Depoliticizing Power

Stephen Turner

Joseph Rouse, *Knowledge and Power: Toward a Political Philosophy of Science* (Ithaca, NY and London: Cornell University Press, 1987), xvi + 283pp., $29.95. ISBN 0-8014-1959-X.

Barry Barnes, *The Nature of Power* (Cambridge: Polity Press, with Basil Blackwell; Champaign, IL: University of Illinois Press, 1988), xiv + 205pp., £27.50/$29.95. ISBN 0-252-01582-7.

Steven Lukes' *Power: A Radical View*[1] codified, for its day, the extension of the concept of power from its traditional legalistic uses, particularly the idea of powers of office-holders (and the idea central to the western juridical tradition of the sovereign power on which other powers legally rested) to the more mysterious Gramscian idea of hegemony. In the fifteen years since its publication, the notions of power and 'politics' have come to be routinely used, in the common parlance of intellectuals at least, to apply to many more domains, notably the domestic and the intellectual. In the past, analogies between political authority in the legal sense and other kinds of influence, control and constraint had been employed, sporadically, for their shock value. As early as the late 1970s they had been sufficiently over-employed to make it possible for Stanley Cavell, in a symposium on the 'politics of interpretation' to ask the question 'Politics as Opposed to What?'[2] The concepts of 'politics' and 'power' had themselves collapsed into the ordinary practice of the domains to which they had been applied: domestic 'politics' *was* domestic life, the 'politics' of interpretation *was* interpretation. What had been lost was what Lukes had attempted to preserve — a coherent conceptual justification for the extension of the concept of power that kept the concept itself intact, that enabled there to be a 'what' for power or politics to be 'opposed to'.

Incidentally, in the course of the extensions of the concepts of power and politics, some of the constitutive binary oppositions of modern liberal

Social Studies of Science (SAGE, London, Newbury Park and New Delhi), Vol. 19 (1989), 533–60

political theory had been undermined. The dominant ideology thesis, for example, threatened the opposition between reason and power that was central to enlightenment rationalism. But many of the threats to these distinctions were not fully consummated. The oppositions hung on, in part because several of them had a history that was inseparable from the origins of the modern intellectual. In particular, they were part of the self-interpretation of the intellectuals involved in the specific historical experience of the French revolution and its antecedents, notably the wars of religion. The opposition between politics and religion — that is, the creation of a separate sphere of politics and the depoliticization or neutralization of religion — was the great political achievement of modernity and the model for liberal political thinking: analogous separations of the spheres of the economic, the legal, the cultural and the scientific followed, and these were each thought to be antithetical to 'the political'. These were, in short, both intellectual and political achievements, and the fact that Europeans and North Americans have been born into political orders in which some form of separation between, for example, church and state, was part of the basic political practice have made them second nature. Yet although the oppositions have proven to be curiously hardy, they have in fact always been troubled, both as a matter of political practice and as ideas.[3]

The reaction against the enlightenment concept of reason coloured the whole of the intellectualization of politics in the early nineteenth century, spawning romanticism, Hegelianism and historicism. This reaction had its effects on the understanding of science, both immediately and distantly. Hegelianism contributed dialectically to the formation of neo-Kantianism, which was itself the lineal ancestor both of Logical Positivism and its most successful opponents, such as Kuhnianism, itself rooted in the historicist didactic efforts of Kuhn's mentor, James Bryant Conant.[4] But the relations between epistemic or scientific concepts of reason and political conceptions of reason have nevertheless not been very close over the last two centuries. Political theory was not immune to the effects of changed conceptions of knowledge, but the effects were confined largely to foundational matters, specifically the question of the epistemic status of political doctrines, legal principles and the like. Nevertheless, a close bond did exist on one level. Liberal political theory, which from the start adhered to some conception of government 'by discussion', retained a rationalistic conception of its (normative) ideal model of political discourse, the conception to which Habermas's notions of 'distorted communication' as a basis for hegemonic power advert. The identity, or similarity, of democracy and science, an identity based on

the presumed similarity between democratic public discourse and scientific discourse, was a theme of many texts on science in World War II, and indeed the source of the Mertonian conception of the norms of science. For some anti-liberal thinkers, such as Carl Schmitt, the idea of government by discussion represented what they regarded as a depoliticization or neutralization of the political realm proper, the absorption of politics by talk — a step Schmitt denounced as based on an illusion about the nature of the political.[5]

Over the last three centuries, the lines between the political and the rational in practice have varied and shifted considerably, and the way in which the contrasts between science and politics have been made by political theorists have also varied. Habermas and Schmitt serve to mark theoretical extremes. Habermas's account of authority holds that:

> The motive for readiness to conform to a decisionmaking power still indeterminate in content [i.e. authority] is the expectation that this power will be exercised in accord with legitimate norms of action. The ultimate motive for readiness to follow is the citizen's conviction that he could be discursively convinced in case of doubt.[6]

This is an attempt to reduce considerations of power to a vocabulary of discussion and 'distorted' discussion; Carl Schmitt's renovated Hobbesianism, with its insistence on the antithesis between authority and truth contained in the Hobbist slogan *auctoritas, non veritas facit legem*,[7] provides the dialectical counterpoint to any attempt at the reduction of the political to the non-political. For Hobbes and Schmitt, one might say, discussion is always an illusion or an instrument of authority, not its basis. The conflict between these theoretical extremes is sharpened by political history, the taint that Schmitt's brief political role as 'Crown jurist' of National Socialism brought to his ideas.[8]

Neither extreme has prevailed either in practice or in theory. The concept of the political has not collapsed into a concept of the rational settling of conflicts, either in political theory or practice, and the liberal ideal of government by discussion has not come to be seen as fundamentally incoherent and as irrelevant to practice. Indeed, on the level of ideas the model of political rationality and the ideal of discussion are perhaps more secure today than is the concept of scientific rationality. At least it is an ideal to which persons with very diverse orientations appeal as an unproblematic point of reference. This messy intellectual history, and especially its intersection with actual politics, needs to be kept in mind: no formulation on the extension of the terms 'power' and 'politics', or of the oppositions and contraries of these terms, is innocent.

Each carries old, or enables the derivation of new, implications in an already formed but very confused tradition of discourse and practice. But neither is any theoretical formulation unequivocally on the side of the good. Fascism has its holocaust, rationalism its reign of terror and Gulag.

Barry Barnes and Joseph Rouse, in two quite different books,[9] have attempted to rewrite the opposition between knowledge and power. Rouse concerns himself primarily with the knowledge side of the opposition, but alludes to the possibility that 'a revision of our understanding of power will change the configuration of knowledge and power more fundamentally than have the recent developments in epistemology and the philosophy of science' (2). Barnes's book is fundamentally a revision of the sociological concept of power; but members' knowledge of social practices enters, in an essential way, into this new concept, and Barnes is concerned to reject the older forms of the opposition. Rouse's book is a strong first effort by a young American philosopher. The merit of the book is in the fine texture of its interpretive argument, which a review cannot easily convey. In this essay I will focus on the political implications of the book, which are largely extratextual. Barnes's is a work of a mature scholar reaching the peak of his powers, a book of significance on a central, perhaps *the* central topic in social theory. The fundamental strategies of the two texts differ: Rouse attempts to obliterate the commonsense notion of power, Barnes to salvage much of it. But the texts share some interesting common ground, particularly in their insistence that power is exercised through 'nets', and in their avoidance of the Mertonian homonomy between democratic politics and scientific discourse. Neither text, however, says much about its own relation to the tradition of political theory, or to actual politics, an omission that a review may usefully correct.

