

Against Reflexivity as an Academic Virtue and Source of Privileged Knowledge

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REFLEXIVITY IS a central and yet confusing topic. In some social theories it is an essential human capacity, in others it is a system property and in still others it is a critical, or self-critical, act. Reflexivity, or *being* reflexive, is often claimed as a methodological virtue and source of superior insight, perspicacity or awareness, but it can be difficult to establish just what is being claimed. Some research programmes treat reflexivity as a methodological basis for enhancing objectivity, whereas others treat it as a critical weapon for undermining objectivism and exposing methodological ‘god tricks’. In this article, I question a widespread tendency to identify reflexivity with ‘radical’ theoretical and critical programmes. By doing so, I do not intend to aid the cause of an ‘unreflexive’ objectivism, thus marking myself as an old, orthodox, crypto-positivist fuddy-duddy. Instead, I shall argue that the meaning and epistemic virtues ascribed to reflexivity are relative to particular conceptions of human nature and social reality. I shall recommend an alternative, ethnomethodological conception of reflexivity that does not privilege a theoretical or methodological standpoint by contrasting it to an unreflexive counterpart.

Like the other versions discussed in the article, the ethnomethodological version of reflexivity is associated with a particular research programme that appeals to some social scientists and not others. According to this version, investigations of reflexive organizations of practical actions can lead to deep sociological insight, but ‘reflexivity’ is not an epistemological, moral or political virtue. It is an unavoidable feature of the way actions (including actions performed, and expressions written, by academic researchers) are performed, made sense of and incorporated into social

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settings. In this sense of the word, it is impossible to be unreflexive. I recommend this limited notion of reflexivity for the simple reason that it avoids the academic pretensions and fractiousness that can arise from equating reflexivity with a particular intellectual orientation, cultural condition or political perspective.

The Reflexivities

In order to sort out the confusing array of versions of reflexivity, I will start with an inventory of reflexivities. I pluralize the term, because some versions appear to have very little in common with others. My list is partly indebted to inventories compiled by Malcolm Ashmore (1989: 26ff) and Steve Woolgar (1988b), and like theirs it is open ended. The constituent categories overlap, and the list is not meant to suggest a strict hierarchical order. The main purpose of the inventory is to demonstrate the diversity of meanings and uses of the concept. I shall begin the list with some familiar conceptions of reflexivity in psychology and systems theory before proceeding to more ‘radical’ conceptions in social and cultural theory. Then, I shall focus on the way ‘reflexivity’ is used in polemical efforts to promote theoretical and methodological advantage in a noisy field.

(1) Mechanical Reflexivity

Many conceptions of reflexivity describe a kind of recursive process that involves feedback. In contrast to a linear model of billiard ball ‘impact’, a recursive process operates through an ongoing series of actions, responses, or adjustments in a system. Recursive models differ from ‘linear’ models, but both are deployed in mechanistic explanations of natural and social processes.

(1a) Knee-jerk reflexivity In common language, the word ‘reflexive’ can refer to an habitual, thoughtless or instantaneous response. This sense of the word greatly differs from the conceptions of reflexive (or reflective) actions, which emphasize conscious awareness, deliberation and choice. In behaviourist psychology, for example, the image of a reflex arc describes a hypothetical pattern through which a stimulus evokes a response. The circuit of relations is habitual and automatic, and conscious ‘reflection’ is, in principle, ruled out of relevance.

(1b) Cybernetic loopiness This type of reflexivity involves a circular, recursive process or pattern involving feedback loops. It can describe a simple servo-mechanism like a thermostat, in which feedback loops are objective and determinate. In the human sciences, selected cybernetic imagery is incorporated into models of human communication (cf. Bateson, 1972) which describe how the expressions of one organism provide feedback for itself and others in an ongoing interactional process. Images of feedback and looping also are used in interactional and historical accounts of human identity formation (Goffman, 1962; Hacking, 1995). These models use

mechanistic imagery, but they also emphasize a humanistic sense of reflexivity as *self-reflection*: the ability to deliberate and consciously monitor one's own actions (see 2b, below).

(1c) *Reflections ad infinitum* The iteration of recursive patterns is sometimes captured with popular icons like the hall of mirrors, the moebius strip, and Escher's hand drawing itself (Hofstadter, 1980). These images illustrate, and in some cases demonstrate, the idea of an infinite regress of reflections upon reflections. They provide elegant metaphors for describing interactional relations and logical paradoxes which can arise in mechanical and geometrical systems like computer programs and linear perspective.¹

(2) *Substantive Reflexivity*

Reflexivity is often treated as a real phenomenon in the social world at large. When applied at the level of entire global social systems, reflexivity is emblematic of late modernity; and when applied at the level of interpersonal interaction, it describes a fundamental property of human communicative action.

(2a) *Systemic-reflexivity* Anthony Giddens, Ulrich Beck, Scott Lash, Yaron Ezrahi, and others identify reflexivity as an organizing principle in late modernity (see Beck et al., 1994; Ezrahi, 1993). This order of reflexivity operates on a larger historical and cultural stage than does an interactional process (1b above) or a hermeneutic circle of texts and readings (5a below).² 'Reflexive modernization' in the grandest sense refers to a recursive turning of modernity upon itself; a movement that "occurs on cats' paws, as it were, unnoticed by sociologists, who unquestioningly continue gathering data in the old categories' (Beck, 1994: 3). In late-modern societies reflexive monitoring takes the predominant form of cost-benefit and risk-benefit analysis, environmental impact statements, economic forecasts and opinion polling. These modes of social inquiry rely upon expert knowledge for settling disputes, measuring public opinion and advising policy makers. The dominant mode of expertise is scientific and technocratic, and yet, according to theories of reflexive modernization, the same historical developments that set up modern scientific rationality also undermine its authority. On the one hand, the process of reflexive modernization privileges scientific discourse, because specialized instruments and expertise provide the means for visualizing and calculating risk, but, on the other hand, highly visible conflicts among experts undermine public confidence in expert rationality.

(2b) *Reflexive social construction* Starting with the idea that humans are self-reflective beings (see 3a), social theorists and philosophers like Max Weber, George Herbert Mead and Alfred Schutz argue that self-reflection has tangible consequences, not only for scientific investigators, but also more pervasively for the agents whose motivated actions and interpretations constitute social orders. A derivative conception of 'social construction'

(Berger and Luckmann, 1966; Searle, 1995) emphasizes the way consensual beliefs and concerted practices give rise to objective social institutions. Accordingly, institutional facts like the value of currency or the price of shares on a stock exchange depend upon collective actions that presuppose the objectivity of those facts. These socially constructed facts are real, in the sense that they are intersubjective, exist independently of the observer, and persist in time, but their reality depends upon, and is continually sustained by, reflexive subscription to that very reality.

