strictly empirical science can least of all presume to relieve the individual of [the burden of] his choice. (2012/1917: 315, emphasis in original; cf. 2012/1919: 349–350)

Furthermore, scientific policy advice had to respect the same strictures as purely theoretical science: Unconditional value judgments were barred. Any advice was to be formulated in terms of conditionals which asserted means–ends relations: These are bona fide empirical statements, legitimated by intersubjectively available evidence (Weber 2012/1904: 102). (From here on I distinguish Weber’s and the Circle’s versions of value freedom as “value neutrality.”)

To see these ideas implemented in a social science context, consider Neurath’s contribution to the *Werturteilsstreit* in an internal discussion document for the *Verein für Sozialpolitik* dedicated to addressing Weber’s

challenge to social scientific value discourse. (Neurath's use of "pleasure" and "pain" as generic terms – "*Lust*" and "*Unlust*" – does not indicate a sensualist understanding of utility.)

7. Moral judgments can impinge on the discipline of economics at *two* points. (a) In the investigation of concrete relations of pleasure and pain. The pleasure or pain resulting from an individual's moral evaluation is co-ordinated to the pleasure and pain which is caused by clothing, food, accommodation, works of art, etc. (b) In the evaluation of a concrete system of institutions which causes pleasure and pain. I can state, for instance, that some order of things conditioned by a certain institution and causing a particular distribution of wealth is of lower moral value for me than some other order of things. *In this case what is evaluated morally is the order of things, whereas in the first case the moral evaluation itself was part of this order.*

8. Moral evaluation can be considered as a manifestation of pleasure and pain in every concrete investigation, for instance by also taking account of the moral indignation caused by servitude in some region, besides taking account of the lack of food that comes along with the servitude in that region.

9. The moral evaluation of systems of wealth distribution, say the free market or some other system, is amenable to scientific formulation once one has agreed on the principle serving as basis for the moral evaluation. One can raise the question: which of the orders A, B, C, . . . , N accord best with principle X? Whether an answer can be always given, or even a univocal one, is another matter. (Neurath 2004/1913: 297–298, emphasis in original)

Note that the two occurrences of value statements specified in §7 are illustrated in §8 and §9 respectively. Value judgments may become a datum for empirical behavioral science (as in §7a and §8). Yet value judgments can also be passed within empirical science (as in §7b), but only under one condition: that the standard of evaluation be agreed, that is, made explicit (as in §9). In other words, conditional value judgments about matters investigated in empirical social science are permissible.

So Weber held that the value pluralism of modernity prevents unconditional value judgments from commanding universal consent and therefore excluded them from empirical science. Neurath and Carnap excluded unconditional value judgments from science because of their verificationism according to which statements must, at least in principle, be testable by reference to intersubjectively available evidence to be cognitively significant. Since the practical outcomes remain the same, one may wonder whether Neurath's and Carnap's version adds anything significant to Weber's value neutrality. The answer is that, importantly, it subtracts

something. Given Weber's repeatedly advertised allegiance to the neo-Kantian Heinrich Rickert's idealist value theory, empiricists could not but reject Weber's original version. For Rickert's philosophy of value, modernity's value pluralism was simply a mistaken illusion of the age; whether he himself agreed with this or not, Weber limited his prohibitions to the realm of empirical science. Since Weber also denied, like Rickert, the unity of science thesis – a core doctrine of logical empiricism which disputed a special status for the human sciences – Neurath and Carnap had to transpose Weber's conception of value neutrality from a neo-Kantian to a naturalistic setting.

Consider that Weber spoke as if “value relations” constituted the sole objects of “the cultural sciences,” that is, social science, whose “transcendental precondition” was “that we *are* cultural *beings*, endowed with the capacity and the will to adopt a deliberate *position* with respect to the world, and to bestow *meaning* on it” (2012/1904: 119, emphasis in original).