Knowledge as Power

Rouse's main concern is to draw out the political implications of the 'post-empiricist' philosophy of science, especially the idea that science is not a mirror, but rather 'one damn theory after another' (4). The main implication is relativism. But those relativizations of scientific knowledge that have been supported by recent versions of the critique of representational theories of the character of scientific knowledge typically attempt to save the appearance of scientific rationality by localizing the critique's effects — to say that there is some limited historical moment, kind of

problem situation, or type of discourse where the traditional processes of cognitive rationality do not apply. In this way, they avoid facing the lurking threat that relativism cannot be quarantined to special unusual moments, and therefore the more frightening implication that power decides truth.

To formulate the problem in this way is already to fall into the traditional oppositions. Much of the literature on science does this quite unselfconsciously. Accounts of conceptual change in science typically treat (or are read as treating) considerations of power as distortive of processes of cognitive rationality. For these writers, to the extent that a topic is ceded to the realm of the political it is *ipso facto* derationalized. 'Empirical' studies of science which show that scientists use the devices of bureaucratic politics or rhetoric to advance certain claims, conjoined with these premises, are thus arguments which reduce the role of cognitive rationality in science. But whether one says 'scientific theories are neither true nor false, but are only ideologies that further individual scientists' particular power interests and that are accepted or rejected by other scientists only because they serve or fail to serve their particular power interests', or that 'science consists in various rational processes for assessing the validity of representations of the world that the application of power may only distort', one preserves the identification of derationalization. For Rouse, this is a false dilemma, and its resolution is to be had through breaking down the distinction between power and knowledge. His main device is to criticize theory-centred accounts of science, and to substitute an account in which the explanatory work is done by descriptions of local knowledge, particularly the 'making' activities of the laboratory and the processes by which local knowledge is translated into results with larger significance.

The task of undermining truth and representation narratives on a wholesale, or philosophical, basis has already been performed, at least in part, by such post-foundationalist writers as Richard Rorty, for whom reason *is* one damn interpretation after another. As Rouse shows, this notion is not as contentless as it might appear, *if* we, so to speak, 'localize' it to the laboratory setting. The relationship between unproblematic background understandings and interpretation is such that the failure of our pre-theoretical understanding, in a social context, such as a laboratory, supplies the problem that our interpretation solves, and by solving it becomes part of the understanding we bring to new events and situations. Rouse's strategy in the book in general is to adapt the anti-representational narrative to the workaday world of scientific experiment, the laboratory *Dasein*. He is aided by laboratory life studies, which

describe this *Dasein*. In the remainder of the book Rouse is concerned to construct and defend an account of science that parallels the standard contemporary 'approaches' and deals with, or obviates, their standard problems, such as those relating to realism.

The basis for his alternative is found in a Heideggerian argument to the effect that:

> scientific knowledge is fundamentally local knowledge, embodied in practices that are not fully abstractable into theories and context-free rules for their application. In Heidegger's terms, science must be understood as a concerned dwelling in the midst of a work-world ready-to-hand, rather than a decontextualized cognition of isolated things (108).

By this he means:

> that the empirical character of scientific knowledge is established only through the use of a local configuration of equipment in the laboratory. The instruments, and the microworlds established by using them, are the proximate referents of scientific claims. Furthermore, scientists' knowledge depends upon their craft knowledge of the workings of these devices. Knowing one's way about the local setting of the laboratory is an indispensable part of scientists' achievement. Yet this knowledge cannot readily be conveyed without drawing upon such accumulated local experience (108).

'Problems' are, in short, always historically particular or local, in contrast to problems of theory choice conceived representationally.

Heidegger himself, Rouse thinks, conceded too much to the theory-centred view of science in his own treatment of practices of theoretical representation. Heidegger characterizes the scientists' efforts to think their way out of the laboratory as 'theoretical decontextualization'; Rouse thinks this is better construed in 'making' terms, as a process of standardization, whereby scientific objects and practices become reliably transferable to new research contexts. What Heidegger takes as a disengagement from particular practical situations and interests is actually a consolidation of power, which enables power to be extended into new networks. Heidegger 'fails to see the social, functional contextuality that still governs the acceptability of the most abstract theoretical claim' (80), and to see that scientific research takes 'place against a practical background of skills, practices, and equipment (including theoretical models) rather than a systematic background of theory' (95–96). Rouse argues that rather than simply becoming 'decontextualized', scientific results — the product of the 'making' that goes on in the laboratory using all those skills — aspire to standardization, so that appropriate 'others' can 'make' them too. This is not just a matter of finding instances of

a general law, as a theory-centred account would have it, because the reproduction of the results itself requires the acquisition of skills and context in a standardized form. The new contexts need not be very much like the original context. Indeed, results are produced with the *aim* of standardization, of use by others. Succeeding at this changes the world: it creates something new, a new piece of 'general-purpose equipment' (125). And the existence of this equipment changes the world, in the sense that 'the world *is* what shows up in our practices'.[10]

If one assimilates the notions of power to the concepts of making and acting, one can, in the manner of Foucault, take everything that one has previously argued to be 'constructed', and call it 'political', and this is what Rouse does: thus the change we call the scientific revolution was not just about 'views', it is about changing the world, the world that shows up in our practices, and in changing the natural world, no less than changing the social world one can 'structure the possible field of action of others' (185), as Foucault puts it. The natural sciences, then, may be said to possess various techniques of power, and these need to be treated as such. Often Rouse writes as though he has found the philosopher's stone in his identification of the transformation of the world and power. Thus he can say:

> an essential aspect of the ways 'certain actions modify others' — that is, in which power functions — is by transforming the world within which action is situated. This transformation is the most fundamental way power (even in Foucault's restricted use of the term) operates within and extends outward from the laboratory (107–08).

This comes very close to simply collapsing the category of 'power' into the (suitably enlarged) category of 'knowledge'.

Criticizing Science

Rouse supposes that, for a political philosopher, the point of treating the power/knowledge techniques that science possesses and develops 'as such' is to make them into potential objects of political criticism. This seems a little strange. One might formulate one's sense of this strangeness by noting that political criticism has a point only where there are relevant political ends. Thus criticism seems appropriate with respect to the social 'sciences', which serve what are, after all, traditional political purposes, such as legitimation, or serve to improve the choices of means to traditional political ends, for example by providing prudential advice to rulers.

Natural science does little of this. Rouse, however, argues that the strangeness is a consequence of our ambient ideas of *power*, which are derived largely from traditional liberalism and deal largely with the subdomain of power relations that Foucault called 'juridical power', which is only one means of shaping and constraining 'the field of possible actions of persons within some specific social context' (211). If one adds science, and particularly the technique of 'standardization', as a new subdomain of power, presumably criticism makes more sense. Rouse regards standardization as parallel to Foucault's example of 'confession' as a technique of surveillance and discipline. He concedes that this parallel is not going to persuade those who were not persuaded by Foucault. To such sceptics, he makes the more limited claim that 'the extension of laboratory practice has created or transformed our most ordinary, daily rituals' (248), and consequently deserves our attention as political philosophers.

What 'political philosophy' means to Rouse, however, is a bit different from what it means to teachers in departments of politics, and although he has something to say to those poor pre-Foucaultian souls, it is mostly in the way of reminding them of their backwardness. He does not give them much help in determining what the political implications of his account of science, in the narrower sense of the term 'political', might be. Nevertheless, he suggests that there is an implicit political perspective in his text, though he is 'not yet prepared to work it out or defend it'. Instead, he points to four possible approaches to providing such a perspective: 'liberal', by which he means Rawlsian; liberationist, which might take feminist, Marxist, or Third World forms; a perspective concerned with interaction between scientific and political concerns, particularly the intrusion of the technical into the appropriate realm of politics, which is a Habermasian topic; or a Heidegger/Foucault concern with the 'dangers in the forms of powers at work in the sciences and technologies' (250).