(3) *Methodological Reflexivity*

There are several variants of methodological reflexivity in the human sciences. Some are connected with long-standing philosophical projects, while others are associated with contemporary social science programmes. Methodological reflexivity is widely advocated, but no single programme holds a monopoly on its use. Indeed, what any given text means by reflexivity often depends upon the method it espouses.

(3a) *Philosophical self-reflection* This is consistent with the Enlightenment ideal of self-knowledge.³ As commonly represented, such knowledge is attained through philosophical introspection, an inward-looking, sometimes confessional and self-critical examination of one's own beliefs and assumptions. It is associated with the classic rejection of 'appearances' in favour of deeper foundations of certainty, and is strongly exemplified by Descartes' (1968[1637]) *Meditations*.

(3b) *Methodological self-consciousness* At the more mundane level of social science methodology, reflexivity has become a canonical feature of participant-observation. Qualitative methods texts often include discussions of reflexivity, which advise students to take account of their own relations to the groups they study (Hammersley and Atkinson, 1983; Ellen, 1992). The texts instruct students to be conscious of their own assumptions and prejudices, and to focus upon uncertainties, possible sources of bias, and problems of access and reactivity. Instrumental and optical metaphors abound in this context: the reflective and refractive processing of 'reality'; the dependence of appearances on observational 'standpoints'; and the attempt to correct biases that distort or confound access to the object of study. In brief, many of the prescriptions for methodological reflexivity are guided by familiar instrumental metaphors and the subject-object dichotomy.

(3c) *Methodological self-criticism* Self-criticism often seems to follow naturally from self-consciousness. Such criticism is not limited to 'confessional' ethnography (Van Maanen, 1988) or anti-objectivistic styles of discourse analysis and textual criticism. Standard conceptions of science emphasize systematic self-criticism. For example, Popper (1963) and Merton (1938) attribute to scientific communities an exceptional willingness to reject any idea, however appealing or widely accepted, that does not survive rigorous

testing, and Lewis Wolpert (1992: 19) goes so far as to treat the capacity for critical reflection as a rare individual attribute that distinguishes scientists from the ordinary run of humanity. Whether treated as a communal ideal or individual virtue, reflexive self-criticism is ‘constructive’ in the sense that, in the long run, it is believed to enhance rather than undermine the positive status of the knowledge that survives such criticism.

(3d) Methodological self-congratulation In the sociology of science, Robert Merton and his functionalist colleagues developed a more specific form of reflexive argument when they applied the same indices of ‘maturation’ in the natural sciences (evidence of specialized journals, professional associations, peer review processes, citation networks) to the study of their own speciality (Merton, 1978: 10). The reflexive application of these indices rhetorically promoted the standing of the sociology of science by supposedly showing that it was ‘self-exemplifying’; becoming more like one of the ‘mature’ sciences it studied.

The strong programme in the sociology of knowledge broke away from the Mertonian programme, but the conception of reflexivity that Bloor (1976) initially identified with the strong programme was not radically different from Merton’s idea that the sociology of science was self-exemplifying. Bloor did not invoke the same indicators of scientific status, and he did not suggest that the strong programme *already was* a ‘mature’ natural science, but like Merton he also linked the credibility of the strong programme to a reflexive identification with science. Bloor’s conditional proposals suggested that a reflexive sociology of science could become ‘scientific’; it could become a means through which science would come to know itself.

(4) Meta-theoretical Reflexivity

Closely allied with methodological reflexivity is a more general reflexive orientation, perspective or ‘attitude’. This is sometimes described as a matter of ‘stepping back’ from full engagement in cultural activity which is often said to be emblematic of the sociological attitude (Berger, 1963). This attitude requires a form of ironic detachment: a disengagement from tribal custom and a heightened awareness of taken-for-granted assumptions. There is a long history of efforts in social theory to identify such critical detachment and perspicacity with social marginality. Classical Marxism embraced the proletariat as a social location for a theoretically guided critique of dominant ideology, Georg Simmel (1970) and Alfred Schütz (1964) treated the stranger’s marginal position as a source of insight into taken-for-granted beliefs, and Karl Mannheim (1936) treated the position of the unattached intellectual as an institutional vantage point for the sociology of knowledge.

(4a) Reflexive objectification One sense of ‘stepping back’ is hyper-objectivistic, as it implies an ability to see, see through, and critically revalue what fully situated members take for granted as ‘objective’. Pierre Bourdieu’s version of reflexivity is an apt example. Bourdieu identifies

reflexivity with an objectivation of the social field. A double objectivation arises when the reflexive light is turned on sociology, a field that already objectifies its subject matter (Bourdieu and Wacquant, 1992: 68ff). This conception of reflexivity depends upon the possibility of taking a detached position from which it is possible to objectify naive practice, and it can lead to conflict when applied to practices that do not regard themselves as naive.

(4b) Standpoint reflexivity The idea that social scientists individually and/or collectively possess a special courage and capacity to ‘step back’ from culturally laden prejudice is rejected by many social and cultural analysts today. Nevertheless, critical self-reflection continues to be held in high regard. One contemporary variant of critical theory places less emphasis on scientific methods and analytical attitudes, and more on gendered, racial and cultural ‘standpoints’ that provide existential conditions for reflexive critiques of dominant discourses. Sandra Harding (1996), for example, recommends a project of ‘strong reflexivity’ in social theory, which is a matter of subjecting one’s own conceptual framework to criticism. ‘Strong’ reflexivity in this sense is not a confessional discourse that inhibits the pursuit of objective understanding. Quite the opposite:

Maximising the objectivity of our accounts requires that the conceptual frameworks within which we work – the assumed and/or chosen ones of our discipline, culture, and historical moment – be subjected to the same critical examination that we bring to bear on whatever else we are studying. (Harding, 1996: 159)

Although more overtly political in its objectives, Harding’s conception is partly akin to David Bloor’s (1976) formulation of reflexivity (see 3d, above). Bloor insists that, in order to be scientific, the sociology of scientific knowledge must reflexively explain its own mode of knowledge-production. In principle, such reflexivity should strengthen rather than undermine the sociology of knowledge. Unlike Bloor, Harding does not propose a methodological identification with science as much as an existential identification with ‘the lives of those most disadvantaged’: members of social categories (women, African Americans or Chicana women) who are neglected or oppressed by established conceptual frameworks of modern technoscience. The marginal social-structural location of Harding’s standpoint epistemology differs fundamentally from a methodological (ad)vantage point, but the epistemic power and privilege assigned to critical self-reflection remains intact. The explicit aim to maximize the objectivity of accounts distinguishes this ‘strong’ version of reflexivity from ‘radical’ anti-objectivistic versions.⁴

(4c) Breaking frame Modern film, theatre and painting sometimes call attention to the illusionist techniques they deploy to create a sense of reality. Goffman (1974) systematically extends the idea of theatrical framing to encompass mundane situations of everyday life. In contrast to theories that

identify standpoints and situated knowledges with social and cultural categories (class, gender, race, etc.), Goffman's frames and situations are locally ordered and highly flexible. In his view, fixed standpoints may be endogenous to particular experiential frames, but persons have a capacity to shift standpoints, both physically and imaginatively. Reflexivity, in this sense of the word, is a sometimes shocking exposure and realization of the conjurer's tricks, props and boundary conditions of compartmentalized experience. Some experiences are more compartmentalized, and more readily exposed, than others, and taken-for-granted 'everyday' reality is the most difficult of all to suspend. Ideas and imagery associated with phenomenological framing and reflexive exposures of frames are featured in various approaches to experience and communication, including social constructionist (2b), hermeneutic (5a), radical referential (5b) and ethnomethodological (6).