The concept of culture is a *value concept*. Empirical reality is “culture” for us because, and to the extent that, we relate it to value ideas; it comprises those, and *only* those, elements of reality that acquire *significance* for us because of that relation. Only a tiny part of the individual reality that we observe at a given time is coloured by our interest, which is conditioned by those value ideas, and that part alone has significance for us; it has significance because certain of its relations are *important* to us by virtue of their connection to value ideas. (2012/1904: 116, emphasis in original)

This is the neo-Kantianism that the Circle theorists were unable to accept. Fortunately, it was possible to rescue something tangible, as Weber himself once hinted at.

As for the meaning of the term “value relation” . . . suffice it to recall that [it] simply represents the philosophical interpretation of that specifically scientific “*interest*” which governs the selection and formation of the object of an empirical inquiry. . . even purely empirical scientific research is *guided* by cultural interests – that is to say: value interests. (2012/1917: 317, emphasis in original)

Detranscendentalize and demetaphysicalize Weber's value talk and what you get is the simple recognition that the pursuit of social science is guided in the choice of its subjects and in the determination of its research agendas by the interests of its researchers – and that there is nothing wrong with this. Indeed, as has often been noted (e.g., Nagel 1960: 486), what's also called “value relevance” is not the sole property of social science at all but extends across all disciplines (saving the unity of science).

Another difference between Weber and Neurath also deserves notice. Value neutrality on its own does not address worries about biased procedures in the gathering of data, the generalization of hypotheses, and the evaluation of theories by peer groups.²⁴ It must be complemented by an argument that recognizes and regiments nonepistemic value choices in these respects. It may not have been a coincidence that Neurath's gap argument also makes room to consider these matters so as to complement his adoption of Weberian value neutrality and value relevance.

Neurath's Noncognitivist Standpoint Theory

For Weber, value neutrality came combined with value relevance which Neurath and Carnap separated from the idealist philosophy with which he had associated it. This allows for the partisan choice of research projects but forbids partisan formulations of research findings. Importantly then, it allows for a transformative agenda quite independently of the value considerations legitimated by the gap argument. Neurath's socialist economics, in particular his radical proposals for the socialization of entire national economies in the wake of World War I, also express this stance. Depending on whether he was speaking as a scientist or citizen advocate, we can find fiery speeches and propaganda among his output, but also scientifically neutral discussions of the conceptual frameworks required to develop such schemes for social transformation.²⁵

Yet Neurath's transformation of Weberian value-neutrality-cum-value-relevance stands in a challenging relation to standpoint theory. One might wonder whether the description of Neurath as a standpoint epistemologist is felicitous: Without affirmation of nonepistemic values, standpoint theory may feel like *Hamlet* without the Prince of Denmark. The puzzle is understandable, but two further questions arise. First, whether pursuing research programs that are informed by political agendas demand for their success that the unconditional value statements that inform their adoption be proclaimed alongside and on par with their results. Second, what the role of unconditional value statements is for standpoint theory

²⁴ On the latter see, e.g., Rollin 2017 and Intemann 2017.

²⁵ Compare Neurath's 2004/1920a in an academic journal with his 2004/1920b, a freestanding propagandistic pamphlet.

and what that tells us about the relation between standpoint theory and general epistemology and philosophy of science.

The first question must not be misunderstood. The issue concerns neither scientists hiding the value commitments of their research programs nor strategies of obtaining and dispensing research funding. The question is rather: What is lost in terms of research output if the prescription of value neutrality is followed? I submit that it is nothing that is of strictly scientific value. To be sure, the public persona of scientist activists may be less headline-grabbing than if they were moral crusaders. But note that value neutrality does not prohibit the very same scientists from being passionate advocates of the agendas their research is meant to further – but this they would do as only citizens in the civic arena, not as expert scientists: *vide* Neurath! They can even use their scientific results to bolster their political argument (present the facts of deprivation, say, and likely means of alleviation). The only thing they cannot do is claim that science gives unconditional backing to their agenda (here of providing alleviation of the deprivation).