Liberal theory, he supposes, is fundamentally about the legitimacy of the exercise of state power, and it is ill-equipped to deal with 'forms of power that circulate throughout our social relationships rather than being exercised by specific agents' (251). This argument is borrowed from Foucault. But Foucault's grand extension of the concept of power identified power with something so ubiquitous that he had trouble distinguishing it from action and thought in general. The source of the difficulty is the separation of the concept of power from the concept of political ends. Foucault, unlike Rouse, provided a kind of remedy for this. When he attempted to ground the concept of power/knowledge in

the tradition of political theory he was led to distinguish a Reichian conception of power as repression and a Nietzschean one as any engagement of hostile forces, under which heading he includes sexual intercourse. This at least gives the 'means' some end. Rouse deals with the different question of what one might do with the new concept of power if one were a liberal. He suggests that if liberal theory could be stretched to fit the techniques of power distinctive to science, it might be employed to warrant the regulation of their uses. But, as he concedes, apart from the usual issues of the role of the military, informed consent and risk, liberalism would probably serve the cause of the defence of science against politically motivated interference. 'If this is what a political philosophy of science amounts to', he concludes, 'one might well ask what all the fuss was about' (252).

If the fuss must come from its other potential uses, liberation from the power of science as it serves hegemonic oppression is apparently one use with fuss-potential. Unfortunately, there is a kind of 'ambivalence lurking within all liberationist philosophies of science' (256), a result of the desire to appropriate those forms of power, properly transformed of course, for their own ends, be they feminist, proletarian, or Third-worldish. Another promising use is given by the Habermasian consideration of the tendency of technical or managerial concerns to usurp the proper role of political action and discourse. But this notion of a 'proper place' for science is itself problematic, and Rouse does not consider it, as he has taken it up under the heading of erroneous attempts to draw the distinction between knowledge and power.

Rouse is thus left without much to say about politics, and we are left to our own devices in applying his analysis. As I suggested in my introduction, rewritings of these oppositions are never innocent. In this case Foucault and Heidegger have done some of the work of application for us, so it is perhaps instructive, and in the case of Heidegger, crucial, that we see how these arguments may be employed. For Heidegger, the fundamental problem is 'the darkening', the 'nihilistic' consequences for Being of the pursuit of, and absorption of human life into, the means of technological mastery. Foucault goes in a different direction by suggesting that those means can be resisted, but not escaped, for each new truth is really another form of oppression, which we may, at best, unmask — as Rouse has now done with science — and resist.

Heidegger's Nazism has until the recent past not been considered a subject for polite company. But it would be an evasion to fail to discuss the topic in connection with Rouse today, when the decades of naive excuse-making for Heidegger's actions have come to an end. Heidegger's

long and fervent support of Nazism has been documented in a recent book which shows, contrary to earlier claims, that he stuck to his allegiance to the Nazi cause.[11] This alone would suffice to raise questions about a 'political philosophy' based on Heideggerian premises. To be sure, philosophical guilt by association, the *argumentum ad Hitlorum*, is hardly decisive: there may have been no logical connection between Heidegger's philosophical premises and his actions. But since Heidegger himself intellectualized the specific 'political' actions he took as a Nazi in the vocabulary which Rouse borrows, an argument disconnecting the two spheres would be an interesting dialectical exercise. Rouse does not attempt it.

A harsh critic might claim that Rouse's conclusion, and the whole claim of the book to be serving as some sort of prologomena to a *political philosophy*, rests on precisely the Heideggerian ideas that informed his politics, and indeed in precisely his less 'theory-centred' moments. Consider the following, a pronouncement made during Heidegger's service as Nazi Rektor of the University at Freiburg:

> *through the National Socialist State our entire German reality has been altered, and that means altering all our previous ideas and thinking, too.* [Heidegger's italics]
>
> The words 'knowledge' and 'scholarship' have acquired a different meaning, and so too have the words 'work' and 'worker'.
>
> Scholarship [i.e. *Wissenschaft*] is not the possession of a restricted class of citizens to misuse as a weapon for the exploitation of those who do the work; it is only a stronger and therefore more responsible form of that knowledge that the whole German people must demand and seek for the sake of its historico-political existence, if this people desires to safeguard its continuation and greatness. The knowledge of true scholarship does not differ in its tradition from the knowledge of farmers, lumberjacks, miners and craftsmen. For knowledge means being at home in the world in which we live as individuals and as part of a community.
>
> Knowledge means growth of resolve and action in the performance of a task that has been given us, whether that task be ordering the fields, or felling a tree, or mining, or questioning the laws of Nature, or determining the place of history in the force of destiny.
>
> *Knowledge means being in the place where we are put.* [Heidegger's italics][12]

Key elements of Rouse's argument are there: the idea that power and altering reality are one, the obliteration of any distinction between scientific or scholarly knowledge and craft knowledge, the language of localism, and the idea that there is some sort of alternative open to modern society.

Heidegger had no qualms about specifying the alternative; his lectures on metaphysics of 1934, presented during his active Nazi period, which he allowed to be printed in the 1950s, identified 'the inner truth and greatness of [National Socialism with its role in] the encounter between

global technology and modern man'.[13] Many other writers who used these core ideas did not put on brown shirts, so one might respond that pointing to parallels is mere insinuation. But as Rouse's own claim that his redescription of science has political implications is also left at insinuation, we can at least legitimately ask two questions: what practical political choices does this philosophy reveal to us, and what *political* difference does this philosophy make?

It may be a reasonable response to say that while Rouse *builds* on Heidegger, he *transcends* Heidegger's notion that allegiance to a particular political movement is an appropriate response to 'technology'. One might say that Foucault's 'political philosophy' leads to resistance, and that since he unmasks so many things as techniques of power that need resisting, he is a kind of anarchist or inner *résistant* to Reichian repression, and that something similar follows from Rouse's position. Reich, however, believed (at one point at least) in the proletarian revolution — that is to say, some sort of achievable *political* end. Absent this, Reichianism is a doctrine of unpoliticality. Perhaps it is better to make Foucault into a Nietzschean. But this entails concessions to the practical reality of authoritarian domination in order to engage in struggle. Heidegger readily made this concession. His language, in his political pronouncements especially, is authoritarian and decisionist, as when he said, 'The *Führer* himself, and only he, is the current and future reality of Germany, and his word is your law'.[14] What this readiness to accept authority suggests, however, is only that Heidegger was the more consistent Nietzschean than Foucault. Gestures of resistance have little importance if they are empty, and however fatalistic Heidegger was about the extinction of being, he was not so deluded as to suppose that 'technology' could be defeated without adopting an alternative. The alternative of National Socialism, in retrospect, was not a good choice, because it lost. But it was a choice that Heidegger could sincerely characterize 'as a complete revolution in our German existence',[15] and one which met, for a time, the criterion that Nietzsche erected for 'values' — that they be 'enforceable', meaning that they defeat their rivals in struggle.[16]

To arrive at the point in which one engages in this sort of reasoning is, for most audiences, to have gone too far. Even the Nazis found Heidegger to be too radical. The sheer craziness of the dialogue — and in Heidegger's case, it was more than mere talk — makes one suspect that something has gone wrong in the thinking that led up to it. Rouse soft-pedals the craziness. It might have been better if Rouse had shown that the reasoning might lead to some interesting political ends that are not crazy. As it stands, the premises, the radical extension of the notions

of the political and of power, are called into question by the conclusions that Heidegger drew, and the questions do not find any convincing political answers in Foucault.