(5) Interpretative Reflexivity

Reflexivity often is identified with interpretation: reading, thinking, contemplating or making sense of, an object or text. Above all, it is identified with a style of interpretation that imagines and identifies non-obvious alternatives to habitual ways of thinking and acting. Interpretation is more or less prominent in many of the above categories of substantive, methodological and meta-theoretical reflexivity, but it is a central theme in the following two categories.

(5a) Hermeneutic reflexivity Many contemporary modes of reflexive interpretation make use of the classic theme of the hermeneutic circle. In its narrow scholastic sense, the hermeneutic circle describes an intimate circle of textual signs and interpretative meanings. The reader's presumptions about what the text *can* mean reflexively inform the temporal effort to make out what it does mean. In the past century, conceptions of text and interpretation have been generalized to cover a broad range of communicative actions, media and material phenomena, so that hermeneutics now includes much more than literary exegesis. A hermeneutic sociology becomes a way to theorize the constitution of society. Giddens (1993[1977]), for example, codified a notion of 'double-hermeneutic' which distinguishes two orders of interpretation: between mute natural objects and reactive social subjects, and between social scientific interpretations and the ordinary interpretations that guide social actions and constitute social orderings.⁵ In classic (and, most famously, Marxist) sociology, ordinary interpretations are said often to be unreflexive, in the sense that they are unconscious or falsely conscious of the determinate contexts and forces revealed through social analysis. In contrast, the sociologist's interpretations are claimed or presumed to be reflexive, self-critical and capable of elucidating alternative possibilities for action obscured by myths, ideologies and prejudices. The division between reflexive and unreflective understandings thus is drawn on the basis of theoretical conceptions of social and historical reality.

(5b) *Radical referential reflexivity* This mode of reflexivity starts with an idea taken from classic sociological theory that interpretations establish the meaning and very existence of the social world. This idea is radicalized, first by extending it to cover ‘natural’ as well as the ‘social’ interpretations, and second by refusing to countenance any of the rhetorical or methodological strategies that endow social scientific findings with a ‘privileged’ or ‘objective’ status.

Radical reflexivity is characterized by a preoccupation with, and sceptical treatment of, *representation*.

To the extent that we are representing, adducing, summarising, portraying, deducing, using evidence, interpreting, in everything we do, our practice embodies deep preconceptions about what it is to be scientific, to reason adequately, to know, and so on. Hence, science – the culture and practice of those called scientists – is only the tip of the iceberg of a much more general phenomenon: representation. (Woolgar, 1992: 329)

Reflexive analysis becomes a matter of explicating (or, perhaps, excavating) these deep preconceptions. Science and technology studies (S&TS) is not the only field in which reflexive studies have gained critical purchase (similar approaches have taken hold in literary, legal and cultural studies), but arguments in that field clearly exemplify radical reflexivity.

Simply understood, radical reflexivity extends a constructionist analysis of representations to include the representations produced in S&TS texts. A radically reflexive analysis problematizes or deconstructs positive claims about progress, knowledge and professional autonomy. Unlike Bourdieu’s reflexive sociology, which seeks to objectify the work of objectivation (Bourdieu and Wacquant, 1992: 63), radical reflexivity questions the very practice of objectivation, without distinction or exemption. In short, it is sceptical of any representation that refers to, or presupposes, a world independent of the local means of its representation.

(6) *Ethnomethodological Reflexivity*

An early, unique, and frequently misunderstood version of reflexivity originated with Garfinkel’s ethnomethodological programme (Garfinkel, 1967; Garfinkel and Sacks, 1970). All of the versions of reflexivity discussed so far involve a mixture of theoretical, substantive and methodological considerations, but such intertwining is especially evident in the case of ethnomethodology’s version. What Garfinkel (1967: 1) calls the “‘reflexive’” or “‘incarnate’” character of accounting practices and accounts’ is simultaneously methodological and substantive, and, because of its central place in ethnomethodology’s programme, it can also be said to have theoretical significance. The reflexivity of accounts implies interpretation – expressing, indicating or recognizing meaning – but, more than that, it alludes to the embodied practices through which persons singly and together, retrospectively and prospectively, produce *account-able* states of affairs. According

to this view, reflexivity is ubiquitous and unremarkable. It is akin to Latour's (1988) 'infra-reflexivity' – the cross-referential, semiotic linkages that proliferate within and between texts – except that it refers not to networks of semiotic *entities* but to proto-semiotic *practices* and local interactions through which signs, objects and signed-objects achieve identity and sensibility. Garfinkel speaks of the 'essential reflexivity of accounts' to describe a property of 'accounts' (verbal expressions, signifiers, texts and other formal devices) that is furnished by taken-for-granted usage in recurrent circumstances. One aspect of this version of reflexivity, to which I shall return later, is that it is not associated with any particular epistemic virtue, cognitive skill or emancipatory interest. It is ubiquitous and 'uninteresting', but, as Garfinkel demonstrated in his studies of the 'documentary method of interpretation', the reflexive relationship between accounts and accountable states of affairs can become vicious (and thus 'interesting') when analysts attempt to treat decontextualized documents, signs and indicators as self-sufficient accounts of 'what really happened' or 'what was really meant'. It can become vicious because the conditions for making sense of a document are not 'contained' in it; they are reflexive to the circumstances of use. At best, those conditions may be imagined to consist of normal, but undocumented, circumstances of action and understanding which operate in standard social situations. In other words, sociology's empirical methods for documenting social structures presuppose background understandings of the normal, but unstudied, operations of the ordinary society.

(7) *Summary*

Each of the reflexivities in my inventory – mechanical, substantive, methodological, meta-theoretical, interpretative and ethnomethodological – involves some sort of recursive turning back, but what does the turning, how it turns, and with what implications differs from category to category and even from one case to another within a given category. The extant versions of reflexivity go along with divisions among schools, programmes and perspectives in philosophy and the human sciences. Reflexivity is frequently associated with radical, anti-objectivistic programmes, but many conceptions of reflexivity support rather than undermine more conventional programmes of empirical research. Reflexivity is often mentioned in connection with methodological efforts to root out sources of bias, and some contemporary notions of reflexivity are indebted to the Enlightenment conception of self-reflection as a uniquely human cognitive capacity that enables progressive understanding of the human predicament.

