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Logical Empiricism as Critical Theory? The Debate Continues

Abstract: Is logical empiricism incompatible with a critical social science? The longstanding assumption that it is incompatible has been prominent in recent debates about welfare economics. Sen's development of a critical and descriptively rich welfare economics is taken by writers such as Putnam, Walsh and Sen to involve the excising of the influence of logical empiricism on neo-classical economics. However, this view stands in contrast to the descriptively rich contributions to political economy of members of the left Vienna Circle, such as Otto Neurath. This paper considers the compatibility of the meta-theoretical commitments of Neurath and others in the logical empiricist tradition with this first-order critical political economy.

0. Introduction

In its first two issues (vol. 1, nos. 1 and 2) thirty years ago (1979), *Analyse & Kritik*, featured a spirited discussion of a topic that must have struck many readers as at best outlandish, at worst as a contradiction in terms: Logical Positivism's potential for radical social critique. If little had by then been published about this, it was not because the issue had not been considered but because everybody presumed to know the answer (especially after the so-called *Positivismusstreit* of the 1960s, the dispute between members and students of the Frankfurt school and protagonists of Critical Rationalism).¹ Critical social thought and positivism, however much updated, appeared incompatible. It was with some surprise, therefore, that one had learnt from Erich Mohn and Rainer Hegselmann that many of the leading neopositivists themselves espoused socialist opinions of varying sorts of radicality and that some even seemed to claim neopositivism for socialism (Mohn 1968; Hegselmann 1979a; 1979b). To sort through these issues was the point of papers by Ansgar Beckermann, Rainer

¹ See Adorno et al. 1969, for critical discussion see Dahms 1994.

Hegselmann, Wolfgang Köhler and Rudolf Lüscher.² To see what may be added to the debate thirty years on is the purpose of our contribution.

In recent years, the claim that logical positivism is incompatible with a critical social science has become increasingly prominent in another arena of debate, welfare economics. Specifically Amartya Sen's revival of a substantive, critical and descriptively rich welfare economics is taken by writers such as Hilary Putnam, Vivian Walsh and Sen himself to involve the excising of the influence of logical positivism on neo-classical economics.³ The descriptive impoverishment of welfare concepts in neo-classical economics, the rejection of the possibility of interpersonal comparisons of welfare, and the shift away from the distributional questions are taken to have their origins in the impact of logical positivism on neo-classical economics in the 1930s. The positivist's non-cognitivism about values, the assumption of a strict demarcation between empirical and normative claims, the defence of a value-free social science and the denial of the possibility of reasoned argument about normative claims were particular influences on the path taken by neo-classical economics into its status as a model of a social science robbed of the resources for social criticism. Whether this story of the role of positivism in economics is correct is another matter. It certainly stands in stark contrast to the actual contributions of the left Vienna Circle to the economic and social debates of the period.⁴ In particular, Otto Neurath's economic theory insisted upon a descriptively rich welfare vocabulary that anticipates Sen's position both in its rejection of the adequacy of purely monetary measures of welfare and in its pluralistic account of the constituents of welfare. It allowed for interpersonal comparisons of welfare and was explicitly critical in its intentions.⁵ That Neurath's practice in social theory looks at odds with the philosophical claims that are taken to have such a negative influence in mainstream economics suggests that the issue be assessed anew.

² See Beckermann 1979; Hegselmann 1979c; Köhler 1979a; 1979b; Lüscher 1979. That no further exegesis was to follow finds an equally natural explanation in how the discussion went. Baumann, Leist and Mans's programme for *Analyse & Kritik* 1979a; 1979b called for an explicitly ethical realist theory of social justice to orient empirical social science while Köhler's alternative rendition of logical empiricism's non-cognitivism as compatible with critical social science built on elements of rational choice theory unknown to many of the critical positivists, with the other contributors treating the matter strictly historically. Hardly had the existence of politically engaged logical positivism been acknowledged that it was left behind.

³ See Putnam 2002; 2003; Putnam/Walsh 2007; Walsh 1996; 2000; 2003; 2008; Sen 1987; 2005.

⁴ On different aspects of the political dimension of the left Vienna Circle's philosophy of science, see O'Neill 2003 and Uebel 2005a.

⁵ For English translations of Neurath's writings on economics see Neurath 1973 and 2004. Specific references will be given below.

1. From Logical Empiricism to Neo-classical Welfare Economics

The charge that logical empiricism is necessarily committed to a non-critical social science is normally traced to a set of claims it is associated with regarding the nature of value claims and their role in the natural and social sciences. The related commitments to a non-cognitivist account of value statements, a dualism of facts and values and to a value-free empirical social science are taken to be the sources of the problems. The internal theoretical reasons for the commitment to non-cognitivism by the logical empiricists are well-known. All cognitively meaningful statements are either analytically true or controllable by empirical observation. Hence in order to accept a form of cognitivism about normative claims, those claims must be either analytically true or controllable by empirical observation. If one assumes, plausibly, that value claims are not analytically true and, more contentiously, that naturalism about value-claims is false so that they are not empirical claims, then it follows that value-claims are either about some non-natural facts or that they do not have cognitive content. If value claims are about non-natural facts then they are not open to control by empirical observation. Hence, if one assumes that naturalism about value-claims cannot be defended, then one is committed to a form of non-cognitivism about values. By the same token, if one is committed to an empirically grounded social science, it also follows that value-claims do not belong to the social sciences. Value claims neither entail nor are entailed by any empirically controllable statement in the social sciences. Hence, the argument runs, normative concepts are to be eliminated from the social sciences, if they are to retain their empirical character.

Two standard additional provisos must be made to the claim that an empirical social science should be value-free if the logical empiricist position is to be characterised adequately. The first is that the value judgements that are to be eliminated are unconditional ones. Conditional value judgements are held to express means-ends relations that are in principle open to empirical scrutiny. The second proviso is that this doctrine of value-freedom is consistent with the Weberian doctrine of value-relevance, that the question of what objects of inquiry are of significance to social theory will be guided by the social theorist's values.⁶ The problems a social theorist chooses to study will be determined by her values. 'Value-free' science does not demand that the scientist shed her human or even political interests.⁷

⁶ Both of these provisos were accepted already in Max Weber's classical discussion of the issue. See his 1904 and 1916.

⁷ A third proviso is that the commitment to the pursuit of an empirically grounded social science is itself the consequence of a normative commitment, but that this is not the consequence of a moral or even political commitment, but of an epistemic one, to the goal of descriptively and predictively adequate and well-confirmed theories. Importantly, no epistemic deontology is involved here: the ultimate parameters of evaluation are freely chosen and any judgements of merit of particular epistemic practices are based on instrumental considerations relative to that goal.

