

nature on Gray's view? And what follows from it? The fleshing out of these questions makes up the bulk of Gray's book.

In Gray's account, Berlin views humanity as self-transforming, inventing a 'variety of natures' across history and manifesting itself in assorted cultures. This entails rejecting the notion of the human being as situated in relation to a natural order, however this order might be conceived. What characterizes the human as human, then, is the capacity for choice:

Berlin does not by human nature mean us to understand any unvarying human passions or needs. Rather he takes the capacity for choice, and for a self-chosen form of life, to be itself constitutive of human beings, and to distinguish them from other animal species, by introducing an element of indeterminacy into their nature and conduct, which could only be eradicated with the elimination of the capacity for choice itself. [p. 14]

The most distinctive feature of the human species is that it is by nature featureless. It is in history that humanity invents a diversity of natures that carry with them wildly different goods and evils, excellences and imperfections. This story of human nature as an historical form of self-creation, Gray argues, supports Berlin's 'master idea': objective pluralism.

Objective pluralism as a doctrine in moral and political theory is based on the conviction that human goods and evils are real, multiple, and often conflict; that they are, in fact, rarely harmonious; and that, on certain tragic occasions, the conflict of goods or evils is incommensurable, where there is no rational, *a priori* way of deciding the conflict, and where any decision will be unavoidably antinomic in its consequences. The texture of moral and political life is fraught with such conflicts: a political choice for liberty conflicts with a choice for equality; justice and mercy can be pointedly at odds; freedom of privacy may conflict with freedom of information; a citizen or statesman may have to choose between supporting a 'murderous traditional tyranny' and a regimented, intrusive regime that suffocates economic and political liberties (pp. 56-57). Moral tragedy is exacerbated by our finitude: a condition of 'moral scarcity' holds which decisively reduces options – one doubtfully could be, in the same life, both a neurosurgeon and a professional athlete. When such choices loom, according to Gray, Berlin's thought teaches us the failure of reason; what is left is 'groundless commitment', indeterminate and even irrational (p. 142). Indeed, Gray sees an anticipation of Berlin's vision in Max Weber, for whom the 'war of the gods' was inextinguishable.

Gray's Berlin situates himself 'against the current' of Western thought, which falls prey, both authors believe, to the 'Ionian fallacy' – the view that all goods are at least in principle commensurable and that reason can provide rationally binding solutions to all moral problems. Plato, Aristotle, Christianity, Marxism, and virtually the whole of the liberal tradition from Hobbes to Rawls, it is argued, commit this fallacy, which yields the germ of totalitarian politics. Thus, Gray claims, the doctrine of objective pluralism, while anticipated by the Greek Sophists, Machiavelli, and the aforementioned Weber, only reaches its full articulation with Berlin, and, presumably, Gray himself. For while Berlin defends liberal regimes as preferable because they allow the diversity of conceptions of life greater breathing room, Gray contends that the doctrine of objective pluralism subverts liberalism itself. In other words, non-liberal forms of human flourishing may only find shade in non-liberal forests. Certain virtues may only grow in non-liberal, and indeed, even illiberal gardens. Gray's concluding chapter suggests that Berlin's liberalism is sabotaged by the very conception of human life we have just summarily presented. There is nothing in human nature, in Gray's estimation, which would allow us to privilege certain modes of human flourishing over others. In refusing to take this step, Gray maintains, Berlin fails to fully grasp the implications of his doctrine.

There are several problems with all this. First let us attend to a difficulty found in both Berlin and Gray, which concerns their failure to appreciate the existence of what might be called 'classical pluralism'. As Pierre Manent has reminded us in his new book *La Cité de l'homme* (1994), Aristotle was clearly aware of the incommensurability of goods without at the same time surrendering the necessity of prudentially balancing them. Gray's presumption that Berlin has launched a fundamentally new problematic ignores the classical world's comprehension of the political question in all of its amplitude, tragedy, and grandeur, particularly in Aristotle's *Politics*.