The Relativity of Reflexivity

Reflexivity is often claimed as a theoretical or methodological virtue that distinguishes a contemporary intellectual movement from its outmoded predecessors, but further examination of some of these predecessors can often reveal that they too had their 'reflexive' modes and moments. The functionalist perspective that dominated American sociology and social

anthropology in the mid-20th century is frequently dismissed today as an outmoded social theory. Kingsley Davis was a proponent of that perspective, and his and Wilbert Moore's argument about the functions of social class systems (Davis and Moore, 1945) is still taught to sociology students as an example of a conservative social theory. Nevertheless, Davis was not simply an 'unreflexive' social theorist, as he expounded upon his own view of reflexive self-criticism. In a presidential address to the American Sociological Association in the late 1950s, Davis made a series of ironic and reflexive remarks about functionalism and its critics.⁶ But, unlike today's reflexive ethnographers in sociology and anthropology, Davis associated 'methodological self-consciousness' with the formal, comparative methods of 1950s style sociology, which he contrasted to the ethnographic method used by anthropologists:

Since sociologists deal with complex societies, they cannot rely on informal observation and informants but have to employ a variety of research techniques. This gives them a methodological self-consciousness that makes it inevitable that any development such as functionalism will be subjected to technical scrutiny. Furthermore, the traditional interest of sociologists in systematic theory (in part a reflection of their closer ties with economics and philosophy) prompts them to examine the premises and the logic of functionalism. (Davis, 1959: 770)

Davis draws an invidious comparison between sociology of modern societies and ethnography of primitive societies. In his view, methodological self-consciousness is a consequence of making assumptions explicit, using different techniques and comparing evidence. He contrasts such 'disciplined' methods with 'field work': "Field work" . . . became a *mystique* among social anthropologists, with the result that singularly little systematic comparison was attempted and hence not much empirically disciplined general theory' (Davis, 1959: 770).

Contemporary reflexive ethnographers (such as the contributors to the much-heralded volume by Clifford and Marcus, 1986), share Davis's scepticism about 'field work', but the systematic basis for their scepticism and the reflexive alternative they promote differs profoundly from what Davis advocates. The difference between Davis's (1959) criticisms of anthropological ethnographies and contemporary reflexive criticisms, is not that the latter are *more* reflexive than Davis's, but that they are *differently* reflexive. It is not simply the case that contemporary ethnographers succeed, where Davis fails, to incorporate reflexivity into their analytic practices. But, while Davis does incorporate a kind of reflexivity into his analytic practice, *what* he so incorporates has little in common with what today's ethnographers regard as reflexive analysis. Whether describing the functions of a caste system or writing reflexively about his own method, Davis takes an empiricist, functionalist approach. Others, who reject functionalism, write anthropology, substantively and reflexivity, in accordance with other agendas.

What Does Reflexivity *Do*?

It is often supposed that reflexivity *does* something, or that *being* reflexive transforms a prior 'unreflexive' condition. Reflexive analysis is often said to reveal forgotten choices, expose hidden alternatives, lay bare epistemological limits and empower voices which had been subjugated by objective discourse. Reflexive analysis is thus invested with critical potency and emancipatory potential. But, as I have argued, what reflexivity does, what it threatens to expose, what it reveals and who it empowers depends upon who does it and how they go about it. Proponents of radical reflexivity argue that many, perhaps most, attempts to *do* reflexive analysis are superficially or inconsistently carried out, but such arguments still beg the question of just what *is* carried out, whether radically or not, under the banner of reflexivity. Perhaps some insight into this question can be gained by more closely examining a version of radical reflexivity, which has become prominent in social and cultural studies of science.

Radicality

Reflexivity is not intrinsically radical. Woolgar (1984: 10; quoted in Ashmore 1989: 32) points out that some species of self-reflection and self-reference are 'benign' (unthreatening to conventional modes of inquiry), and, as noted above, objectivistic modes of social analysis advocate their own, appropriately objectivistic, modes of reflexivity. The effects or implications of applying a form of analysis 'to itself' will vary with the kind of analysis in question, and the examination of 'self' (or self's own writings, and the writings of colleagues in self's field) is no less circumstantial, contingent, fallible or trustworthy than is any other investigative or critical activity. Like confession, reflexive analysis does not come naturally; it requires a tutorial under the guidance of a particular programme.⁷

Unlike garden-variety methodological self-criticism, radical reflexivity attempts to disrupt, delay or counteract the objectification of knowledge.⁸ And, unlike theoretical efforts reflexively to 'deconstruct' established modes of objectivity in order to set up alternative, more democratic and perhaps even stronger, modes of objectivity, radical reflexivity makes no concession to any form of objective, or privileged, analysis. Some critics see this as going too far, because it inhibits empirical social research (Collins and Yearley, 1992) and elevates epistemological purity above any attempt 'to make a difference in the world' (Haraway, 1997: 36). Both the critics and the proponents of radical reflexivity emphasize that a constructionist analysis problematizes, deconstructs, and undermines objective commitments by revealing 'methodological horrors' (Woolgar, 1988b) and exposing uncertainties and 'messy' contingencies.

The radical reflexivity of Ashmore (1989), Woolgar (1988a, 1988b) and Pollner (1991) should not be confused with political radicalism (e.g. radical feminism, radical socialism or any other radical social movement), although the two can coincide.⁹ As I understand it, the relevant style of radicalism

has to do with an uncompromising attempt to follow through on certain logical and epistemological commitments, to the point even of problematizing those very commitments. The commitments that are followed through are associated with an opposition to logical-empiricist philosophy of science and/or sociological scientism, and an advocacy of a constructionist alternative. Contrary to the aims of others who attempt to support social science research programmes by invoking abstract maxims and guidelines which are supposed to distinguish scientific from pseudo-scientific or non-scientific inquiries, radical reflexivists attempt without prejudice to analyse rhetorical uses of distinctions between ‘society’ and ‘nature’ and ‘true’ and ‘pseudo’ sciences. They eschew logical-empiricist resources for building arguments and designing studies, and they criticize other so-called relativists for lapsing into scientism and empiricism. However, they too make use of methodological resources. Woolgar and Ashmore derive many of their resources from the strong programme in the sociology of scientific knowledge, but they attempt to apply them relentlessly. Radical reflexivity follows through on the programme by refusing to exempt the sociology of science from its own relativizing inquiry. They attempt to avoid making selective and inconsistent use of relativistic arguments and procedures. Rather than attempting to evade paradoxes created by applying relativist arguments to themselves, they celebrate paradox and argue that it is threatening only to those who hold on to a restricted and outmoded conception certainty and logical compulsion.