Rethinking Power

Rouse's is largely a work of commentary, which tends to the Baroque in its literary style; Barnes's is a very different kind of book. Commentary and textual apparatus is kept to a minimum, and the prose is simple, direct and clear. Barnes begins not with the intellectual tradition of political theory, but with the commonsense view of power. Common usage treats power as something real that is possessed by some persons in some situations, as a capacity or potentiality rather than something that is necessarily overtly displayed in action, and as a thing that is theoretical or inferred rather than directly observable. These serve as a starting point for a theory of power, but do not suffice. In everyday discourse, power is ordinarily imputed on the basis of its supposed effects, and thus there is a kind of circularity to the concept. The question for a theorist of power is whether this circularity is eliminable, or whether perhaps 'this circular reasoning and circular accounting is all there is to power' (5).

Barnes argues that the traditional social science refinements or specifications of the concept of power have erred on the side of individualism — of locating power in individual actions of command, for example, rather than in societal structures of command and influence that allow the exercise of power through long chains. Part of the reason for this, he suggests, was plain moralism: individualistic conceptions of power gave writers like C. Wright Mills the satisfaction of pointing their fingers at small groups of bad guys. Parsons, whose papers on power and influence in the 1960s treated power as a medium analogous to money, pointed toward a *societal* conception of power. Parsons's error was to think that the system of power relations could be understood as normatively determined, that is, based on some sort of shared acceptance of the legitimate authority of a society's institutions as a whole.

Barnes's approach is to reject the notion of normative determination but salvage the problem-structure to which it is addressed, including the Hobbesian problem in its various guises, the problem of the societal reconciliation of conflicting individual or group interests. The solution to 'the problem of order' is not shared norms, he argues, but knowledge, the knowledge that members have and share about the societal routines

that bear on them and that they enact. The better analogy is not to money, as Parsons, in the grip of the notion of the importance of generalized confidence, had supposed, but to language, understood as a means of strictly concerting the actions of many individuals without coercion and without a general societal resolution of the problem of conflicting interests:

> Knowledgeable individuals will continue with linguistic habits and routines, mutual intelligibility will be sustained, despite variation in the ends and interests of those individuals. At the level of the intelligibility of language, interests converge. Linguistic order is sustained as the solution to a *co-ordination problem*. Conformity to the routines of language-use profits the individual most of the time if most other people also so conform most of the time. Every individual has an incentive to a high level of conformity so long as all other individuals manifest a high level of conformity (37).

In short, individuals conform to the micro-routines that solve coordination problems if other individuals do and if it is profitable to do so. The pay-off to conformity need not be very large if the cost of doing so is very low. It is costly to calculate one's interests, so certain routines or sets of routines persist because they become habitual and thus lower their cost. Indeed, Barnes suggests, there is an inherent human tendency to habituation (34). But the more interesting kinds of persistence arise in the case of routines we are aware of and have *reasons* to follow. What Barnes rejects is any reductive or generalized account of the reasons for following routines. Although, to be sure, if we violate some routines we may be punished, this does not mean that coercion is at the base of societal routines, any more than are generalized beliefs about their legitimacy, as Parsons believed. Instead, many interests and motives exist for sustaining routines, including such things as the costs of change. Routines are sustained because, in the particular local circumstances under which individuals choose to follow or not follow routines, individuals' considerations of expedience support the following of routines.

This reasoning leads Barnes to a novel image of social order, in which the knowledge members have about their practices is fundamental: society is not merely a persisting set of routine practices, but a 'distribution of knowledge'. The knowledge Barnes has in mind is self-constituting, self-validating, shared knowledge. He gives the examples of knowledge that something is a target, or a banknote: shared knowing *makes* the target a target, and the banknote a banknote. Of course we ordinarily experience these things as pre-constituted, as external facts we learn, and thus we are led to neglect our own role in the continuous reconstituting of these

objects through our knowledge of them, and to neglect our individual contribution to change in these objects, which occurs through our learning more about society's practices — a learning which is at the same time a contribution to society's reconstitution of itself.

Power, Barnes argues, is an *aspect* of the distribution of knowledge. The more that is shared, the larger the society's capacity for concerted action, which is societal power. What is traditionally thought of as individual power in a society, such as power to command, is in Barnes's terms discretionary control within a system of known and recognized rights. There is no mystery of authority, any more that there is a mystery about why traffic signals are obeyed. Power does not emanate mysteriously from an individual but resides in rights to exercise discretion, rights which can be delegated, shared, or relocated. In general, however, the delegation of authority is hierarchical — upward, for example to a party bureaucracy, or downward by empowering others to employ the discretion thus centralized.

This may seem merely to substitute the term 'discretion' for 'power' and thus to recreate the mystery of individualized power as the mystery of depersonalized discretion. But the notion of routines saves the theory from this end. The effect of Barnes's argument is not merely to substitute a concept but to change the explanatory problem: what needs explanation, as he formulates the problem of power, is not some property, like charisma, but the use, reproduction and alteration of routines, of which specific uses of the transference of discretion will be instances. These are, so to speak, *local* facts which have more or less clear *local* explanations, rather than vast general facts which demand equally vast general explanations, such as those functionalist explanations of practices attempted to provide, and Parsons provided with his 'normative determinism'.

The Quest for a General Theory

The argument might have been left at this — that is, an anti-essentialist account of 'power', which concluded by treating 'power' as a useful portmanteau term for a variety of relationships with analogies to one another. But Barnes, from the start of the book, wants something more, perhaps because he thinks that to stop with a critique of the concept would amount to an acceptance of the circularity implicit in ordinary reasoning about power.

The broader reasons for Barnes's desire for a positive account of the

'nature' of power become clear only at the end of the book. In his closing chapter, Barnes argues that:

> Wherever human beings are found, whatever the situations in which they are found, social order and social power are also found. It follows that the particular features of a situation are insufficient as a basis for understanding the power available in that situation. Our understanding of power must involve a situation-transcending component: it must include a general conception of human behaviour and of how human beings interact with each other (165).

He suggests that there are two such conceptions available in present social science, sociological functionalism and an alternative conception in which human beings are viewed 'as active agents linked together through shared knowledge and mutual susceptibility' (165). He identifies this alternative with the sociology of knowledge tradition generally, with Giddens and with Bhaskar. He envisions the possibility of 'a systematic, general, yet non-teleological account of social order' being woven from these 'strands of thought' (166), and describes some of the ways that his account might have to be modified and developed to serve this purpose (for example by elaborating the simple general postulates about human behaviour he employs). He also describes what he takes to be the more enduring part of his approach, which he associates with the turn to culture and cognition in Habermas and Foucault, particularly the recognition 'that knowledge and society are inseparable, that cognitive order is social order', and the correlative denial of the vulgar Marxist idea that there is a sphere of ideas and a sphere of economic life such 'that in the primary sphere there is activity without belief, as it were, and in the secondary belief without activity' (170).

Of the various general claims about human nature and motivation on which Barnes relies, the most unusual is his notion of humans' innate propensity to habituate and follow routines. This is traditionally thought of as a conservative idea, though this is perhaps misleading. 'Habit' and its associated ideas were central to academic sociological thinking in the USA until the 1940s, when they were supplanted by the idea, itself an echo of enlightenment rationalism, that tradition was no longer relevant to individual experience, conjoined with the doctrine that what counted in the formation of 'attitudes' was the immediate process of social interaction. The heavily financed study of racial attitudes performed by Gunnar Myrdal, *An American Dilemma*,[17] explicitly assaulted the older American sociology of race relations and its emphasis on the '*mores*', as W. G. Sumner called them, and their imperviousness to change: the new message, which Merton among others promoted, was that the new

science of social psychology had discovered means of manipulating attitudes by manipulating processes of group membership and patterns of interaction.