Secondly, while it is clear that Berlin has frequently emphasized the need for balanced, moderate judgement amidst the indeterminacy of the human world, most recently in *The Crooked Timber of Humanity* (1990), he has not sufficiently explored the intricacies of practical wisdom. Gray wavers between admitting the role in Berlin 'of reasonings about conflicting values in particular cases' (p. 156) and 'reasonable trade-offs among conflicting goods' (p. 155) – which would imply the possibility of *phronesis* in situations of conflicting goods – on the one hand, and stressing

'groundless decision' (p. 158) when confronted with such conflicts, on the other. Gray certainly overstates the latter tendency in Berlin throughout his study, but enough ambiguity exists in Berlin's work to allow Gray's interpretation occasional textual support.

Relatedly, Gray exaggerates the historicist dimension of Berlin's thought. Human nature, in Berlin's view, is more constant across history and culture than Gray concedes. As Berlin noted in a recently published collection of interviews:

The differences among peoples and societies can be exaggerated. No culture that we know lacks the notions of good and bad; true and false. Courage, for example, has, so far as we can tell, been admired in every society known to us. There are universal values.

Without these universals, the 'minimum content of natural law' – a notion borrowed from H.L.A. Hart – becomes unthinkable, as Gray recognizes (p. 64). But by playing up Berlin's historicism, and playing down his attachment to universalism, Gray makes it difficult to see how even a minimal natural law articulated along Hartian lines could be defended. Berlin becomes a defender of the irrationalism of the Counter-Enlightenment rather than a pessimistic defender of reason, a disenchanted liberal in the spirit of Benjamin Constant. The conceptual dilemmas encountered by Gray in the final chapter, 'Agonistic Liberalism', where the normative differences between pluralism and relativism are almost indiscernible, are rooted in this severance from a richer theory of human nature. We are left with irrational commitment to the form of life we inhabit, or irrational opposition to the form of life we despise. The liberal regime becomes one way of life among others with no grounding in anything beyond the accidental and contingent.

Gray's *Berlin* calls attention to the fact that the liberal regime, for all of its possibilities, has a cost, that it may undermine the very excellences which it was intended to preserve or crowd out goods it is at root incompatible with. We cannot afford to pretend this loss is unimportant, or that it is not occurring. But Gray's underestimation of his subject's attachment to a more substantial conception of human universality prevents him from fully comprehending Berlin's thought, and allows for no principled position to generate coherent cross-cultural comparisons, let alone judgements. How can we even make sense of the ideas of goods, evils, excellences, and human flourishing that Gray's book abounds in on the basis of the author's Rorty-like historicism (a historicism increasingly prominent in each successive work Gray has published over the last few years)?

Yet Berlin, in spite of the empathy (what Vico referred to as *fantasia*) exhibited by his essays and books on figures as diverse as De Maistre, Hamann, Montesquieu, Herder, and Herzen, – all of them seemingly capturing an essential attribute of what it means to be fully human – remains ambivalent on the question of human nature. This ambivalence haunts his writings, as it haunts modernity. We are reminded of the ironic Benjamin Constant, torn between political support for the Enlightenment project in its less extreme forms and private dissatisfaction with its essential emptiness, what it left unfulfilled in the human spirit. Like Constant, Berlin suspends himself between history and nature, refusing to collapse one into the other, refusing, finally, to ask the most difficult of philosophical questions: *Quid sit homo*.

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Hoyningen-Huene, Paul, *Reconstructing Scientific Revolutions: Thomas S. Kuhn's Philosophy of Science*, trans. Alexander T. Levine, (Chicago, The University of Chicago Press, 1993) pp. xx, 310, US\$43.75 (cloth), US\$18.25 (paper).

The work of Thomas S. Kuhn has exerted a profound and enduring influence on historical, philosophical and social studies of science in the latter part of the twentieth century. The nature of this influence was presaged by Kuhn himself in the opening lines of his major work, *The Structure of Scientific Revolutions* (2nd ed., 1970). Kuhn claimed that granting an enhanced role to history in our thinking about science might lead to a 'decisive transformation in the image of science by which we are now possessed' (Kuhn, 1970, p. 1). This prediction has proved correct. Granting such a role to history has led to challenges to traditional philosophical ideas about the nature and methodology of science, stimulated reflection on the historiography of science and promoted sociological analysis of epistemic aspects of science.