Yet logical empiricism often is also associated with a stronger claim that is taken to follow from the commitment to non-cognitivism about values, namely, that is that any ultimate value-commitment is beyond the scope of rational deliberation. Non-cognitivism is thus held to lead to a form of irrationalism about values. Habermas once put the charge thus: “the practical questions that have been eliminated from empirical-scientifically restricted knowledge must be utterly dismissed [...] from the scope of rational discussions.” (1963 [1976, 146])⁸

The critically impoverishing consequences of these positions are often taken to be most clearly evident in their role in the development of neo-classical economics and the loss of substantive welfare concepts from the discipline. Writers such as Robbins and Samuelson appear as key figures in the development of the new orthodoxy. Starting with the final claim first, the positivist influence is taken to ground a retreat from any rational discussion of the basic normative claims about welfare and justice that informed classical political economy. Reason can only address questions about means which are open to empirical evidence. Questions about ends are placed beyond rational deliberation. The influence in economics is evident in the much cited passage from Robbins that “[i]f we disagree about ends it is a case of thy blood or mine” (1932, 53). Here value-claims were taken outside the realm of rational deliberation or, more narrowly, outside the realm of empirically grounded social science.

The exclusion of value from the social sciences leads in turn to what Sen characterises a “descriptive impoverishment” of social theory (1978, 185; 1980, 362–364). In particular it leads to the disappearance of substantive welfare concepts from economics. Sen’s charge that some version of the doctrine of value freedom had this effect on economics certainly has some force. For writers like Samuelson the increasingly formal characterisation of terms like ‘utility’ in economic theory was an exercise in emptying them of any normative content. The shift to a formal definition of utility involved “a steady removal of moral, utilitarian, welfare connotations from the concept” (1938, 344). Hence the following comment: “any connection between utility [...] and any welfare concept is disavowed. The idea that the result [...] could have any influence upon ethical judgements of policy is one which deserves the impatience of modern economists.” (1937, 161) The result was that insofar as there was a welfare economics in the emerging neo-classical theory, it was not one that could any more do the job that even classical utilitarian economics aimed to do, that is evaluate human welfare. The point has been forcefully restated recently by Putnam: “the fact-value dichotomy or dualism (in a virulent form, in which ethical questions were considered to be questions of ‘thy blood or mine’) penetrated neo-classical economics after 1932 [...] [with] the resultant impoverishment of welfare economics’ ability to *evaluate* what it was supposed to evaluate—*economic wellbeing*.” (2002, 62) Economic theory is consequently robbed of its critical force.

This legacy of noncognitivism and value-freedom attributed to logical empiricism is compounded by the denial of the possibility of interpersonal comparisons of welfare and with it the retreat from the minimal redistributive claims of earlier

⁸ This type of claim also hovered over the discussion in *Analyse & Kritik* vol.1.

utilitarian welfare economics.⁹ Again Robbins is the key figure. His argument against the possibility turns in part on implausible claims about the inscrutability of other minds, in part on the claim that interpersonal comparisons of welfare are value judgements and hence not part of a scientific economics (e.g., 1938, 640). Interpersonal comparisons too were taken out of the realm of rational deliberation and into the realm of personal conflict.

The critics of positivism's legacy in economics themselves acknowledge that not all of the problems of economics are due to positivism. The claim that interpersonal comparisons of welfare rest on value-judgements in particular is a peculiar addition of the economics (Sen 1987, 30–31; Walsh 1996, 174–196). Hence Little's comment: "Interpersonal comparisons of satisfaction are empirical judgements about the real world, and are not, in any normal context, value judgements." (Little 1957, 66) Given that empirical content can be given to welfare claims, the claim that distributing resources from the wealthy to the poor will increase the latter's welfare more than it decreases that of the former, could be understood as a straightforward empirical claim. Likewise it is not clear that non-cognitivism as such entails that value disputes are taken outside the realm of rational deliberation and into that of 'thy blood or mine'. One response to Robbins' position might be to reject the assumption that non-cognitivism entails that value disputes are ultimately beyond rational argument. This was indeed the position that Sen took in his earlier writing.¹⁰ Much in recent non-cognitivist meta-ethics can be understood as an attempt to show that non-cognitivism is consistent with reasoned ethical argument.¹¹ Whether or not they are successful we will not pursue further here.¹²

However, while the critics allow that not all the faults in neo-classical theory have their origins in positivism, they are committed to the claim that some of its sins are traceable to positivism's legacy. Correspondingly, the revival of welfare economics as a critical social science concerned with welfare understood in a full substantive sense—and with the proper distribution of means to well-being—is thought to require a rejection of this positivist legacy about values. In particular it is thought to involve the rediscovery in economics of what Sen has called the 'rich description' that was characteristic of classical political economy (1978; 1980). It requires the use of those normative terms that at least one strand of logical empiricist argument had claimed should be eliminated from the social sciences. To understand just where the inconsistencies lie, Sen's use of the term 'rich description' and its relation to value-descriptions deserves some elaboration.

⁹ The argument ran that, the decreasing marginal utility of income entailed that, other things being equal, a transfer of income from the rich to the poor would increase the total happiness. An egalitarian distribution of income will tend to increase total utility. The argument is flawed in that it holds only on the special assumption that everyone's schedule for the marginal utility for income is the same such that that individuals get the same level of welfare from each level of income. If that assumption is denied then utilitarianism can entail radically inequalitarian outcomes (Sen 1997, 15–18).

¹⁰ See Sen 1967, 53ff., and the critical discussion by Putnam 2002, ch. 2.

¹¹ See, for example, Blackburn 1984 and Gibbard 1990.

¹² The two authors of this paper have different views. John O'Neill holds a form of cognitivism, Thomas Uebel a form of non-cognitivism.

An initial point to note is that, as used by Sen, while it includes descriptions informed by an ethical interest, the term is explicitly used to include a wider range of interests and values that inform the choice in descriptions than just the ethical.¹³ Second, and more importantly in this context, it is possible to distinguish two distinct ways those values and interests are related to rich description. The first is that the selection of what descriptions are significant is guided by ethical and other interests: “description can be characterized as choosing from the set of possibly true statements a subset on grounds of their relevance.” (Sen 1980, 354) This claim as it stands is consistent with the classical Weberian account of value-freedom which explicitly includes value-relevance as a ground for a selection of the object of study. The statements could still be written in entirely value-neutral terms. However, the second way in which values can be related to a rich description is that the terms used for a rich description of the social world are themselves value-laden. In the language that has been popular since Bernard Williams (1985, 129–131 and 140ff.), they involve ‘thick’ ethical concepts like brave, cowardly, kind, pitiless, concepts whose application is “at the same time world-guided and action-guiding” (1985, 141).