The effect of these developments was that the older ideas of habituation and of rules underwritten by the *mores* dropped out of mainstream sociology in the US at precisely the moment that American sociology, backed by American money, became the dominating force in world sociology. Sociological functionalism, that vague phantasm, dispensed with the *mores*, and indeed the two approaches are antithetical: for functionalism, practices serve *present* purposes for the social organism; the older sociology taught that the *mores* persisted *in spite of* their conflict with 'societal ends'. The mystical Parsonian idea of societal ends — hidden, omnipresent and omniexplanatory — presupposed that at the deepest level there could be no such conflicts, but at most temporary discrepancies between system parts. Yet in a few other academic contexts, the idea of underlying rules survived. One of these was in the concept of political traditions and political culture. Another was in Wittgenstein's conception of rule-following, on which Barnes relies but enhances with the unWittgensteinian psychological idea of a propensity to the habituation of routines.

Barnes's appeal to human nature is unsurprising, in view of his acceptance of the terms of dispute that sociological functionalism has defined. Because he wishes to solve some of the general theoretical problems that motivated sociological functionalists, notably the Hobbesian problem, he is compelled to propose some answers to other problems that arise over general questions of human motivation, selfishness and cooperation. Hobbes' own form of the Hobbesian problem was the puzzle of the relation between pre-social propensities and social practices that arose in connection with the contractarian theory of political society. Contracts are fundamentally a matter of mutual interest. But cheating on contracts may also be in one's interest, so utility, in the sense of immediate short term individual utility, cannot by itself account for the practice. Something needs to be added. Ordinarily, the thing added is sanctions by powerful authorities. But this merely pushes the problem back one step: where does authority come from and what is its fundamental character? Hobbes' answer is that it comes from an authority constituting promise in which protection is exchanged for obedience. If society and its enforceable practices is based on a promise of protection for obedience, where did the practice of promising come from? Hobbes found it in a pre-social propensity to keep promises.

Later variants of this 'problem' dropped the pseudo-historical topic

of the original society-creating promise in favour of such devices as the concept of tacit consent to authority. The issue of the conflict between individual and social goods remained, and liberals came to an appreciation of the paradoxical contrast between the morality of rule by command and the achievement of public goods through the employment of selfish private motives. The discussion of these topics centred on the problem of the goodness of the nature of man. Kant, for example, thought that individuals had within them both pro-social and anti-social sides, and that the problem of political development was to construct laws that better employed anti-social motivations (such as the desire to dominate) for positive social ends (such as invention), which could be done through competition in a separated economic sphere. Kant's version of this, in his essay on universal history, is teleological and historical: improved laws better realize the potential of mankind. By the time it was written, the essay embodied the conventional wisdom on authority, that legal authority *per se* (that is, command) was a means to ends, and one means among others, and that *indirect* means often produced the same ends more successfully, or could produce higher ends.

Kant was a liberal and an optimist. Political theorists of a less liberal stripe tended to focus on the content of the authority-constituting bond, the relation between protection and obedience. But they accepted the same notion of the value and occasional substitutability of indirect means. Donoso Cortés, whose view of the evil nature of man and the necessity of repression was perhaps the most extreme of any nineteenth-century thinker, explained that

> . . . there are only two possible kinds of repression, one internal and the other external, the religious and the political. These are of such a nature that when the religious thermometer is high, the thermometer of repression is low, and when the religious thermometer is low, the political thermometer, political repression, tyranny, is high. This is the law of humanity, a law of history. And if you do not think so, consider how the world was, consider how society was before the time of the Cross; tell me how it was when there was no inner repression, when there was no religious repression. That was a society of tyranny and of slaves.[18]

This law, elaborated or disguised in various ways, may be found buried in Durkheim's and Weber's analyses — it is the political message of the *Protestant Ethic*,[19] and of Freud's *Civilization and its Discontents*[20] — and became a central premise for Parsons, who accordingly celebrated the role of internalized individual controls as progress. Two ideas central to this whole line of thinking may be separated here: the idea of indirect means of rule that may be substituted for direct means, that is, command

or 'juridical power' (and substituted for one another); and the idea of repression.

The substitutability of indirect means of rule itself serves to destroy any simple equation of the political and the juridical. What teachers of politics know is that long before Foucault, the possibility of moving an institution or practice from the category of 'politically-neutral' to the category of 'political' was a commonplace. Schmitt pointed out that the political ideas of the Enlightenment themselves pushed in the direction of expanding the domain of the 'political' to include the task of the transformation of man.

> For the rationalism of the Englightenment, man was by nature ignorant and rough, but educable. It was thus on pedagogic grounds that the ideal of a 'legal despotism' was justified: Uneducated humanity is educated by a legislator (who, according to Rousseau's *Social Contract*, was able 'to change the nature of man'); or unruly nature could be conquered by Fichte's 'tyrant', and the state became, as Fichte said with naive brutality, an 'educational factory'.[21]

The later notion of the total state, the state which admitted of no separate, depoliticized, or politically neutral realms of life, followed from these ideas.

The means in question here are, broadly speaking, repressive. Part of the novelty of Barnes's account is his implicit rejection of this tradition: the effect of Barnes's analysis is to repudiate Cortés's 'law of political thermometry', and with it the idea that society is a set of repressive forces, without doing so on the basis of a distinctively optimistic account of human nature. For Barnes, 'routines' are not necessarily repressive, though particular routines and the collection of routines in particular societies may be. Perhaps he would argue that the whole imagery of repression itself flows from an individualistic conception of power, whereas his own is a societal one. For him, routines are the source of society's powers and, more important, subject to control and revision by its members. Control and revision may be costly, but it is nevertheless we, the members, who constitute and continuously reconstitute the routines through our employment of them and our knowledge of them, and who can control and revise them. This is not an optimistic political credo, much less a naive doctrine of liberation by the power of thought, but it is also something quite unlike the epiphenomenalist 'system-serving' reductive analysis of practices that it supplants.

The Concept of the Political, Again

Barnes's discussions of actual politics are necessarily abstract, though he is careful to give illustrative examples of his points. The core of his substantive analyses is economistic and game theoretical, though he wisely avoids the technicalities of these approaches, which are usually unilluminating. In the domain of political struggle, the strategic issues revolve around concentrating power and increasing power by delocalizing it, by establishing routines that can be, so to speak, wired in long series, so that an act has distant consequences. The nemesis of delocalization is the cost of preserving the routines: transaction costs, information costs and costs associated with the prevention of concerted resistance by subordinates by making such action costly to those who resist. But the fundamental facts, the routines, constituted by our knowledge of them, 'belong' to us, not to the rulers, who merely possess discretion within the body of routines.

Barnes identifies an intrinsic bias in the process of routinization toward the creation of élites. Where a small group formed by a great deal of interaction can act in concert without all of these costs of delocalization — for example, through trust — they can dominate. And as he stresses, those who possess discretion can manipulate these costs, for example by Thatcherite divide-and-conquer tactics. Rule may also be aided by control of information, by the creation of meaningless routines which limit subordinates' knowledge of genuinely power-creating routines, and by similar devices. The Achilles heel of regimes based on the ignorance of the ruled and on illusion is the problem of succession; the very procedures used to rule create an incapacity on the part of followers to agree on new rulers.

In these discussions of politics in the narrower sense, of rulership and the preservation of rule in the face of enemies and potential enemies, Barnes's treatment is, on the surface, not radically unlike conventional Weberian political analysis. However, there are some more subtle differences. Sanctions play a limited role in Barnes's story, as does legitimization, or 'approval' by subjects. Barnes emphasizes that these explanatory devices need not be so heavily relied on if the role of conversion costs and rational calculation on the part of subordinates is properly understood.[22]

In short, the lights provided by these traditional considerations of jurisprudence and political sociology respectively are dimmed to reveal the other considerations on which 'regularity' depends. This is quite different from simply extending the concept of power to cover a form

of activity or technique previously not considered a form of power. But in some ways it has similar effects. One of the dialectical consequences of these efforts in political theory in recent years has been a return to the narrower 'concept of the political'. So it is instructive to ask what other relations between routines and power are revealed by the older conceptions.