There is a massive literature relating to Kuhn. Yet until now no monographic treatment has been devoted solely to the philosophical aspects of Kuhn's account of science. *Reconstructing Scientific Revolutions* remedies this situation by providing an extremely detailed and impressively

documented scholarly examination of Kuhn's philosophy of science. Since *The Structure of Scientific Revolutions* contains the fullest development of Kuhn's views, it tends to be the focal point of Hoyningen-Huene's discussion. However, Hoyningen-Huene goes to great lengths to document modifications of Kuhn's position which were introduced prior to *Structure* as well as in subsequent publications. He covers a wide range of Kuhnian themes, and takes the analysis of several such themes to unprecedented depths. The book, which was originally written in German, contains numerous references to German philosophers of science, and brings a European orientation to bear on Kuhn which makes for novel treatment of a number of key issues.

One of these involves the emphasis which Hoyningen-Huene places on Kuhn's metaphysical perspective. In describing the nature of scientific revolutions, Kuhn spoke rather extravagantly of the world changing in the transition between paradigms, 'as if the professional community had been suddenly transported to another planet' (Kuhn, 1970, p. 111). Such turns of phrase suggested an idealistic rejection of a reality independent of human thought. However, Hoyningen-Huene argues (pp. 32-33) that Kuhn was in fact operating with a distinction between the invariant world-in-itself and the phenomenal world of the scientist, which is subject to variation. This metaphysical divide between appearance and reality corresponds to an epistemological divide between the knowable and the unknowable, which is reminiscent of Kant. Hoyningen-Huene proposes a very plausible interpretation of Kuhn, according to which scientists' epistemic access is restricted to the phenomenal world and does not extend beyond the phenomena to the world-in-itself (pp. 34-35, 239, 270-271). There is, however, an air of paradox about the idea that one might know, of whatever lies beyond the appearances, that one can know nothing of it, which Hoyningen-Huene does little to dispel.

In later work, Kuhn's metaphysical position has continued to develop, and Hoyningen-Huene traces out a number of the changes which Kuhn has made. These range from an attempt to cast the world-change idea in terms of a distinction between objective 'stimuli' and subjectively variant 'sensations' (pp. 42-60), to Kuhn's later thoughts of doing without a Kantian noumenal world altogether (p. 60) (an option recently rejected by Kuhn, 'The Road Since Structure' *PSA 1990*, Vol. 2, 1991, p. 12). However, the idea of a historically changing phenomenal world remains crucial to Kuhn's position throughout his work. Hoyningen-Huene discusses at length (pp. 70-111) the account of empirical concept acquisition by means of ostensibly learned similarity relations, which Kuhn developed in a series of papers in the 1970s. He argues that this account provides an analysis of how the phenomenal worlds inhabited by different scientific communities are constituted. He also shows that Kuhn's analysis of the constitution of phenomenal worlds faces a fundamental difficulty due to the inability to transcend the phenomenal world of the analyst: owing to our confinement within a particular phenomenal world, it is mysterious how the analyst may step outside that world to develop a general account of the constitution of all such worlds (pp. 66-69, 122-130).

After spending much of the first half of the book on Kuhn's metaphysical stance, Hoyningen-Huene turns to Kuhn's model of scientific theory-change. The main outlines of this model are well-known: viz., initial disunified research in a field of science gives way to consensus based on a shared paradigm; research is then characterized by normal scientific puzzle-solving, which is periodically interrupted by revolutionary transitions between paradigms. Hoyningen-Huene devotes the latter half of the book to a detailed elaboration of the model, paying particular attention to changes introduced by Kuhn in work after *Structure*.

Important examples of such changes discussed by Hoyningen-Huene include Kuhn's attempt to resolve ambiguity in the concept of paradigm by distinguishing between exemplar and disciplinary matrix (pp. 140-141), and Kuhn's abandonment of universal acceptance of a single paradigm as necessary for normal science (pp. 143, 169-170). Hoyningen-Huene also provides lucid treatment of the evolution which Kuhn's concept of incommensurability has undergone since *Structure* (pp. 206-218): initially, it involved differences of meaning, phenomenal world and problem-field; later, it became a strictly semantic notion related to Quinean indeterminacy; in recent formulations, incommensurability involves differences of lexical structure between theories. There is, as well, extended analysis of the role played by rational factors in Kuhn's model of revolutionary theory-choice, which includes an interesting discussion of the bearing of Kuhn's views on the distinction between the contexts of discovery and justification (pp. 236-252).