It is this stronger claim that raises the more serious problems for the possibility of value-free but critical social theory. As Putnam puts it, “values are entangled with facts” (2002, ch.2; cf. Walsh 2000; 2003). Sen, in his more recent writing, endorses this stronger reading of rich descriptions (2005). He has good reason for doing so. The whole of Sen’s capabilities approach to well-being is saturated in thick ethical terms or, as Putnam puts it, ‘entangled concepts’:

“the capabilities approach requires that we use the vocabulary that one inevitably uses, the vocabulary that one *must* use, to talk of capabilities in the sense of ‘capacities for valuable functionings’, and that vocabulary consists almost entirely of ‘entangled’ concepts, concepts that cannot be simply factored into a ‘descriptive part’ and an ‘evaluative part’. Just about every one of the terms that Sen and

¹³ Sen introduces the concept of rich description in a discussion of Dobb’s response to charge that the labour theory of value is either metaphysical or ethical and hence not a proper part economics. For Dobb, the virtue of the theory lies in its descriptive focus on participation in productive activity and the processes of exchange as social relations between agents involved in the production of commodities: “Such an approach serves also to explain the place assigned to labour as human productive activity: why it was natural for Marx to place it in the very centre of the stage. Implied in this, indeed, is a virtual definition of productive *activity*, and correlatively of appropriation or exploitation, in the sense of the annexation or receipt of part of the fruits of production by those who have contributed no productive activity and lack any personal participation in the process of production *per se*. As such ‘exploitation’ is neither something ‘metaphysical’ nor simply an ethical judgement (still less ‘just a noise’) as has sometimes been depicted: it is a factual description of a socioeconomic relationship, as much as is Marc Bloch’s apt characterisation of Feudalism as a system where feudal lords ‘lived on labour of other men’.” (Dobb 1973, 145) For Sen Dobb’s descriptive interpretation of the labour theory of value is informed not just by possible predictive and normative interest, but also a “description of production that focused on human beings—giving a quantitative expression to human effort ‘in the struggle of man with nature to wrest a livelihood’ (Marx 1937, 19)” (Sen 1978, 177). Its potential virtues lies in its focus that is given by an interest in the “human effort directly or indirectly involved in the process production and exchange of commodities” (1980, 361–362).

his coworkers and followers use when they talk about capabilities—‘valuable functioning’, ‘functioning a person *has reason* to value’, ‘well nourished’, ‘*premature* mortality’, ‘self-respect’, ‘able to take part in the life of the community’—is an entangled term.” (2002, 62, orig. emphasis)

The conclusion commonly drawn by those attracted to something like Sen’s capabilities approach to welfare is that a value-free social science of the kind defended by the logical empiricists is neither possible nor desirable. In the formulation that Walsh offers: “if a theory may be black with fact and white with convention, it might well (as far as logical empiricism could tell) be red with values. Since for them confirmation *or* falsification had to be a property of a theory as a *whole*, they had no way of unraveling this whole cloth.” (1987, 862)

A notable feature of this criticism is that it largely proceeds independently of any reference of the work of particular logical positivists. The accounts are developed in terms of the influence of logical empiricism on the work of certain economists, in particular of Robbins. This is problematic for at least two reasons. First Robbins own relation to the logical empiricist tradition is itself not a straightforward one, especially given rationalist influences on his work (Hollis/Nell 1975, 196ff.). Second, while it might be the case that one can trace an influence of logical empiricism on the development of certain versions of neo-classical economics, logical empiricism is logically independent of any particular economic theory. As Walsh acknowledges, ‘positivist’ influences can be traced on writers in the classical tradition such as Robinson and Sraffa (Walsh 2008, 228 and *passim*). More significantly, quite different economic perspectives are found within and around the Vienna Circle itself. In particular, Otto Neurath’s practice is very different from that concurrently offered by Robbins and others in the neo-classical tradition.¹⁴ Neurath’s economic writings are self-consciously rich in their descriptions of the constituents of welfare. Indeed there are even parallels with his work on welfare and that of Sen. Clearly, the story is much less clear cut than the recent accounts suggest.

2. Neurath: Welfare, Values and Politics

Against the picture of logical empiricism’s influence on economics as a retreat from substantive concerns with human welfare, Neurath’s contributions to economics move in the exactly opposite directions. They can be understood as an attempt to revive a classical economics that returned to the question of the relation between social institutions and human welfare. His economics is Aristotelian in its insistence on making wealth understood as the physical and social conditions of human welfare the centre of the discipline.¹⁵ Neurath’s own account of

¹⁴ For instance, Neurath explicitly criticised Robbins’ ‘conventional’ definitions of National income, national capital, etc., in 1944, 49 fn. 47.

¹⁵ “We find the oldest origins of political economy in the science of household economics on the one hand and in the science of government on the other. The economics of free exchange has only become the object of examination at a relatively late stage. The object of theory

welfare was however Epicurean rather than Aristotelian. “[S]ocial Epicureanism’ deals with the happiness of human beings as an effect of social actions. What is the effect of different orders of life, of different measures, on the conditions of life of human beings and thereby on their happiness and unhappiness?” (1925 [2004, 415]) Happiness or the ‘quality of life’ was defined in subjective hedonic terms of the ‘pleasantness or unpleasantness of experience’ (1925 [2004, 416]). However, in practice Neurath’s economics focussed not on psychological states, but rather on the objective determinants of those states. Neurath did so in part in response to the problems of interpersonal comparisons of different subjective states.

Again against the standard story of the influence of logical empiricism on economics, Neurath allows that we can and do make everyday interpersonal comparisons of welfare:

“[W]e can compare the qualities of life of the same person at different times or the qualities of life of different persons. In ordinary life we make all these comparisons, by attempts at empathy with our own past or with our neighbours. We say, for example, that we are feeling happier in one year than in an earlier one, that a child at play is happier than a man who had been shot in the stomach.” (1917 [2004, 314])

However, he also argues that there are difficulties in dealing directly with welfare understood in term of subjective states: “Qualities of life of whole groups, however, are never given to us unmediated and so we can only deduce them and try to discover them by empathy. There is no telepathic communication between people which could give us information directly.” (1925 [2004, 420]) Comparisons are possible through consideration of the objective, publicly observable conditions of life associated with different qualities of life. Thus the passage just quoted continues as follows using the work of Engels on the conditions of workers in Manchester as an illustration:

“How did Engels compare the quality of life of English factory workers before and after the factory system? His basic assumption was that more work and less food, less clothing, and living in darker houses lowers the quality of life in general, especially as the cultural self-esteem of the workers had also been reduced. [...] Engels therefore contented himself with stating these changes of the condition of life. For our concrete investigation, the relief map of qualities of life is

and practice was wealth, where wealth was understood as real income in the widest sense. The question of how a people, how humanity can become happy and rich has stood in the centre of attention of the economic literature for a long time. For Adam Smith real income still plays a decisive role. Occasionally he seeks to establish the connection between certain economic orders and wealth. His followers have gradually chosen as main object of inquiry the order of monetary and credit relations, which he dealt with in detail, and let fade into the background entirely the question of how the different possible economic orders impinge on wealth.” (Neurath, 1916 [2004, 300–301]) After the third sentence quoted a footnote refers to and cites from Aristotle, *Nicomachean Ethics*, 1094: “[...] the end of economics is wealth”.