The focus of much of the renewed discussion of the concept of the political has been the work of Schmitt,[23] who pushed Weber's conception of political authority (which itself derived from jurisprudential sources) to its extreme implications as a philosophy of law. The main issue for Schmitt was a jurisprudential question that had been answered 'sociologically' by Weber, the question of the extra-legal foundation of legal authority. The question arises from the process of legal argumentation in which more fundamental laws are cited to warrant interpretations of, or to affirm the validity of, other laws; the process must end in some extra-legal fact, with a political rather than a legal question: what is the basis of the most basic laws? Weber's answer was the sociological fact that they were obeyed; Schmitt, whose purposes were different, pointed to a set of juridical facts which were nevertheless not adjudicable matters of law, the facts of sovereignty as they were revealed in the legal device of the exception, the declaration of a state of emergency or siege involving suspension of laws, rights and normal legal processes. The striking fact about declarations of this kind, for Schmitt, was that they could not themselves be subject to law: the law presupposes normal conditions; sovereign power is revealed in the power to decide what is normal and thus when the law is to be suspended. This power, Schmitt stressed, was necessarily personal: some individual had to be designated who personally made these decisions. The only 'principle' that could govern such declarations was necessity, and the fundamental necessity, for the state, was the preservation of its own power as a state against its enemies, internal or external.

Barnes is not unaware of the 'sociological' form of the problem these theories attempt to solve, and in the closing pages of the book he examines, and accepts, Randall Collins's version of Weber, which finds the emotional basis of the legitimacy of state power in the state's embodiment of national power-prestige. Barnes also suggests that one may treat the ability to manipulate mass emotions as a skill whose possession is a form of power (164). But Weber's purposes led him in a different direction. His concern was with the old chestnut of the distinction between political associations and other forms of association, a distinction he wished for methodological reasons to make on a wholly individualistic

basis. He wound up borrowing the definition of Rudolph Jhering, that the state is a territorial monopoly of legitimate violence. Schmitt merely takes this one more step by inquiring into the inherent juridical properties of states so defined. His answer is that sovereignty is the possession of a monopoly of decision, including the decision to declare that 'normalcy' has ceased and the ordinary law has been suspended in favour of command.

This set of facts may be redescribed in Barnes's vocabulary. One might say that the collection of positions we call the state is the locus of an unusual concentration of discretion over routines, the power of 'decision', whose use is not itself governed by routine nor is it 'delegated' except in the rather general sense of delegation from below, and these routines include routines that enable those who control them to manipulate the utilities of the ruled in the most extreme fashion. This is awkward, but it treats the concentration of discretion in the state as quantitatively distinct from other cases of concentrated discretion. Schmitt describes these facts more brutally, and makes a qualitative distinction. As Schwab summarizes him:

> By virtue of its possession of a monopoly on politics, the state is the only entity able to distinguish friend from enemy and thereby demand of its citizens the readiness to die. This claim on the physical life of its constituents distinguishes the state from, and elevates it above, all other organizations and associations.[24]

One wonders whether the state, described in either fashion, is not after all a pretty impressive affair, and that perhaps the quest for the distinctive properties of the state, or the realm of the political, was not wholly misguided. If one makes Schmitt's point in quasi-Barnesian terminology, arguing that in contrast to the ordinary power routines exercised in various areas of social life, the state represents an exceptional concentration of discretion, over maximally effective means of manipulating utilities and of the capacity for substituting alternative means to the same ends, and that in some conditions, at the core of this concentration of discretion, the 'conventional' or routine character of the exercise of power is no longer relevant, one has arrived at Schmitt's position: the laws of physics do not hold in a singularity; Schmitt's point is that at the core of the state there is, so to speak, a juridical singularity.

One need not, however, follow Schmitt's argument this far in order to see the relevance of his point. Barnes and Schmitt's opponent, Kelsen, are both subject to analogous strictures: Kelsen was open to criticisms based on the insufficiency of legal explanations or considerations to

account for the law, an insufficiency brought out by the phenomenon of the exception, a wholly 'juridical' fact which by definition could not, in some key respects, be subject to legal rules or control; Barnes offers an analysis of power based on the idea of routines, or conventions, in which an analogous question arises: is the sum of the routines in a society sufficient to account for the facts of power, particularly state power? Is there 'power' beyond routines? This question may be answered by insisting that all exercise of power relies in some respect on routines. But this form of argument may be used to cut both ways. Indeed, there is a curious symmetry here with Schmitt's argument for the ineliminability of decision and of the personal element of authority.

Schmitt points to something beyond 'routines' when he identifies the extralegal basis of the law in authority, with the effective monopoly of 'decision'.[25] To be sure, even a state of siege cannot be carried out without the adherence to some routines. But particular routines, indeed masses of them, can be suspended through the exercise of authority. Moreover, authority is not *reducible* to the routines through which it is exercised. To the extent that authority is personal the individual conception of power cannot be wholly eliminated in favour of a depersonalized notion of power as discretion resting on rights-establishing routines. Schmitt argues that even legal authority is irremediably personal, because 'the legal idea cannot translate itself independently.... In every transformation there is present an *auctoritatis interpositio*',[26] that is, individuals who are in certain respects unlimited and unconstrained by other individuals must make the decisions that apply the law. The routines, Schmitt would say, themselves rest in a concrete sense on individual decisions, as well as what Barnes calls 'knowledge': *auctoritas, non veritas facit legem.*

Barnes comes very close to Schmitt's formulation when he says that someone has possessed power when 'routines have been at their disposal and have been directed and controlled as they decided' (65). But he does not take the step that for Schmitt is crucial, to see the possession of power as inseparable from, and limited by, the conditions under which it could be dispossessed, of which the threats of war or revolution are the most extreme. Put differently, political associations are sustained by individual actions within the range of the routines that are available to them. Actions exercising 'rights' themselves may well lead, under particular circumstances, to the dissolution of the conditions under which the routines persist, and this possibility is ineliminable by the addition of more routines. The contrast between Barnes and Schmitt on this point may be seen as a matter of root images: for Barnes, the model of concerted action

in modern society is the traffic light; for Schmitt, it might be the slave plantation, in which, under normal conditions, a great deal of delegation of discretion according to routines would take place, but in which the threat of rebellion was always present, and in which the wrong decisions by the slave master might well assure his defeat.

For Barnes, routines form a series, or net, through which power is exercised, and society is a network of these relations; for Schmitt, the model is the juridical hierarchy, in which one realm of limited discretionary power supervenes over another, until one reaches, at the top, the unlimited power to decide on the discretionary powers of others: all paths lead back to the sovereign. Whatever the limitations of the latter model, it makes clear that power in something like its traditional sense in the theory of sovereignty, limitless discretion to command backed by an effective monopoly of power, still lurks behind the cases of limited, routinized power that is the 'normal' case in modern societies, and that routines do not merely persist, they are made to persist by utilities — manipulating *decisions*, that is, acts which use routines but are not themselves routine. Barnes might freely acknowledge this, and concede the point. But the importance of even the most minor concessions to this kind of consideration should not be underestimated: the existence of power beyond routines, conjoined with the traditional considerations of competition between powers and the creation of local monopolies of certain maximally effective powers, such as the power to take lives legally, leads us directly back to the older vocabulary of the political. And by considering the inherent constraints on the ruler who wishes to avoid dispossession, much of the older political view of power, which perhaps neglected but did not ignore conventions, laws and social routines, would be returned to its familiar, central place. This is to say that there is a place for Barnes in Schmitt. The same may be said for Rouse.