Making Problematic

What, then, is ‘problematized’ by a radical reflexive analysis? A constructionist analysis of an objective proposition like ‘Thyrotropin Releasing Factor is Pyro-Glu-His-Pro-NH₂’ (Latour and Woolgar, 1979: 147),¹⁰ delves into the history of that statement, and points out that its unqualified ‘X is Y’ form derives from the deletion of contingencies and mediations which would be indexed with discursive modalities: ‘*I think X is Y*’, ‘*X might be Y*’, ‘*under condition Z, X seems to be Y*’, etc. At an earlier stage of the research, such modalities were formulated by (some) members of the relevant community of scientists, but they were progressively removed when ‘the fact’ became established. Accordingly, both the deletion of the contingencies, mediations and modalities associated with the ‘X is Y’ form of ‘factual’ statement, and the stability that resulted from their deletion was itself historically contingent. The stability of the statement was not guaranteed by any natural, essential or transcendental foundation. Insofar as contingencies are commonly associated with tenuous, uncertain or contentious statements, to suggest that their deletion is not warranted for all time implies that the objective statement ‘X is Y’ is potentially, if not immediately, problematic.¹¹

One point needs to be clarified about what is meant by ‘problematic’ in this context. When Latour and Woolgar (1979) argue that the statement ‘Thyrotropin Releasing Factor is Pyro-Glu-His-Pro-NH₂’ is problematic, they are not contesting the evidence for that claim. As they acknowledge,

they would be ill prepared to defend or criticize the statement's evidential basis. Instead, they mean that the statement once was, and may again be, subject to debate among members of the relevant scientific tribe. This differs from saying that the authors of the statement have erred, or that the purported fact may be spurious because the scientists failed to control all of the relevant experimental conditions. This order of 'problem' does not imply that the scientists at Salk Institute in San Diego who published the factual claim about Thyrotropin Releasing Factor would have been wise to withhold publication until further testing was done. Instead, the 'problem' is that there is no absolute assurance against the possibility that the factual statement may be rejected or significantly modified in the future. If the scientists were to understand what Latour and Woolgar wrote, they would recognize that *no* amount of testing would *ever* be sufficient to secure the fact against all future possibility of refutation. The immediate problem for them was to decide when the fact was secure *enough* to make a public announcement; a judgement for which there is no absolute guarantee.

Not surprisingly, when this form of constructionist analysis is applied to particular statements made in social studies of science, those statements also can be made out to be problematic, 'vulnerable to deconstruction' (Collins and Yearley, 1992: 304). However, in such cases the reflexive analysis may be more difficult to distinguish from more familiar species of critical argument. Take, for example, Ashmore's (1989: 114) discussion of a 'claim' made by Collins (1982: 304): 'One of the most well replicated outcomes of [SSK] concerns the social negotiation of reproducibility.' At least part of the thrust of Ashmore's (1989: 112ff) analysis is (or can be taken as) a critique of Collins's 'unreflexive' approach. Collins argues that the concept of 'replication' in experimental methodology is problematic, and a number of his studies describe cases in which scientists experience practical difficulties and wrangle over whether a particular experiment counts as a replication of an earlier experiment (Collins, 1985). Despite having established the problematic character of 'replication', Collins (1982) nevertheless claims that his own findings and those of a number of other case studies replicate one another. Ashmore then examines this claim by using what he takes to be Collins's own way of analysing natural scientists' replication claims. Ashmore points out that Collins does not apply his sceptical analysis of replication to his own claims. This argument resembles a familiar kind of refutation: elucidating a contradiction. Moreover, Ashmore's (1989: 137) disavowal of any intention to refute Collins might (as Ashmore himself points out) be heard as a familiar kind of disclaimer. Contrary to Ashmore's emphasis on reflexivity, however, the devastating effect of his criticism (if it is devastating, and a criticism) arises from the ordinary, familiar, and effective way Ashmore seems to point out a contradiction in Collins's arguments.

Unlike Latour and Woolgar's analysis of the construction of a scientific statement, Ashmore's reflexive analysis of Collins's statement about replication is much closer to home: the analysis is internal to the field of social studies of science. It is 'internal' both in the sense that the analysis is

published by a *bona fide* member of the science studies field for other members to read, and also in the sense that it re-applies the logic of a familiar kind of science studies explanation to an instance of research in that field. Not surprisingly, the analysis seems to imply criticism. Similarly, when Woolgar (1981) analyses ‘interest’ explanations in sociology of science, or when Mulkey et al. (1983) rhetorically examine published articles by their science studies colleagues, it is difficult *not* to read them to be engaged in criticism. Two decades earlier, when Garfinkel (1967) began to publish his ethnomethodological studies of social scientific research practices, many sociologists took those studies to be critical of the rigour of ‘conventional’ sociological methods. Indeed, they were critical, though *how* they were critical and the extent to which they were critical continues to be a source of consternation and puzzlement.

Constructionism and Criticism

If, as I have claimed, radical reflexivity is a matter of analysing the construction of constructionist arguments, the question of whether, and how, radically reflexive studies are critical turns on the question of whether, and how, *constructionist* studies are critical. At the moment this is a contentious issue in social cultural studies of science. Many critics of constructionist science studies, especially those who have taken up the banner of ‘science’ in the so-called ‘science wars’ (Gross and Levitt, 1994; Sokal, 1996), equate constructionism with substantive criticisms of natural science laws and facts. Some studies *are* explicitly critical of particular theories, narratives, and metaphors in the natural science fields they investigate. For example, Richard Lewontin’s (1993) and Evelyn Fox Keller’s (1992) criticisms of the ‘master molecule’ metaphor in molecular biology explicitly advocate an alternative, more holistic orientation to cellular and sub-cellular processes. Similarly, Emily Martin’s analysis of gendered imagery in biological accounts of fertilization (Martin, 1996) identifies metaphors that systematically skew, and arguably distort, biological understandings of the processes in question.¹² Such criticisms contribute to debates about substantive biological matters, and they may even influence research trends. The particular arguments are inspired by feminist, constructionist or other intellectual movements, but they are far more pointed and particularistic than a more general assertion to the effect that *all* scientific knowledge is constructed and reflects the particular standpoints of its creators.