therefore replaced by an inventory of conditions of life.” (1925 [2004, 420])

In his own work on the standard of living Neurath employed just such a specification of the objective conditions of well-being.¹⁶

Three points are worth making here about Neurath’s account of the standard living. First, as the reference to ‘cultural self-esteem’ in the passage indicates, it includes not just the material or physical conditions in the everyday sense of the term, but also the social and institutional conditions of human welfare: “change in a man’s food and shelter is of less importance than a change in his state of being bullied or humiliated by certain institutions.” (1942 [1973, 425]) Self-government and freedom and other human relations belong to the “happiness conditions” of human beings (*ibid.*, 427). Particular acts of humiliation on the one hand and of social recognition on the other would form a full account of the conditions of life of an individual. Second, the conditions that constitute the standard of living are internally plural. “The attempts to characterize the standard of living are like those which try to characterize the ‘state of health’. Both are multidimensional structures.” (1937 [2004, 520]) The multi-dimensionality of welfare was combined with a particular form of holism about comparative judgements of different silhouettes of the conditions of life.¹⁷ The claim that there is no single measure, and in particular no single monetary measure, that can be used to compare welfare states is one that remains central to Neurath’s later economic writings and informs his contributions to the socialist calculation debates.¹⁸ Third, and this will be evident from the passages just quoted, Neurath’s welfare economics is descriptively rich. It employs a full array of thick ethical concepts terms such as ‘self-esteem’, ‘honour’, and ‘humiliation’.

Neurath’s welfare economics does not then accord with the picture of a descriptively impoverished economics which refuses to engage in interpersonal comparisons and remains critically unengaged. Indeed, there are clear parallels between the account of welfare that is offered by Sen and that offered by Neurath. Both are sceptical of the claim that welfare can be captured adequately in monetary terms. If, as Putnam puts it, the “leading idea of ‘the capabilities approach,’ [...] is that one cannot adequately judge the success of programs aimed at increasing welfare if one’s sole measure of welfare is a monetary one [...]” (2003, 400), then it is a leading idea that was clearly shared by Neurath. Both defend an internally pluralistic account of the components of welfare. Both defend the possibility of interpersonal comparisons from within that position. There are even parallels in the details of their accounts.¹⁹ Where they differ is in their account of welfare itself. Neurath starts from a form of social Epicureanism which is hedonistic in approach, whereas Sen’s theory of welfare has Aristotelian roots and is concerned with what people are able to do or become in dimensions of life that are significant to them, with their capabilities to achieve certain functionings

¹⁶ See, e.g., Neurath 1937.

¹⁷ See, e.g., Neurath 1910 [2004, 294].

¹⁸ On different aspects of this engagement of Neurath’s, see O’Neill 2002; 2004; 2006; Uebel 2005b; 2007a.

¹⁹ See the close examination by Lessmann in 2006 and 2007.

(beings and doings), rather than psychological states. The parallels between their accounts are akin to the parallels between the capabilities approach and that of recently revived hedonic approaches. They agree on details of what matters for human welfare, but items that appear on the hedonist's list as determinants of welfare—social relationships, working life, political participation, personal autonomy and the like—appear on the capabilities approach as constituents. For the hedonist they matter for well-being in virtue of standing in a contingent causal relationship to particular psychological states. On the capabilities approach, they appear as valuable functionings that are constitutive of welfare.²⁰

So Neurath does not offer the kind of impoverished social theory that is the object of recent critics of logical empiricism. His account is like that of Sen, an exercise in rich description. However, while Neurath's social and economic theory is an exercise in rich descriptions, his meta-theory might appear to point in the opposite direction to a form of radical minimalism. His commitment to physicalism and his related *index verborum prohibitorum* (1941b [1983, 217]; 1944, 51) might point in that direction. However, his physicalist approach as such does not involve any descriptive minimalism. The physicalist programme for the social sciences is often misunderstood.²¹ It does not involve the elimination of intentional vocabulary or some reductive programme for reducing the sciences to physics. Rather in its basic sense 'physicalism' refers to the doctrine that all statements in the sciences, social sciences, and everyday life should be controllable by statements that are capable of translation into terms that refer to spatio-temporal particulars. Properly understood it is as such consistent with rich descriptions of spatio-temporal particulars. Consider the following example of a physicalist expression which Neurath offers:

“Yesterday I was awed and moved as I entered the gigantic cave’.
Only spatio-temporal expressions are covered by the proposal of Logical Empiricism. (‘A person was moved entering a cave’ is such a spatio-temporal expression of course!) and therefore we speak of the ‘physicalist’ approach to Logical Empiricism, but not because it is suggested to reduce all statements to so-called ‘physical’ ones.”
(1941a, 148)

Nothing in physicalism as such implies a rejection of rich descriptions.

Where the descriptive impoverishment charge against his meta-theory may have more bite is in his claim that value terms should be eliminated from the social sciences. Neurath makes two standard logical empiricist moves on the use of value laden terms in social sciences. The first is that we eliminate their normative force by relativising the terms to speakers and communities. Terms like ‘justice’ can be used only if relativised to a group. One can then speaking empirically of a state of affairs being “just according to the rules of a certain nation or tribe at a certain date” (1941a, 147). The second is the elimination of the normative terms themselves: “we propose to avoid praising and blaming

²⁰ On the distinction between constituents and determinants of welfare see Dasgupta 2001, ch. 3 and 2005, section 3.

²¹ For an extended argument for this, see Uebel 2007b.

words in articles and books on history: one man ‘kills’ another man, he does not ‘murder’ or ‘assassinate’ him.” (1941,147; cf. 1935 [1987, 74]) Whether either move is successful is another matter to which we return below. To be sure, Neurath allowed that ethical principles could enter independently, and given agreement on the formulation of the principles, conclusions would then be open to empirical investigation: “The moral evaluation of systems of wealth distribution, say the free market or some other system, is amenable to a scientific formulation once one has agreed to the principle serving as the basis for the moral evaluation.” (1913 [2004, 298]) However, the investigation of the social world itself should be value-free.