The 'concept of the political' was defined for Schmitt by the *possibility* of a struggle metastasizing into a struggle of the most extreme kind, a 'friend–enemy grouping' that manifests itself in war or revolution.[27] In different contexts, different kinds of struggle could take this form, so there can be no general division between 'the political' and other spheres. Modern liberalism was founded on the neutralization or depoliticization of religion in the wake of the wars of religion. But religion, or for that matter science, could be *made* political, and making them political, deneutralizing them, is a matter of political decision: a decision to define, for example, a scientific opponent as an enemy of the state, or to deneutralize a realm, for example, by turning schools into educational

factories for state purposes (or to turn educational institutions to anti-state ends, for example by a pedagogy of anti-authoritarianism).[29] The anti-constitutional *Weltanschauung* parties of Weimar era Germany were a case in point: the Socialists and Nazis provided party-oriented leisure activities, newspapers (even auto-clubs, in the case of the Nazis), which served to extend party-identification to as many domains of life as possible. Totalizing parties characteristically did not respect, or grew up in opposition to, the liberal compact based on the neutralization of such realms of religion, a public 'political' realm which was, by agreement, limited with respect to religion or other 'private' concerns. When these parties succeeded and became one-party regimes, they reduced the State to an instrument: the liberal oppositions between the political and, respectively, the religious, cultural, economic, legal and the scientific of the nineteenth century, were obliterated in fact in the 'total state' of the twentieth, which potentially embraced every domain, including of course science itself in the Nazi and Soviet cases.[29] Schmitt himself regarded totalization as representing a historical stage beyond liberalism. But it is a stage that arose through decision: the fatal decision of the constitutional authorities not to suppress these parties while they had the chance.

Schmitt's idiom and conclusions are far removed from Rouse's, but Rouse's conceptions find a place in his: there is nothing inherently 'political' about the techniques of 'making' that are characteristic of science, but they become political, in Schmitt's sense, if a decision is made, either by the custodians of state sovereignty or the scientist, that gives relations the form of enmity, what Schmitt calls the friend–enemy grouping. What is missing in Rouse's account is an enemy: to make 'technology' the enemy, as Heidegger did, a decision had to be made to identify it with a concrete friend–enemy grouping, namely the friends and enemies of National Socialism. Rouse's inability to derive any interesting political implications from his philosophical efforts results from his inability to make some analogous identification. If he had made one, the element of decision, of the political act of defining the enemy, would have been apparent, and it would have likely been a choice of a more traditional kind — in terms of such supposedly fundamental oppositions as those which feminism or Third-world liberationism are concerned. At this point, the novelty of Rouse's extension of the concept of power would disappear, for it would be evident that the struggle was fundamental, that the 'means' of power are relative to the struggle, that the conditions under which particular means of power are effective can be manipulated, and that the means traditionally definitive of sovereignty,

such as legal power and the power to suspend the law, are in some pre-philosophic sense more significant in defining the struggle than the means Rouse considers. To put things quite simply, the state can lock up scientists, forbid them to publish and refuse to pay their bills, and by doing so assure that the 'power' they possess cannot be exercised. The state may not wish to suffer the consequences of such actions, but it is the state that decides.

The asymmetry between political associations and other associations is of course a key to the traditional idea of sovereignty and the tradition of political theory that followed from it. It is unquestionable that, from a sociological point of view, the emphasis on ultimate juridical authority is an overemphasis, both historically and with respect to the phenomenological experience of being ruled. Barnes supplies a valuable corrective. By returning the problem of power to the local, immediate features of the decisions individuals make in choosing to follow power-creating routines, he has made a major step in re-establishing the analytic utility of the concept. The general picture of the exercise of power he presents is persuasive, and his emphasis on the multiplicity of reasons that individuals have for upholding routines and the alterability and manipulability of these reasons, is a fundamental insight. In itself, this insight is a great advance on past attempts to give wholesale answers to the traditional puzzles of power. Whether, and how, knowledge of the relations that this renovated concept redescribes serves to alter the concept of the political is a separate question. Barnes's self-described affinity for Habermas notwithstanding, the book offers a way out of the sterilities of Habermas's attempted wholesale reduction of power to the distortion of communication (with its reliance on an ideal of *veritas* that no sociologist of science could find coherent), and Habermas's ideal, based on the inversion of Hobbes, of government by discussion, in which *veritas, non auctoritas, facit legem*. Perhaps it would be better to see the Barnesian theory of power and the notion of dispossessable sovereignty as complementary, and in addition to see Barnes's account as showing that no general solution to the sociological (that is, non-normative) problem of legitimation, such as Habermas's, is necessary.

• NOTES

1. Steven Lukes, *Power: A Radical View* (New York: Macmillan, 1974).
2. Stanley Cavell, 'Politics as Opposed to What?', *Critical Inquiry*, Vol. 9 (1982), 157–78.

3. Carl Schmitt (trans. George Schwab), *Political Theology: Four Chapters on the Concept of Sovereignty* (Cambridge, MA & London: MIT Press, 1985), 22–23.

4. James Bryant Conant, *Modern Science and Modern Man* (New York: Columbia University Press, 1952).

5. In my conclusion, I will stress the contribution of Carl Schmitt to this line of attack. However, a wartime parallel to Schmitt of considerable historical significance on the American side was Hans J. Morgenthau's *Scientific Man vs. Power Politics* (Chicago, IL: The University of Chicago Press, 1946). Morgenthau was the intellectual mentor of Henry Kissinger.

6. Jürgen Habermas (trans. Thomas McCarthy), *Legitimation Crisis* (Boston, MA: Beacon Press, 1975), 43.

7. Schmitt, op. cit. note 3, 33.

8. The issue of Schmitt's politics is discussed in Joseph W. Bendersky, *Carl Schmitt: Theorist for the Reich* (Princeton, NJ: Princeton University Press, 1983). The issue of the peculiar bond between Schmitt and the Frankfurt School 'Critical Theory' has been examined in a recent symposium: Ellen Kennedy, 'Carl Schmitt and the Frankfurt School', *Telos*, No. 71 (Spring 1987), 37–66; Martin Jay, 'Reconciling the Irreconcilable? Rejoinder to Kennedy', ibid., 67–80; Alfons Söllner, 'Beyond Carl Schmitt: Political Theory in the Frankfurt School', ibid., 81–96; *Telos* Special Issue: *Carl Schmitt: Enemy or Foe?*, No. 72 (Summer 1987), 1–160; Kennedy, 'Carl Schmitt and the Frankfurt School: A Rejoinder, *Telos*, No. 73 (Fall 1987), 101–16. This contains a transcript of Schmitt's statements to the Allied authorities while in custody after the war (*Telos*, No. 72, op. cit., 97–129). It should be stressed that the arguments Schmitt constructs, as they pertain to the problem of the political, can be understood as natural extensions of the liberal political tradition itself, and indeed in some sense make explicit ideas that are found in Weber and in some of Weber's own German liberal sources: see Stephen Turner and Regis Factor, 'Decisionism and Politics: Weber as Constitutional Theorist', in Scott Lash and Sam Whimster (eds), *Max Weber, Rationality and Modernity* (London: Allen & Unwin, 1988), 334–54.

9. In what follows, page numbers will refer to Rouse's and Barnes's books. It should be evident from the context which book is cited.

10. Rouse appears to be innocent of any knowledge of the central role given to replication in Mertonian sociology of science, and although he cites some of the literature critical of this emphasis, he uses it only to make the point that there is a significant local, tacit element in the laboratory process of remaking a result. He does not seem to think there is anything 'politically' problematic about the process by which the status of an experiment as a replication, or the competence of a researcher, is negotiated or established, and indeed it is essential to the argument of the book that these processes be politically and epistemologically opaque or unproblematic: they are the devices, the fundamental net-links, into which he proposes to decompose the interactions of scientists and the world.