Answering the second question is more complex. With standpoint theory regarded as a normative political theory, the role of unconditional nonepistemic value statements is plain: they state its basic value axioms and are thus indispensable. With standpoint theory regarded as epistemology, it is not clear what role they have to play. What is clear, however, is that under the heading of standpoint theory, both normative proposals and descriptive theses have been put forward.²⁶ Standpoint theory, we saw, emerged as a normative political theory to articulate anti-discriminatory demands and overturn androcentric bias in traditional epistemology and philosophy of science and found application in the sciences and in the provision of health, social care, and law across society generally. Yet standpoint theory is not only about advocacy (especially in criticizing undesirable practices), however important that is; it also made significant contributions to epistemology itself. For instance, it has challenged what Okruhlik called “the dogma of the intersubstitutability of epistemic subjects” (2004: 67) – that epistemology be blind to their social situatedness²⁷ – and from this recognition of a desirable pluralism of perspectives follow consequences for how to think about objectivity and question the ideal of the “view from nowhere.”

²⁶ See Wylie (2012), who summarizes its history before defining standpoint theory as quoted earlier.

²⁷ For the political valence of the concept of situated knowledge see Haraway 1988.

Given that standpoint theory is both politically and epistemically normative, its stand on unconditional nonepistemic values can be a differentiated one. It would of course be nonsensical to bar it, as a political theory, from asserting unconditional value statements, but it is not at all clear why, as an epistemology, it should insist on issuing them. Prohibiting them would not rob standpoint epistemology of its critical bite, given the transformative agenda of its political wing, but only distinguish between the roles of engaged advocate in the civic arena (with scientific malpractice in view) and the role of epistemologist (parallel with first-order scientists). The move to procedural objectivity away from the view from nowhere conception would not be endangered.

Let me stress that it is not my business to suggest how feminist epistemologists should go about theirs. What is my business, however, is to argue that value neutrality is much less detrimental than it may at first appear. To ask the question, seemingly so absurd, of what standpoint theory would lose if it were to renounce unconditional nonepistemic value statements, is to clarify in what sense it is appropriate to think of Neurath as a standpoint theorist in pursuit of a transformative agenda. My answer is that he can count as one if we allow for a noncognitivist version of standpoint *epistemology* (and set him to work further on the situatedness of cognition which he only began to consider). Cognitivist and noncognitivist standpoint epistemologists can speak as one as civic actors; they agree in their politics, after all. Only their activism as scholars and scientists proceeds in different voices – but this does not change any potentially transformative results of their theorizing.

Discussing Standpoints with Carnap

Yet is this all there is to the issue of cognitivism versus noncognitivism? Carnap's remark (1963b: 82) that one's meta-ethics rarely if ever determines behavior may well be true, but there remains Okruhlik's worry, prompted perhaps by unduly strident talk in Carnap's London lectures (1935: 23), which may suggest that noncognitivism "puts values outside the domain of meaningful discussion."

Elsewhere, however, Carnap had already clarified that "the exclusion from the domain of *theoretical judgments* does not relieve us of the ability, even the duty to adopt a *practical attitude*. There is a *fundamental difference* between both, however, which we must come to understand" (2013/1934: 176, emphasis in original, my translation). Here we touch on the all too often neglected positive part of the message of Carnap's noncognitivism:

his recognition of the “other” of scientific reason and the indispensable complementation of reason by this other, the will and willing. All action requires decision, and this demands that we “adopt a practical attitude” on what’s at issue – and that includes value questions.

By theoretical means one can only determine here that this or that institution brings with it these or those hygienic, economic or cultural consequences. This is a very important preparation for our adoption of an attitude, but it does not render this adoption otiose. We must decide whether we are in favor of or against the consequences which theoretical investigation has established will follow (e.g., the elimination of economic crises and unemployment). It is on this that, guided by theoretical insight, our action depends. (2013/1934: 177, my translation)

“Adopt[ing] a practical attitude,” taking a stance, is what agents do. (One is tempted to say that is what makes for an agent.) Carnap’s terms are striking: “*Pflicht der praktischen Stellungnahme*” (duty of adopting a practical attitude) and “*Sache der praktischen Stellungnahme*” (matter of adopting a practical attitude), the former denoting the normative, the latter the descriptive dimension of exercises of the will. The same duality applies to assuming, taking, and adopting a “standpoint.” (“*Praktischer Standpunkt*” is a close cognate of “*praktische Stellungnahme*.”)