3. The Politics of Values

The rejection of a non-natural sphere of value and the elimination of a particular kind of moral vocabulary from the social sciences within the Vienna Circle needs to be understood in its context. The assumption that runs through much of the work of the recent critics is that the aim of value-freedom was to free social science from critical engagement with the social world and that hence its implications were fundamentally conservative. This would be totally to mis-characterise Neurath’s own project. His motivation was not to eliminate social criticism but to give a particular characterisation of a social scientific approach, in particular one that saved it from a particular form of moralism—a pseudo-scientific moralism associated precisely with the conservative German academic ‘mandarins’ against whom Weber had invoked his basic strictures on value-free science already in 1904 (provoking in turn the debates in the Verein für Sozialpolitik that Neurath participated in).²²

An additional point to notice here is that a rejection of a non-natural sphere of value was not peculiar to the left Vienna circles. It was shared for example by the Frankfurt School in its earlier materialist phase. The view that an idealist metaphysics of value serves to reconcile individuals to their fate in existing social orders was common to both the left-Vienna and Frankfurt traditions at this point in their development. Thus in Horkheimer’s early writings one finds a similar rejection of a “metaphysically grounded morality” (1933a [1972, 44]).²³ The later Frankfurt shifted in its appraisal of the idealist legacy in philosophy.²⁴ Earlier on, however, the shared object of their criticism was a particular form of idealism about value and commitment to a politics on “the earthly plane” (Neurath 1931 [1973, 295]). The central object of the left-Vienna critique were ethical systems postulating absolute or unconditional values determined either by direct intuition or by transcendental argument. What is typically overlooked then is that evaluative discourses of other sorts may still find redemption by re-interpretation. There’s value and there are values, we might say. Whereas

²² See Neurath 1910 and 1913.

²³ Compare Neurath 1932a [1983, 78–79].

²⁴ For a discussion of this parallel and the aborted collaboration between Horkheimer and Neurath, see O’Neill/Uebel 2004, with further references.

idealists favour a one-for all strategy, it remains open to logical empiricists to look at different evaluative discourses on their own merit. This strategy deserves more consideration than it has received but it is highly pertinent to our topic here.

Criticism of an idealist view of morality that appeals to some transcendent domain of values characterises all of Neurath's remarks on ethics. In his later years, the shift from the 'earthly plane' of the happiness and suffering of particular individuals and the conditions of their well-being to a transcendent level became associated particularly with totalitarianism, but he pointed out that this shift can lead to moral monstrosities also on the personal level.²⁵ But Neurath had to concede the relation between idealist metaphysics about values and the commitment to totalitarianism is not a necessary relationship. A transcendental Kantian ethic is consistent with both liberal and socialist politics and has been defended as such in both traditions. Neurath's proper claim is the more minimal claim that a focus on well-being of individuals on the earthly plane, on the concrete and everyday, and a scepticism of moral abstractions is in fact less likely to lead to absolutist and totalitarian enthusiasms.

In context then, the defence of a form of non-cognitivism and the defence of a value-free social science could be understood as having their own political points. They represent a route away from the dangers of totalitarian enthusiasm and pseudo-scientific moralising. However, there are problems with the position even so placed in context. There is a difference between rejecting moralising criticisms on the one hand and the attempt to eliminate any evaluative vocabulary from the social sciences on the other. Not all evaluative criticism is necessarily moralistic in this sense. One need not be committed to an idealist metaphysics in order to hold a cognitivist meta-ethics. One might, for example, hold a cognitivist form of naturalism, or a non-naturalist theory of value which still takes the referent of value terms to be ordinary observable states or objects (Putnam, 2002, 101ff.). The response might be pressed further that Neurath's own position has internal tensions.

Two kinds of question might be pressed here. The first is whether the kinds of welfare comparison and comparative political economy that Neurath engages in can really proceed without the appeal to some set of evaluative claims. Could the presentation of different social silhouettes of different social orders have the critical force it does have without appealing, at least implicitly so, to some set of standards? The second question is whether Neurath's own practice of rich description in his welfare economics can survive his own relativising and eliminativist meta-programme. Can his first-order use of thick ethical concepts to characterise the conditions of human well-being be rendered consistent with the second-order claims he makes about the elimination of the normative concepts from the social sciences?

²⁵ The type anti-absolutist argumentation here described became more pronounced in later years and is evident particularly in his correspondence with Carnap, e.g., in his letter to Carnap of 25 September 1943, *Carnap Nachlass*, Archives of Scientific Philosophy, Hilman Library, University of Pittsburgh. For a discussion see O'Neill 2003.

4. Social Science: Empirical and Critical

The first of the questions about the evaluative claims implicit in Neurath's comparative political economy is one that was pressed by G. D. H. Cole in his correspondence with Neurath. Cole makes the following observation about Neurath's use of social silhouettes:

“I do not think the result of looking at things in this way is that one is left simply with a number of diverse patterns of which one can say ‘Here is pattern A’ and ‘Here is pattern B’, and so on, and leave it at that. I think that a pattern can be good or bad in the same sense that the work of art can be good or bad. What it cannot be is *the* good (or, of course, *the* bad). In other words, there may be no single thing of which one can say ‘This is good absolutely and in all circumstances’, but there may be patterns of which one can say ‘This pattern is very much better than that’, and this implies a standard of judgement, that is of valuation, which I believed to be indispensable and yet incapable of being reduced to scientific terms. I am not sure how far you agree with this, which amounts in my mind to a pluralistic conception of values which still remain values, though they are not referable to a single and unique standard.”²⁶

Cole here granted a number of Neurath's central claims in Neurath's position. He rejected the claim that there are absolute or transcendental standards of value. He also rejected any form of monism, that there is a single standard for comparing different social orders. Values are plural. The need for judgement akin to that for a work of art is similar to one that Neurath himself employed in his early writing (e.g., 1910). What Cole denied was that we can make welfare comparisons without appealing to evaluative claims about ‘better’ or ‘worse’. Neurath responded as follows:

“Should you agree with me that in any case, where we are using the terms ‘good’ or ‘bad’ we can use them only with the addition ‘for somebody’, then I should add, that we have to describe, what kinds of pleasure, happiness etc you want to include. Then we shall reach statements of this type: should we alter the social actions from A to B, then the Happiness of the group X will increase, the Happiness of the group Y will decrease etc. This description of increasing or decreasing happiness, as vaguely as it may be possible, is a scientific and empiricist statement as any other.”²⁷

Neurath here makes two claims about welfare comparisons about what is good for a person: the first is that we need to specify the content of the good with

²⁶ Cole to Neurath, 26 January 1945, *Neurath Correspondence*, ISOTYPE Collection, Department of Typography and Visual Communication, University of Reading.

²⁷ Neurath to Cole, 3 September 1945, *Neurath Correspondence*, ISOTYPE Collection, Department of Typography and Visual Communication, University of Reading.

what are the constituents of well-being—the ‘kinds of pleasure, happiness etc you want to include’. The second is that once we have specified the content, we can make empirical claims about the social determinants of changing welfare standards of different social groups. The difficulty that those committed to the entanglement of values and facts might press is that even if the status of the investigation of the social determinants might proceed in a value-free manner, the specification of the content of welfare cannot. The kind of rich specification of welfare concepts that Neurath himself offers, with its use of thick ethical concepts, is a case in point.