Constructionist analyses are often *taken* to be critical even when they are not intended that way. This is because proposals to ‘deconstruct’ the practices through which ‘objective’ representations are constituted employ familiar argumentative idioms. Many of the terms used in connection with constructive analyses suggest that ‘deconstruction’ is not simply a matter of reverse engineering (taking an artefact apart in order to learn how to put it together). Instead, such analysis is said to reveal sources of contingency and uncertainty, which are inadvertently (or, in some cases, quite deliberately) hidden by a text’s just-so stories. But, unlike standard methodological

criticisms, which identify particular, sometimes eliminable, errors and biases, radically constructionist accounts of science emphasize an array of *irremediable* horrors, problems, paradoxes and uncertainties, and they describe scientific practices as *inherently* messy and problematic. One might want to ask why they do not emphasize what makes such practices rational and effective? The answer is that they *do* describe how ‘rationality’ and ‘effectiveness’ are locally *constructed* and historically stabilized. Consistent with a long-standing sociological preoccupation with exposing and unmasking hidden agendas, backstage conspiracies and *sub rosa* economies, constructionists hope to unveil the underside of scientific practice which is hidden by lofty ideals and artful rhetoric.

Constructionism and Contingency

It is widely believed by proponents and critics alike that constructionist research ‘problematizes’ its subject matter, but the meaning and significance of such problematizing is itself problematic, in the sense that the critical merits and implications of constructive analyses remain unclear, ambiguous and subject to dispute until (and even after) they are worked out in substantive detail. Constructionism frequently is treated as a general epistemological position, and specific case studies often begin with general philosophical arguments about the theory-ladenness of observation, the underdetermination of theory choice by evidence and the indeterminate relationship between methodological rules and actual practices. These arguments derive from sceptical epistemology, where they are cast at such an abstract level that they have no direct bearing on the intelligibility and adequacy of particular scientific claims. Confusion results when terms of reference that imply particularistic criticism are woven into abstract sceptical statements (Sharrock and Anderson, 1991). For example, take the following characterization by Steven Ward (1996: 32) of ‘postmodern’ theorizing:

When truth is revealed to be an outcome of power configurations . . . linguistically biased and arbitrary philosophical hierarchies . . . or self-referential language games . . . there is a tendency for postmodernists to conclude that modern conceptualizations of truth and reality are outmoded concepts. Since both truth and reality appear to be the products of discourse, there is little need to write as if discourse must originate in them. The only viable option open for theory, or what is now better written as ‘theory,’ is to recognize itself as a form of literature and practice poetics or polemics.

In this case, the subject of construction is not sub-electrons, N-rays or quarks, but ‘truth’ itself.¹³ Nevertheless, the passage employs empiricist idioms that imply that ‘truth and reality’ have been ‘revealed’ to be outcomes, ‘effects’ and ‘products’ of historical ‘power configurations’. The reflexive option (‘the only viable option’) proposed at the end of the passage is marked by resignation to forms of theorizing (or ‘theorizing’) that eschew extant standards of ‘truth’ and ‘reality’, as though these general conditions of inquiry

could be set aside like outmoded instruments. Despite this proposal, Ward uses terms like ‘arbitrary’ and ‘biased’ that implicate something like the very standards of inquiry that would be set aside. This combination of epistemological abstraction and apparent empirical reference facilitates commerce between theory, history and politics, but it misleadingly suggests that a philosophical critique of modern concepts can settle what counts as ‘arbitrary’ or ‘biased’ in specific cases.

The *problem* of how descriptions correspond to their objects (the primary problem taken up in a programme of radical reflexivity) is a classic problem for philosophical analysis, but it has no direct bearing on the more localized referential questions and problems addressed in science and other situations of inquiry. Undoubtedly, problems arise in science and daily life in connection with particular utterances, words, signs, pictures, evidences and so forth, but these tend to be limited in scope and cast up against an unquestioned background (Wittgenstein, 1969). Such circumscribed problems do not often give rise to the vertiginous insight that ‘[e]verything becomes rhetoric and discourse. Never ending interpretation, not forever fixed theory or methodology, is all that is possible’ (Ward, 1996: 33). The move from particular interpretative troubles to a general, and ultimately insurmountable, ‘problem’ of representation may seem profound, but it begs the question of why it should be imposed on practising scientists, or anyone else.¹⁴ Claims about particular theories and experimental findings may be problematic, but not because ‘representations’ *always* are problematic, because of the way they are underpinned by trans-situational ‘presuppositions’, deep metaphors or grand narratives that pervade an entire epoch of Western history.

Scientists may have many reasons to be sceptical of claims made, for example, about data taken from a radio telescope fixed on a particular quasi-stellar radio object, but general arguments about theory-ladenness and underdetermination provide no *specific* reason to be sceptical of the data or to favour one astrophysical interpretation over another. Scientists engaged in particular research projects can ignore the general problems raised by sceptical philosophers because, even if they are genuine problems, they apply across the board and imply nothing specific about the adequacy of particular judgements. At best, the general problems can inspire critics to be confident that established facts and research programmes *can* be undermined in *some* way, but this does not lift the burden of finding a *convincing* way to undermine them, nor does it make the revelation of problems any less contingent than the revelation of facts.

In the instance of a ‘radically reflexive’ argument about particular studies in the author’s own field, the argument also will be subject to the exigencies of critical discourse in that field. Is Ashmore’s reflexive analysis of Collins convincing? Some of us would say yes, because Ashmore effectively exposes inconsistent treatments of the concept of replication that Collins is hard-pressed to defend. This has less to do with reflexivity and more to do with the methods, standards and contingencies of argument in philosophy

and the human sciences. Like any other effort to expose, uncover, reveal or disclose surprising, counterintuitive and potentially unsettling, matters, a reflexive analysis must be entrusted to an uncertain fate. There are no guarantees of success, and no *inherent* advantages to ‘doing’ reflexivity or ‘being’ reflexive. Consequently, a project that deconstructs objective claims should be no more or less problematic, in principle, than the claims it seeks to deconstruct. In brief, there is no particular advantage to ‘being’ reflexive, or ‘doing’ reflexive analysis, unless something provocative, interesting or revealing comes from it. An author might *try* to achieve such outcomes, but as many of us know all too well, an author’s personal conviction is not a *criterion* of success. Regardless of whether a study examines a natural scientific project, a social science text, or its own construction, its cogency will depend upon what it says about its topic and whether it persuades relevant audiences. Depending on the case, it may come across as insightful, witty, convincing, unconvincing, boring or silly.