But what, in Carnap’s hands, makes for a responsible *Stellungnahme* that is within the means, intellectual and affective, of the agent? Elsewhere I discussed the recognition of cognitive autonomy and reflexivity as required for rational action by Neurath (2004/1913); here I turn to Carnap’s later analysis which illuminates their recognition of the all-too-human condition of having to adopt practical attitudes:

This result of a logical analysis of value statements and the controversies concerning them may appear as a purely academic matter without any practical interest. But I have found that the lack of distinction between factual questions and pure value questions leads to confusions and misunderstandings in discussions of moral problems in personal life or of political decisions. If the distinction is clearly made, the discussion will be more fruitful, because with respect to the two fundamentally different kinds of questions the approach most appropriate to each will be used; thus for factual questions arguments of factual evidence will be offered; whereas persuasion, educational influence, appeal, and the like will be brought to bear upon decisions concerning pure value questions. (1963b: 81)

Carnap offered the fact–value distinction as a basis for an “explication of value statements” (1963b: 1009). The distinction is an analytic one made for pragmatic purposes: It cannot be overstressed that it is *not* an ontological distinction (1963b: 1003).

This is also true of noncognitivism: It provides a framework for analysis. Assume a list of (1) “statements connected with values or valuations” (behavioral descriptions, means–ends and utility claims) and a list of (2) statements connected with values or valuations that are “clearly analytic if true, otherwise contradictory” (statements whose truth is intelligible given only the meaning of the terms used: logical truths, T-sentences, conceptual explications). Now the “thesis of noncognitivism” can be stated in a conditional form: If a statement on values is neither factual (belongs to category [1]) nor analytic (belongs to category [2]), then it is noncognitive. This is consistent with some value statements being factual and “rejects only those conceptions which regard knowledge of values as a knowledge *sui generis*, essentially different from factual and logical knowledge” (Carnap 1963b: 999–1000). Next, define “optative” as “a general kind of meaning common to all statements expressing a wish, a proposal, a request, a demand, a command, a prohibition, a permission, a will, a decision, an approval, a disapproval, a preference, or the like, whether or not they also contain meaning components referring to matters of fact.” Any sentence that “has a meaning component of this sort” is an “optative sentence.” Now noncognitivism asserts unconditionally: “There are pure optatives” (Carnap 1963b: 1001). So even pure optatives are far from meaningless, but their type of meaning is not descriptive: The direction of fit does not go from world to mind but from mind to world. (Their acceptability to a subject is determined by whether they correctly express the way she wants the world to be and whether they are consistent with her other value commitments.) Noncognitivism only holds that there are statements that do not describe and cannot be true or false since they instead express that something should be the case.

In a recently discovered fragment, Carnap called such statements “value functions” and integrated them in a Bayesian decision-theoretical framework. (Given a credence function, a body of evidence, and a set of possible actions, it can be defined what a “rational action” is, namely an action for which there exists no alternative that is preferred by the agent in that situation.) People possess many different partial value functions; importantly, however, Carnap allowed that “there is also a comprehensive value function” which “comprises all aspects” of what a person values and “in which the relative weight of each aspect in any possible overall situation finds expression – aspects that are sometimes in mutual conflict” (2017: 192). Carnap affirmed that there are “standards of rationality for value functions” and made some proposals, but noted that they would not rule out as irrational value functions that “would be considered by most people, perhaps all, as completely wrong and immoral” (2017: 193). As elements

of a decision-theoretic calculus, Carnap's value functions were judged only for their formal fit. No "purely valuational criteria" to feed into the comprehensive value function were mentioned by him, so the nature of its "weighting" of individual value functions is left undetermined.