Is Neurath’s use of rich descriptions consistent with his relativising and eliminativist strategies to remove unexplicated normative terms from the social sciences? Can his use of a variety of thick evaluative concepts²⁸ in specifying the conditions of well-being be rendered consistent with a meta-theory that looks more austere in what it allows? If it cannot, are there other empiricist strategies that are open to him? Neurath’s proposal that “we [...] avoid praising and blaming words” might be consistent with his welfare economics, but only if it is a proposal to avoid specifically moralising terms, not if it is a proposal to avoid thick evaluative concepts more generally. Moreover, both the moves that Neurath makes to avoid the use of “praising and blaming words” are open to well-rehearsed rejoinders, if interpreted to exclude all evaluative terms. The first, the relativisation of terms to the group studied, is often not possible since the evaluative terms like justice are themselves contested terms within groups studied. The second, elimination of ‘thick’ evaluative terms, is not possible without loss of information. As Sen once noted (1980, 367), the elimination of the terms “poverty” and “unemployed” due to their evaluative connotation and their replacement by the term “weaker section of the Indian population” in official Indian documents is also descriptively misleading: it is the ‘weaker’ section of the population that does most of the heavy work. There is no possibility of replacing thicker evaluative concepts of this kind from our descriptions of the social world. As we saw, in his own practice Neurath did not do so. Are there other resources within the empiricist tradition that would allow the more permissive practice that Neurath actually uses in his comparative political economy?

The standard move within the logical empiricist tradition at this juncture is to retain the use of such value laden thick concepts, but to analyse them as a conjunction of a factual component that does the describing and an evaluative component to be given a non-cognitive reading. Nagel for example distinguishes between the ‘characterising’ or ‘descriptive’ content and ‘appraising’ content of evaluative concepts in the social science.²⁹ Thus to use the example he employs from the biological sciences, that of ‘anaemia’, the characterising force of the concept can be given a specific empirical content in terms of a specific range of

²⁸ We use the term ‘thick evaluative concepts’ as a shorthand here. It would be more precise to talk of thick and thin *uses* of concepts. For example the term ‘good’ in its attributive uses is thick. Where we talk a person being a ‘good logician’ or a ‘good goal keeper’ we are making both an appraisal and claim about the kinds of dispositions the person will exhibit. Neurath’s use of “good for” in the welfare context is thick in this sense.

²⁹ See Nagel 1961 [1979, 492ff.]. Compare the contrasts drawn in Stevenson 1944, 207; for a sympathetic discussion see Keat 1981, 38–43, and his contribution to this volume.

red corpuscles in the blood. This can be separated from the appraising force, that “since an anaemic animal has diminished powers of maintaining itself, anemia is an undesirable condition” (1961 [1979, 493]). In using the evaluative terms in social scientific discussion we confine ourselves to the characterising content of concepts, not their appraising content. Nagel suggests that the same distinction can be employed in relation to terms in the social sciences such as “mercenary”, “deceitful” and “cruel” (1961, 494).

It is this strategy of attempting to disentangle the evaluative and empirical content of concepts that is criticised in the passage from Putnam quoted earlier. There are reasons to be sceptical about the possibility of prising apart the factual and evaluative components of thick concepts. The central objection here is that the descriptive content of such concepts is not given, such that, for each new instance we can decide how to continue in the application of the concept to new cases.³⁰ Rather, it is in virtue of the appraising force of the concept we know how to go on to make new applications. There is no descriptive content that we can prise away from the evaluative which will determine in advance how we should go on in the application of the concept. Take for example the concept of a ‘cruel unusual punishment’: the idea that there are some descriptive marks of cruel punishments that we could use to ascertain, without referring to the ‘evaluative component’, to our responses to the new punishment, is implausible. It is in virtue of the evaluative content that we are able to make the judgement in the new case. To put the point in Nagel’s terms, the characterising force of the concepts cannot be determined independently of the appraising force.

These points can be granted. However, the argument does not end there. There is a distinction to be drawn between recognising the evaluative point of a concept and endorsing that evaluative point. Indeed the possibility of making this distinction is a necessary condition for reasoned ethical deliberation itself. To take an often used example, if the use of the thick ethical term ‘chastity’ could only be understood from within an ethical form of life in which it was endorsed, the very possibility of ethical criticism or even self-reflection would be ruled out. Those who want to criticise a form of life in which chastity is a central value need to be able to understand the ethical point of the concept and the variety of different kinds of behaviour that can count as chaste or unchaste without endorsing the value judgements employing the concepts. And those within the practice who want to think reflectively about whether chastity should have the role it has in their lives must be able to consider the possibility that unchaste actions need not be the vices they take them to be. Deliberative conversation about values across different ethical perspectives and practices and reflection within a particular ethical perspective requires the possibility that recognition and endorsement can be prised apart.

The possibility is also a condition of a particular kind of empirically grounded criticism within the social sciences which requires that it is possible to consider the truth of claims employing normative terms without endorsing those terms.³¹

³⁰ For a response to this point see Blackburn 1992 and for a reply see Dancy 1995.

³¹ There is a related ambiguity in the way that the concept of what counts as purely positive statements in the social sciences. Consider the following from Hollis/Nell: “‘Positive’ statements

For example, the critic of a negative conception of freedom can still appraise the empirical truth of claims about the relations of markets and negative freedom without endorsing a negative conception of freedom. Indeed it is important that the critic should be able to raise two distinct kinds of critical question. One is whether a purely negative conception of freedom captures all that matters about freedom. The second is whether the market actually is a condition of negative liberty or not. One central point of a defensible version of a doctrine of value freedom is this—that the truth or falsity of social scientific claims about the social world do not turn upon the moral values endorsed by the social theorist. They are open to appraisal in terms of empirical evidence. Both the critic and defender of capitalism can empirically investigate whether and the degree to which capitalist relations are exploitative or whether capitalist social relations are a condition of negative liberty. Both sides might agree on the empirical claims but disagree on their normative positions. However, the possibility of rational deliberation on such normative differences in turn itself relies upon the possibility of distinguishing understanding the point of a normative concept and endorsing it. If only those who endorsed a concept could use it, then no debate is possible. It is this position rather than its opposite which would lead to a form of irrationalism about value disputes. A strong version of the fact-value entanglement thesis would leave social theorists with different evaluative commitments unable to converse either about the central empirical and normative claims that divide them.