How to be Unreflexive

When reflexivity is treated as a discrete methodological act, cognitive state or self-conscious existential condition, its ‘achievement’ can be contrasted with an ‘unreflexive’ failure to perform the relevant act, attain the relevant state or become conscious of the relevant condition. However, when reflexivity is considered ubiquitous and unavoidable, it no longer makes sense to distinguish reflexive from unreflexive language or action. As noted in my inventory, an ethnomethodological conception of reflexivity does not set itself off against an unreflexive counterpart. Garfinkel (1967: 4) speaks of ‘the “uninteresting” essential reflexivity of accounts’. As I understand the expression, Garfinkel means that practical actors, including sociologists and others who collect data and construct models that purport to describe and explain social reality, are not, and cannot be, interested in making a sustained topic out of the reflexive production of their accounts. This absence of sustained interest does not necessarily indicate a deliberate, or even implicit, effort to construct a *sense* of objectivity by deleting all evidence of uncertainty and ‘messy’ contingency. Instead, reflexive uses of ordinary language and commonsense knowledge *constitute* whatever sense *can* be made, whether or not it is billed as objective. Such reflexivity comes with the territory of language-use. More generally, reflexive uses and implications of particular gestures, expressions, figures and objects screw together the supporting rods and lay down the scaffolding of ‘reason’ and ‘discourse’. Particular interpretative and analytic problems may be ‘interesting’ for practical purposes, and limited substantive and instrumental conceptions of reflexivity may be relevant, but a more ubiquitous ‘reflexivity of accounts’ is necessarily kept in the background. It is kept in the background because it makes up ‘backgrounds’ and ‘contexts’: it frames, supports and constitutes an infrastructure of intelligibility and accountability. There is no general reason to suppose that the reflexivity of accounts poses an underlying ‘problem’ (as opposed to a resource) for sociologists, economists, operations

researchers or auditors, whenever they develop formal models, indices, and assessments of social organization. Instead, the theme of *reflexive accountability* implicates a novel domain of sociological investigation: the ‘uninteresting’ local achievement of (ordinarily and professionally) accountable social order (and disorder).

Garfinkel’s (1967) discussion of reflexivity alludes to ‘researchable’ phenomena: the local procedures through which members ‘achieve’ accountable activities. Consequently, as Garfinkel and Sacks (1970: 358) propose, the ‘fact’ that activities are *accountably* rational (not *rationally* accountable in terms of a context-free conception of rationality), is less interesting as a fact than as a provisional opening for research into the procedures through which that fact is accomplished. After the late 1960s, conversation analysts and ethnomethodologists continued to study the practical and interactional production of order in ordinary and professional settings, but they rarely addressed ‘reflexivity’ as an explicit topic. The word does not even appear in the extensive index of Harvey Sacks’s (1992) transcribed lectures, and Garfinkel has little to say about reflexivity as a topic in its own right in his lectures and writings after the early 1970s. In more recent discussions and debates about reflexivity, an ‘early’ ethnomethodological conception of reflexivity sets up constructionist treatments of the topic (Woolgar, 1988a), and some writers suggest that ethnomethodology lost the radical conception of reflexivity that was once prominent. Melvin Pollner (1991), for example, complains that ethnomethodologists abandoned radical reflexivity in favour of a substantive interest in particular reflexive phenomena in ordinary conversation and more specialized fields of practice.

An ethnomethodological conception of reflexivity remains on record, but for all investigative purposes ‘it’ no longer provides a sustained topic of discussion or debate.¹⁵ However, while recent ethnomethodological studies rarely address reflexivity as an explicit topic, ethnomethodologists have not exactly abandoned it. For ethnomethodological and conversation-analytic studies of diverse practical actions, reflexivity has dissolved into a heterogeneous array of local practices. Consequently, as Pollner (1991) observes, ethnomethodology no longer seems to furnish a ‘radical’ version of reflexivity, a version which keeps pace with constructionist and postmodernist pursuit of that topic.¹⁶

Pollner argues that a kind of complacency has settled into ethnomethodology. In his view, in the 1960s and early 1970s ethnomethodology was an unsettled, critical and contentious approach to the construction of social reality. But, like so many other revolutionary movements, it eventually became established (in however small and tenuous a way) as a safer, saner and settled subfield. As Pollner puts it, ethnomethodology moved to the suburbs. What troubles him is that many ethnomethodologists settled comfortably at the margins of conventional sociology. Ethnomethodology, in the view of some practitioners (Heritage, 1984; Zimmerman, 1988) and even a few prominent social theorists (for example, R. Collins, 1994: 172), had become a progressive, cumulative and empirical programme of social

research. While this success, and the peaceful coexistence with other branches of empirical social science that went along with it, had definite advantages, what was lost, according to Pollner, was radical reflexivity: an unrelenting, unsettling, self-critical examination of how *any* empirical investigation constructs the world it studies. Similarly, in a number of essays, Woolgar criticizes complacent tendencies in social constructionist studies of science, technology and social problems.¹⁷ For Pollner and Woolgar, reflexive inquiry unsettles efforts to consolidate research in fields that originally pursued radical alternatives to conventional social science methods.

Mundane and Referential Reflexivity

Pollner distinguishes between two levels of reflexivity: a mundane level which makes up the infrastructure of accountability that ethnomethodologists study, and a 'referential' level which consists in an explicit turning of an account to examine and question its very 'achievement' *as* an account. Mundane reflexivity implies no 'unreflexive' counterpart, and it does not privilege any particular theory or methodology. To imagine an unreflexive action would be like imagining a sound without amplitude. In contrast, referential reflexivity *is* set off against an 'unreflexive' counterpart. It is possible to fail to be reflexive or to write reflexively. To write unreflexively is to fail to mention relevant contingencies and involvements that remain in the background of *what* is 'constructed' as factual or essential. Accordingly, it is possible to write unreflexively *about* the 'essential reflexivity of accounts'.

It may seem that Pollner has identified two levels of reflexivity: a surface level that ethnomethodologists investigate, and a deep level that they tend to avoid or evade when writing about mundane practices. The difference is more than a matter of level, however. Pollner's 'radical referential reflexivity' aligns with a social constructionist treatment of language that is not easily reconciled with an alternative picture of ordinary language-use that is, arguably, more compatible with ethnomethodology.¹⁸ To appreciate the difference, consider Durkheim's (1982[1895]) dictum, quoted by Garfinkel and Sacks (1970: 339): 'The objective reality of social facts is sociology's fundamental principle.' For a social constructionist, this assertion is an example of an 'unreflexive' just-so statement. It does not *refer* to the pragmatic and rhetorical circumstances of its use. Many of Durkheim's contemporaries, and certainly many of *our* contemporaries, would be inclined to challenge the statement as a tendentious and contestable pronouncement about an 'objective' state of affairs. Durkheim surrounds it with supporting arguments and examples, but the form of the isolated statement is unqualified and does not signify the possibility that it might be doubted.

When Garfinkel and Sacks quote Durkheim's statement, they do not attack its lack of reflexivity. Instead, they use it as an example of an indexical expression, an expression whose sense depends upon the circumstances of use. They note that Durkheim's statement can be used as a slogan, a statement of aim or task, a justification, a brag, a sales pitch or an announcement of a discovery. Garfinkel and Sacks thus place the statement in vulgar

company, but while they are irreverent to its theoretical aura as a fundamental tenet of sociology, they do not make it out to be unreflexive. Instead, they detail some of the countless ways its sense is reflexively bound to discursive, pragmatic and professional circumstances. In principle, there is no end to the possible ‘reflexive’ relations between statement and circumstance. Indeed, Durkheim’s expositors have drawn an impressive array of connections between his key statements, his biographical and intellectual circumstances, and his polemical aims. Consequently, to complain that the statement is ‘unreflexive’ is to beg the question of just what would make it ‘reflexive’.