11. Victor Farias, *Heidegger et le nazisme* (Paris: Verdier, 1987).

12. Martin Heidegger (trans. Dagobert D. Runes), *German Existentialism* (New York: Philosophical Library, 1965), 40.

13. Martin Heidegger (trans. Ralph Manheim), *An Introduction to Metaphysics* (New Haven, CT & London: Yale University Press, 1959), 199.

14. Heidegger, op. cit. note 12, 28.

15. Ibid., 27.

16. Robert Eden, *Political Leadership & Nihilism: A Study of Weber & Nietzsche* (Tampa, FL: University of South Florida Press, 1984).

17. Gunnar Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy* (New York & London: Harper, 1944).

18. Donoso Cortés (Marques de Valdegamas), 'Address on Dictatorship' (1849), in E. N. Anderson, S. J. Pincetl, Jr and D. J. Ziegler, *Europe in the Nineteenth Century: A Documentary Analysis of Change and Conflict, Vol. 1, 1815–1870* (Indianapolis, IN: Bobbs-Merrill, 1961), 175.

19. As in his many remarks on the religious basis of 'restraint' and its political significance, for example 'the relative immunity of formerly Puritan peoples to Caesarism, and, in general, the subjectively free attitude of the English to their great statesmen as compared with many things which we have experienced since 1878 in Germany positively and negatively': Max Weber (trans. Talcott Parsons), *The Protestant Ethic and the Spirit of Capitalism* (New York: Scribner, 1930), 224–25.

20. Sigmund Freud (trans. Joan Riviere), *Civilization and its Discontents* (London: Hogarth, 1946).

21. Schmitt, op. cit. note 3, 56.

22. It should be stressed that the 'Weber' who emphasized legitimacy is a construction of American sociology; Weber's actual texts tell a different story, congenial to Barnes's. See Max Weber (ed. Guenther Roth and Claus Wittich), *Economy and Society: An Outline of Interpretive Sociology* (Berkeley, CA: University of California Press, 1978), 60, n. 20.

23. Carl Schmitt (trans. George Schwab), *The Concept of the Political* (New Brunswick, NJ: Rutgers University Press, 1976); Schmitt (trans. Ellen Kennedy), *The Crisis of Parliamentary Democracy* (Cambridge, MA & London: MIT Press, 1985).

24. Schwab, 'Introduction' to Schmitt, op. cit. note 3, xxiv.

25. Schmitt's target is Hans Kelsen, who had a depersonalized conception of the law; Schmitt characterizes Kelsen as holding that:

> The state, meaning the legal order, is a system of ascriptions to a last point of ascription and to a last basic norm. The hierarchical order that is legally valid in the state rests on the premise that authorizations and competences emanate from the uniform central point to the lowest point. The highest competence cannot be traceable to a person or to a sociopsychological power complex but only to the sovereign order in the unity of the system of norms (op. cit. note 3, 19).

26. Schmitt, op. cit. note 3, 31.

27. Ibid., 25–30.

28. As Schmitt puts it in 1933:

> We have come to recognize that the political is the total, and as a result we know that any decision about whether something is *unpolitical* is always a *political* decision, irrespective of who decides and what reasons are advanced. This also holds for the question whether a particular theology is a political or an unpolitical theology. (Schmitt, op. cit. note 3, 2.)

29. Ibid., 23–24.

Stephen Turner is a Graduate Research Professor at the Department of Philosophy, University of South Florida, Tampa. His recent work on political philosophy includes *Max Weber and the Dispute Over Reason and Value. A Study in Philosophy, Ethics and Politics* (with Regis Factor) (Routledge); 'Decisionism and Politics: Weber as

Constitutional Theorist' (with Regis Factor), in Scott Lash and Sam Whimster (eds), *Max Weber, Rationality and Modernity* (London: Allen & Unwin), 334–54; and 'The Political Face of "Rational Morality"', *Theory and Society*, Vol. 17 (1988), 551–70.

Author's address: Department of Philosophy, University of South Florida, Tampa, Florida 33620, USA.

Information for Contributors

Social Studies of Science is devoted mainly to the results of original research, whether empirical or theoretical, which bring fresh light to bear on the concepts, processes, mediations and consequences of modern natural science and technology. It is multi-disciplinary in the sense that is encourages appropriate contributions from political science, sociology, economics, history, philosophy, psychology, social anthropology, and the legal and educational disciplines. It welcomes studies of fundamental research, applied research and development; of university science, industrial science and science in government; of all aspects of technological innovation; and from all countries.

Prospective authors should send *five* copies of their contribution to the Editor. (Ideally, four of the copies should be photoreduced and doublesided, to economize on postage; only one 'top' copy need be full-size and singlesided.) Articles should be between 6,000 and 18,000 words long. Exceptionally, longer articles may be considered for publication in two or more parts. Shorter contributions will be considered for the 'Notes and Letters' section. All contributions should be typed and double-spaced on quarto or 8¼" × 11¾" (A4) paper; any diagrams necessary should be carefully drawn and fully labelled in pencil; captions should appear on a separate sheet. The Editors may alter manuscripts wherever necessary to make them conform to the stylistic and bibliographic conventions of the journal. A copy of the final annotated draft will be sent to the author(s) for approval, before the contribution is set in type.

Contributors are asked to pay careful attention to the following important points of detail:

English spelling should be used throughout, except in the case of words where the American 'z' has generally replaced the 's': e.g., organize. Single quotation marks should be used throughout.

Italic type will be used for the titles of books and journals referred to in the text and Notes, and for the least familiar foreign words. All words to be italicized should be underlined. The Notes and References should be typed, double-spaced on a separate sheet, numbered consecutively. They should be referred to in the text by numerical superscripts. Citations to *Science* and *Nature* should give both volume number and the full date, thus: *Science*, Vol. 177 (4 August 1972). Page numbers stand alone, without 'p.' or 'pp.' The following sample citations illustrate other aspects of the journal style, and should be closely studied:

1. J. Ben-David and R. Collins, 'Social Factors in the Origins of a New Science: the Case of Psychology', *American Sociological Review*, Vol. 31 (1966), 451–65.
2. L. Pearce Williams (ed.), *The Selected Correspondence of Michael Faraday*, Vol. 1 (London: Cambridge University Press, 1971), 113-19.
3. Ben-David and Collins, op. cit. note 1, 461.
4. Ibid., 460.

All subscription enquiries should be addressed to the Publisher.

SAGE Publications
28 Banner Street, London EC1Y 8QE
PO Box 5096, Newbury Park, CA 91359
32, M-Block Market, Greater Kailash-1, New Delhi 110 048

Published by

Social Studies of Science (ISSN 0306-3127) is published by SAGE Publications, London, Newbury Park and New Delhi, quarterly in February, May, August and November.
Annual Subscriptions: Institutions £72/$119; Individuals £28/$46
Second class postage paid at Rahway, NJ. POSTMASTER, send address corrections to *Social Studies of Science*, c/o Mercury Airfreight International Ltd. Inc., 2323 Randolph Avenue, Avenel, New Jersey 07001, USA.
Subscription and advertising details available from SAGE Publications Ltd.
28 Banner Street, London EC1Y 8QE, UK
Printed by J.W. Arrowsmith Ltd, Bristol, UK

Social Studies of Science is regularly listed in *Current Contents*, and abstracted in *ABC-Pol-Sci.*

Social Studies of Science

An International Review of Research in the Social Dimensions of Science and Technology

Volume 19 Number 3
August 1989

Contents

Papers

Discussion Paper