The truth of the empirical claims in social science does not turn on the ethical commitments of the theorist. Empiricism in this sense is consistent with a descriptively rich critical social theory. Empiricism does not require the elimination of evaluative terms or demand the possibility of disentangling the evaluative and descriptive components of thick evaluative terms in the sense that the characterising force of ethical terms can be ascertained independently of their appraising force. It can however leave room for a critical social theory that employs an evaluative vocabulary but which sustains a significant difference between empirical and normative content. There are differences as to what position one might take on substantive claims about status of value claims and the authors of this paper take different positions. However, this perennial philosophical problem need not be resolved before we can make sense of the notion of critical empirical social science. While there may be internal tensions between the meta-theory and social scientific practice of members of the left Vienna Circle, there is scope within

are all those which a dispassionate observer could make while remaining ethically neutral. They can include facts about the ethical norms of the agents studied but must not add any ethical reckoning of those norms." (1975, 8) There is a certain ambiguity about the first sentence. A being that stood outside on any ethical perspective, who could not understand the point of ethical concepts in life, would not be able to use thick ethical concepts which are essential to describing social life. However, it does not follow that a description requires a commitment to some particular ethical perspective. In understanding the point of some particular ethical concept, the theorist need not endorse it. Indeed, for reasons we have just noted, the possibility of understanding without endorsement is a condition of any rational deliberation and reflection about values.

their empiricist framework for a critical and descriptively rich social theory. One example is the political economy of Otto Neurath himself.

Bibliography

- Adorno, T., et al. (1969), *Der Positivismusstreit in der deutschen Soziologie*, Neuwied.
Trans. as: *The Positivist Dispute in German Sociology*, London 1976
- Beckermann, A. (1979), Logischer Positivismus und radikale Gesellschaftsreform, in: *Analyse & Kritik* 1, 30–46
- Baurman, M./A. Leist/D. Mans (1979a), Zum Programm einer kritischen Sozialwissenschaft – Empirie und Theorie, in: *Analyse & Kritik* 1, 1–29
- / — / — (1979b), Zum Programm einer kritischen Sozialwissenschaft – Theorie der gerechten Gesellschaft und Ideologiekritik, in: *Analyse & Kritik* 1, 105–124
- Blackburn, S. (1984), *Spreading the Word*, Oxford
- (1992), Through Thick and Thin, in: *Proceedings of the Aristotelian Society* 66, 258–299
- Dahms, H. J. (1994), *Positivismusstreit. Die Auseinandersetzungen der Frankfurter Schule mit dem logischen Positivismus, dem amerikanischen Pragmatismus und dem kritischen Rationalismus*, Frankfurt
- Dancy, J. (1995), In Defence of Thick Concepts, in: *Midwest Studies in Philosophy* 20, 263–279
- Dasgupta, P. (2001), *Human Well-Being and the Natural Environment*, Oxford
- (2005), What Do Economists Analyze and Why: Values or Facts?, in: *Economics and Philosophy* 21, 221–278
- Dobb, M. H. (1973), *Theories of Value and Distribution since Adam Smith: Ideology and Economic Theory*, Cambridge
- Gibbard, A. (1990), *Wise Choices, Apt Feelings. A Theory of Normative Judgement*, Oxford
- Habermas, J. (1963), Analytische Wissenschaftstheorie und Dialektik. Ein Nachtrag zur Kontroverse zwischen Popper und Adorno, in: M. Horkheimer (Hrsg.), *Zeugnisse. Theodor Adorno zum sechzigsten Geburtstag*, Frankfurt. Trans. as: The Analytical Theory of Science and Dialectics, in: T. Adorno et al. [1976], *The Positivist Dispute in German Sociology*, London, 131–162
- Hegselmann, R. (1979a), Otto Neurath – Empiristischer Aufklärer und Sozialreformer, in: O. Neurath, *Wissenschaftliche Weltauffassung, Sozialismus und Logischer Empirismus*, Frankfurt, 7–78
- (1979b), *Normativität und Rationalität. Zum Problem praktischer Vernunft in der Analytischen Philosophie*, Frankfurt
- (1979c), Grenzen der wissenschaftlichen Weltauffassung des Wiener Kreises, in: *Analyse & Kritik* 1, 47–50
- Horkheimer, M. (1933), Materialismus und Metaphysik, in: *Zeitschrift für Sozialforschung* 2, 1–33. Trans. as: *Materialism and Metaphysics*, in: M. Horkheimer (1972), *Critical Theory. Selected Essays*, New York, 10–46.
- Hollis, M./E. Nell (1975), *Rational Economic Man: A Philosophical Critique of Neo-Classical Economics*, Cambridge
- Keat, R. (1981), *The Politics of Social Theory*, Oxford
- Köhler, W. (1979a), Zerstört der Logische Empirismus die Praktische Rationalität?, in: *Analyse & Kritik* 1, 51–59

- (1979b), Logischer Empirismus und normative Entscheidungstheorie, in: *Analyse & Kritik* 1, 192–199
- Lessmann, O. (2006), *Konzeption und Erfassung von Armut. Vergleich des Lebenslage-Ansatzes mit Sen's 'Capability'-Ansatz*, Berlin
- (2007), A Similar Line of Thought in Neurath and Sen: Interpersonal Comparability, in: E. Nemeth/S. W. Schmitz/T. Uebel (eds.), *Otto Neurath's Economics in Context*, Dordrecht, 115–130
- Little, I. (1957), *A Critique of Welfare Economics*, Oxford
- Lüscher, R. (1979), Die linke Ecke des Wiener Kreises, in: *Analyse & Kritik* 1, 182–191
- Mohn, E. (1968), *Der Logische Positivismus. Theorien und politische Praxis seiner Vertreter*, Frankfurt/M.
- Nagel, E. (1961), *The Structure of Science. Problems in the Logic of Scientific Explanation* (Repr. Indianapolis 1979)
- Nemeth, E./S. W. Schmitz/T. Uebel (2007) (eds.), *Otto Neurath's Economics in Context*, Dordrecht
- Neurath, O. (1910), [Untitled contribution to discussion] Über die Produktivität der Volkswirtschaft, in: *Schriften des Vereins für Sozialpolitik* 132, 599–602. Trans. as: Remarks on the Productivity of Money, in: O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 292–296
- (1913), Über die Stellung des sittlichen Werturteils in der wissenschaftlichen Nationalökonomie, in: *Äusserungen zur Werturteilsdiskussion im Ausschuss des Vereins für Sozialpolitik*, no editor/publisher/place, 31–32. Repr. in Neurath (1981), *Gesammelte philosophische und methodologische Schriften*, ed. by R. Haller/H. Rutte, Vienna, 69–70. Trans. as: On the Role of Moral Value Judgements in Economic Science, in: O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 297–298
- (1916), Die Naturalwirtschaftslehre und der Naturalkalkül in ihren Beziehungen zur Kriegswirtschaftslehre, in: *Weltwirtschaftliches Archiv* 8, 245–258. Trans. as: Economics in Kind, Calculation in Kind and Their Relation to War Economics, in: O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 299–311
- (1917), Das Begriffsgebäude der Wirtschaftslehre und seine Grundlagen, in: *Zeitschrift für die gesamte Staatswissenschaft* 73, 484–520. Trans. as: The Conceptual Structure of Economic Theory and its Foundations, in: O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 312–341
- (1925), *Wirtschaftsplan und Naturalrechnung*, Berlin. Trans. as: Economic Plan and Calculation in Kind, in: O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 405–465
- (1931), *Empirische Soziologie*, Vienna. Excerpts trans. as: Empirical Sociology, in: O. Neurath (1973), *Empiricism and Sociology*, ed. by M. Neurath/R. S. Cohen, Dordrecht, 319–421
- (1932a), Soziologie im Physikalismus, in: *Erkenntnis* 2, 393–431. Trans. as: Sociology in the Framework of Physicalism, in: O. Neurath (1983), *Philosophical Writings, 1913–1946*, ed. by R. S. Cohen/M. Neurath, Dordrecht, 58–90
- (1935), *Was ist rationale Wirtschaftsbetrachtung?*, Vienna. Trans. as: What is Meant by Rational Economic Theory?, in: B. McGuinness (ed.), *Unified Science*, Dordrecht, 67–109