The significance of his decision-theoretical calculus for our concerns is that it shows that, his noncognitivism notwithstanding, Carnap took practical reasoning very seriously (the model links up with his long work on inductive logic). Moreover, by analyzing "complex value statements" into components which are either purely factual or purely optative it becomes possible to exhibit the value commitments expressed by the complex statement (Carnap 1963b: 1009–1011). This provides an example of the first of the modes in which "a scientific treatment of value-judgments" may proceed, according to Weber. It can "help the striving person to reflect on the ultimate axioms that form the basis of what he is striving for, on the ultimate value standards that he applies or that he should apply in order to be consistent" (Weber 2012/1904: 103). Significantly, it is science – here formal science: logic in the broad sense – that provides this clarification. Add to this what, as Weber already noted, the empirical sciences can offer regarding practical value questions: consideration of "(1) the unavoidable means; (2) the unavoidable side effects; (3) the resulting competition between a number of different *possible* valuations [on the basis of] their practical consequences" (Weber 2012/1917: 315, emphasis in original). Together, the logical and the consequential analyses of value statements – that is, analyses addressing questions of logical consistency and dependence and questions about means–ends relations and resources – provide endless material for discussions that inform decisions. However, what "the cognitive" cannot do for us – and on this point all three, Weber, Neurath, and Carnap, are uncompromising – is what only the will can do: make the decision.

What can be proven theoretically is that philosophical and religious metaphysics is a potentially dangerous narcotic that damages reason. We reject this narcotic. If others love its use, we cannot refute them theoretically. This does not mean at all, however, that we must be unconcerned about how people decide on this point. We can give theoretical information on the origin and the effect of this narcotic. We can also work on people's practical decision of the matter by exhortation, education, example. But we must in this be clear that this work lies outside of the theoretical field of science." (Carnap 2013/1934: 179, my translation)

Here Carnap embedded what became his decision-theoretical conception in a naturalistic psychology that is open to elaboration by neighboring

disciplines. Carnap's discovery of the "other of reason" does not reveal a hidden metaphysics but points to the complexity of the behavioral sciences. It also reveals a refreshing honesty about what philosophy can do: If we wanted to ennoble his common sense as "metatheoretical reflexivity," the additional adjective "deflationist" would be appropriate. (Given this analytical stance, he and Neurath need not even deny the *de facto* entanglement of facts and values in the wild, only that they cannot be disentangled.)

In sum, when it is alleged that noncognitivism "puts values outside the domain of meaningful discussion" it must be answered that this is false for Carnap's and, we may take it, Neurath's versions of it. They can discuss what value statements and valuations entail and presuppose logically and what practical consequences are likely to attend to action taken or not taken in their light. Thereby they can impress on agents the responsibilities they face. What they cannot do is establish the truth of unconditional value statements. I submit that cognitivists cannot do this either. (Forceful claims to truth without evidence, if repeated often enough, may prove effective in certain historical situations, but this does not make them rationally justified.) Noncognitivists are no less fit for the public contestation of values than cognitivists.

Conclusion

Needless to say, what I have defended here needs elaboration and supplementation in all sorts of ways, not being a theory in its own right but a gloss of a perspective recovered from underappreciation.²⁸ What prompted this investigation of the practical dimension of the metaphilosophy of the left wing of the Vienna Circle was the disquiet felt by activist theorists about the doctrine of value freedom and noncognitivist value theory. With their position on value freedom clarified as subscription to demetaphysicized Weberian value neutrality and their position on noncognitivism identified as recognition of the other of reason (there are pure optatives, statements whose acceptability to a person is not determined by the satisfaction of truth conditions), their use of value relevance can now be

²⁸ Like all philosophical positions, noncognitivism faces outstanding problems; note that Carnap's to-do list is broad enough to comprehend the Frege–Geach problem which had not yet entered the literature when he wrote (the Schilpp volume was long delayed): "logical rules must be stated for the logical relations, especially for logical implication, both between value statements and between value statements and cognitive statements" (Carnap 1963b: 1013).

regarded as noncognitivist standpoint-taking within science. Other arguments may also have to be considered, but given those discussed here I conclude that activist scholars and scientists need not deny all forms of value freedom. Neurath's and Carnap's form of value neutrality, even their noncognitivism, does not prevent the epistemology of science playing its part in the moral and political struggles of the day.