Hoyningen-Huene's main aim in this book is to provide an authoritative interpretation of Kuhn, which will serve as a corrective to much of the misunderstanding with which Kuhn has met. Accordingly, Kuhn's views on controversial topics such as rationality, relativism and incommensurability emerge as less extreme than they initially appeared to many philosophical critics reacting to his views in the mid-1960s. Moreover, given the close attention which Hoyningen-Huene pays to modifications which Kuhn has made since *Structure*, readers whose knowledge of Kuhn is based on

that work will find a significantly revised version of Kuhn's model of science carefully presented by Hoyningen-Huene.

In order to concentrate on the interpretation of Kuhn, Hoyningen-Huene chooses not to discuss the critical literature on Kuhn in any great detail. Reference to the literature is largely confined to footnotes, and to a limited number of points where discussion of other authors is needed to understand Kuhn's views. Given the widespread misunderstanding to which Kuhn's work has been subject, this procedure seems on the whole to be justified. However, the procedure has an inherent weakness which Hoyningen-Huene does not altogether avoid: narrow focus on an author in isolation from the critical literature runs the risk of failing to place due emphasis on views which the author has developed in response to the literature.

A particularly salient case in point involves the issue of meaning variance, which Hoyningen-Huene discusses in connection with Kuhn's account of concept acquisition and incommensurability. Philosophers have treated meaning variance primarily as a problem within the theory of reference, and have placed particular emphasis on application of the causal theory of reference to this problem. The causal theory is a source of serious objections to Kuhn's thesis that both the sense and the reference of scientific terms vary in theoretical change. Kuhn has responded to these objections repeatedly, and at least once has discussed the causal theory in detail, raising cogent objections to it ('Dubbing and Redubbing', in C.W. Savage (ed.) *Minnesota Studies in Philosophy of Science XIV: Scientific Theories*, 1990). Yet, by concentrating on Kuhn's positive views, Hoyningen-Huene fails either to address the significance of the causal theory for meaning variance or to evaluate Kuhn's response to the causal theory. His interpretation therefore fails to address at least one significant aspect of Kuhn's philosophy of science.

The book has an immense number of footnotes, which provide references to the numerous relevant comments made by Kuhn scattered throughout his writings. There is a complete bibliography of Kuhn's published work, and an extensive list of secondary sources. Kuhn has himself written the Foreword, and says that 'No one, myself included, speaks with as much authority about the nature and development of my ideas' (p. xi). One could hardly ask for a better recommendation than that.

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Hunt, I., *Analytical and Dialectical Marxism* (Aldershot: Avebury, 1993) pp. ix, 224, Stg. £35.00 (cloth).

One might have hoped that with the passing of the Soviet Union and the end of the Cold War the possibility would emerge of a dispassionate and intellectually unprejudiced analysis of Marx and his various interpreters. If Ian Hunt's book is any indication this hope is premature. It belongs intellectually to the discussion that has been developing amongst radical academics since the late 1960s and, within that context, to what might be called the uncritical orthodoxy. It is not unintelligent but it is intelligence bent to the service of a *parti pris*.

This is most noticeable in the Preface. The interesting point is not that Hunt sets himself the task of answering the 'philosophical critique of Marx emerging from the Cold War' (are there no non-Cold War critiques worth answering or does all critique come from cold warriors?) nor that he takes the obvious step of dissociating himself from the 'Soviet experiment' (China too?). The telling point is that he situates his work in the context of a 'dramatic shift in power, wealth and income away from the public sector and the working class to capitalist owners and managers' over the last two decades in the advanced capitalist countries and of 'a capitalist ideological and political offensive which has exposed the weakness and pretensions of existing organisations of the working class' which makes it 'necessary to restate and develop the insights of Marxism . . . for the sake of providing some theoretical support for an understanding of the failures of existing forms of working class organisation'. Such talk suggests that Marxism itself is compatible with the idea that there could be such a shift; that such a shift is a bad thing even from a Marxist standpoint; that the working class (if the concept is useful) does in fact share the war aims Marxism attributes to it; that Marxist theory does in fact make some useful contribution to working class organisation, whether for real or imagined working class purposes; that the discussion of interpretations of Marxism gives some knowledge about reality; and so on. All this is problematic. Even the focus on the question of distributional shares is only 'party Marxist'; Marx himself was interested in the problem of freedom and poured scorn on the idea that the objection to slavery was that it led to under-nourishment