- (1937), Inventory of the Standard of Living, in: *Zeitschrift für Sozialforschung* 6, 140–151. Repr. in O. Neurath (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht, 513–526
- (1941a), The Danger of Careless Terminology, in: *The New Era* 22, 145–150
- (1941b), Universal Jargon and Terminology Science, in: *Proceedings of the Aristotelian Society* 41. Repr. in O. Neurath (1983), *Philosophical Writings, 1913–1946*, ed. by R. S. Cohen/M. Neurath, Dordrecht, 213–239
- (1942), International Planning for Freedom, in: *New Commonwealth Quarterly*, April issue 281–292, July issue 23–28. Repr. in O. Neurath (1973), *Empiricism and Sociology*, ed. by M. Neurath/R. S. Cohen, Dordrecht, 422–440
- (1944), *Foundations of the Social Sciences*, Chicago
- (1973), *Empiricism and Sociology*, ed. by M. Neurath/R. S. Cohen, Dordrecht
- (1983), *Philosophical Writings, 1913–1946*, ed. by R. S. Cohen/M. Neurath, Dordrecht
- (2004), *Economic Writings. Selections 1904–1945*, ed. by T. E. Uebel/R. S. Cohen, Dordrecht
- O’Neill, J. (2003), Unified Science as Political Philosophy, in: *Studies in History and Philosophy of Science* 34, 575–596
- (2004), Ecological Economics and the Politics of Knowledge, in: *Cambridge Journal of Economics* 28, 431–447
- (2006), Knowledge, Planning and Markets. A Missing Chapter in the Socialist Calculation Debate, in: *Economics and Philosophy* 22, 1–24
- /T. Uebel (2004), Horkheimer and Neurath: Restarting a Disrupted Debate, in: *European Journal of Philosophy* 12, 75–105
- Putnam, H. (2002), *The Collapse of the Fact/Value Dichotomy and Other Essays*. Cambridge/MA
- (2003), For Ethics and Economics without Dichotomies, in: *Review of Political Economy* 15, 395–412
- /V. Walsh (2007), Facts, Theories, Values and Destitution in the Works of Sir Partha Dasgupta, in: *Review of Political Economy* 19, 181–202
- Robbins, L. (1932), *On the Nature and Significance of Economic Science*, London
- (1938), Interpersonal Comparisons of Utility, in: *The Economic Journal* 48, 635–641
- Samuelson, P. (1937), A Note on Measurement of Utility, in: *Review of Economic Studies* 4, 155–161
- (1938), The Empirical Implications of Utility Analysis, in: *Econometrica* 5, 344–356
- Sen A. (1967), The Nature and Classes of Prescriptive Judgements, in: *The Philosophical Quarterly* 17, 46–62
- (1978), On the Labour Theory of Value: Some Methodological Issues, in: *Cambridge Journal of Economics* 2, 175–190
- (1980), Description as Choice, in: *Oxford Economic Papers* 32, 353–369. Repr. in Sen (1982), *Choice, Welfare and Measurement*, Cambridge/MA, 432–49
- (1987), *On Ethics and Economics*, Oxford
- (1997), *On Economic Inequality*, 2nd ed., Oxford
- (2005), Walsh on Sen After Putnam, in: *Review of Political Economy* 17, 107–113
- Stevenson, C. L. (1944), *Ethics and Language*, New Haven
- Uebel, T. (2005a), Political Philosophy of Science in Logical Empiricism: The Left Vienna Circle, in: *Studies in History and Philosophy of Science* 36, 754–773
- (2005b), Incommensurability, Ecology and Planning. Neurath in the Socialist Calculation Debate, 1919–1928, in: *History of Political Economy* 37, 311–342

- (2007a), Neurath as an Austrian Economist. Behind the Scenes of the Early Socialist Calculation Debate, in: E. Nemeth/S. W. Schmitz/T. Uebel (eds.), *Otto Neurath's Economics in Context*, Dordrecht, 37–59
- (2007b), Philosophy of Social Science in Early Logical Empiricism: The Case of Radical Physicalism, in: T. Uebel/A. Richardson (eds.), *The Cambridge Companion to Logical Empiricism*, Cambridge, 250–277
- Walsh, V. C. (1987), Philosophy and Economics, in: J. Eatwell/M. Milgate/P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, vol 3, London, 861–869
- Walsh, V. C. (1996), *Rationality, Allocation and Reproduction*, Oxford
- (2000), Smith after Sen, in: *Review of Political Economy* 12, 5–25
- (2003), Sen after Putnam, in: *Review of Political Economy* 15, 315–394
- (2008), Freedom, Values and Sen: Towards a Morally Enriched Classical Economic Theory, in: *Review of Political Economy* 20, 199–232
- Weber, M. (1904), Die Objektivität sozialwissenschaftlicher und sozialpolitischer Erkenntnis, in: *Archiv für Sozialwissenschaft und Sozialpolitik* 19. Trans. as: *Objectivity in Social Science and Social Policy*, in: M. Weber (1949), *The Methodology of the Social Sciences*, 49–112
- (1916), Der Sinn der Wertfreiheit der soziologischen und ökonomische Wissenschaften, in: *Logos* 7. Trans. as *The Meaning of 'Ethical Neutrality'*, in: M. Weber (1949), *The Methodology of the Social Sciences*, 1–47
- Weber, M. (1949), *The Methodology of the Social Sciences*, ed. by E. A. Shils, New York
- Williams, B. (1985), *Ethics and the Limits of Philosophy*, London