Here is where ‘radical referential reflexivity’ runs into difficulty. It is, of course, possible to contest Durkheim’s statement by challenging its assumptions, attributing it to particularistic interests, or disputing its evidential support. Plainly, Durkheim’s statement does not qualify itself by reference to arguments that dispute the very ideas of ‘objective reality’ and ‘social facts’, and it does not overtly acknowledge alternative fundamental principles (or no such principle at all). Durkheim does not say: ‘Some of us have convinced ourselves that the “objective reality” of “social facts” might be sociology’s fundamental principle.’ For better or worse, he enunciates an unqualified statement of theoretical principle rather than a confession of belief. The form of the statement acknowledges no responsibility for what present and future critics might make of it, and so it does not *delete* the qualifications and marks of uncertainty that particular critics may want to append to it. In brief, Durkheim does not argue against his own statement or qualify it in a way that concedes to actual or imaginary opponents.

According to a common constructionist formula, objective expressions rhetorically delete, disguise or place in a ‘black box’ the tacit knowledge, cultural origins and epistemological limits of knowledge. A theoretical, and even moral, imperative for those who follow the constructionist programme is to open up the ‘black box’ to expose the local origins and cultural limitations that have been deleted. But if an initial statement is held to be unreflexive, then the question is: ‘How much more needs to be added to it before it becomes reflexive?’ Take, for example, the prototypical objective expression, ‘Water boils at 100 degrees Centigrade.’ Is it fair to say that this statement *deletes* all reference to the unstated circumstances of place, altitude, materials, equipment, competency, historical background, etc.? Any of these circumstances, and many more too, *can* be relevant, but when is it relevant to mention them? Consider a more qualified statement like ‘Water boils at 100 degrees Centigrade *at sea level*.’ The qualification may clarify the original statement by explicating an unstated condition that is relevant to mention under some circumstances. Further qualifications about the composition of water, the meaning of ‘sea level’, and so forth may also be relevant to mention. At some point, if only through sheer exhaustion, the listing of conditions and contingencies will have to come to an end, but the task of listing them is potentially endless. Commonly, the unqualified statement is sufficient, and to mention further conditions would strike others as boring,

pedantic and irrelevant. In any case, the sense, intelligibility, and objective adequacy of the statement is reflexive to the circumstances of use, regardless of how much is said explicitly *about* the circumstances *in the statement*. The injunction to be reflexive or think reflexively does not tell us how much, or how little, to mention about 'context'. Nor does it assure us that what we say 'reflexively' will be read by others as cogent, revealing, honest and insightful, as opposed to pointless, obscure, evasive and foolish.

When reflexivity is understood as communal and relational, and not individual or intentional, it becomes unclear what it would take for an actor or scholar to successfully carry out an instruction to be unreflexive. A person or company can, of course, deliberately set out to mislead others by writing unqualified statements of 'fact', and sometimes individuals and organizations are held accountable for unintentional omissions as well as deliberate attempts to mislead. Children are sometimes admonished for failing to 'think' about what they are doing, while performers are sometimes instructed to act without thinking. The sense and moral implications of these various acts and lapses are found in particular circumstances of public life. An individual agent or author has limited control over the commission, omission, or implications of such acts, and no overarching standard or form of reference regulates their production. As we have seen, even in the more restricted fields of social science theory and practice, there is a confusing array of reflexivities. There is no single way to be, or not be, reflexive.

When we recognize that there is no single coherent division between reflexive and unreflexive discourse, then reflexivity loses its metaphysical aura and (apparent) ideological potency for empowering theories and rallying movements. Inspired by Pollner (1991), we may then be inclined to ask, What's *left* of reflexivity? My answer: not very much that would interest our more theoretically ambitious colleagues.

Conclusion: The 'Light' of Reflexivity

In this article, I criticized the idea that reflexivity is an epistemological achievement that empowers or critically disables its object of (self-)reference. I focused upon versions of reflexivity associated with 'radical' epistemologies that oppose themselves to objective modes of representation. My criticism did not follow the familiar lines of a *tu quoque* argument against relativism. Such arguments and related demonstrations of infinite regress are familiar strategies for reducing relativism to absurdity.¹⁹ The idea of infinite regress suggests that a reflexive application of relativism opens the door of a hall of mirrors in which the real object becomes indistinguishable from the infinite play of its images. Or, to use another image, reflexivity is likened to a demonic machine that, once set in motion, devours everything in its path and then turns on itself. The *tu quoque* arguments turn the devastating warheads of reflexive critique on the home troops, so that the argumentative launch pad is reduced to ground zero. In order to view such refutations as 'devastating', it is necessary to assume that reflexivity is *inherently* potent and destructive. It is necessary to believe that reflexivity undermines truth,

reveals bias where reality once stood unchallenged, and shows that all facts are fictions and all knowledges are arbitrary. My argument suggests something else: that concepts of reflexivity are diverse, and the implications of reflexive inquiry remain unspecified until we learn more about the relevant theoretical investments and contextual applications.

Reflexive inquiry would destroy its own grounds when applied to itself *if*, but only if, it carried an inherent destructive potency. But why should that be so? Why should reflexivity carry an inherent force that undermines objective accounts? To describe the local origins of knowledge, or to examine how objective accounts are written, can, but does not inevitably, undermine the knowledge in question. As I have argued, the ‘effects’ of any reflexive project are contingent, as they depend on its execution and communal reception. The projected ‘light’ which shines on the literary site of reflexive inquiry is not a constant source of illumination.²⁰ Moreover, a self-conscious attempt to ‘do’ reflexivity or ‘be’ reflexive does not control its communal horizons and eventual fate. A self-consciously reflexive pronouncement will not necessarily strike others as profound and revealing. It may just as easily seem pretentious, silly or evasive. In a world without gods or absolutes, attempting to *be* reflexive takes one no closer to a central source of illumination than attempting to *be* objective.

In this article, I have questioned the idea that reflexivity is possessed or achieved by some positions, texts or analysts, and not by others. My argument sought to deflate the ‘epistemological’ hubris that often seems to accompany self-consciously reflexive claims. To doubt versions of reflexivity which privilege themselves against unreflexive counterparts does not necessarily support objectivism. In my view, ethnomethodological studies of discourse and practical action can help to dissolve the picture of reference that sets up the opposition between reflexive and objectivistic ‘epistemologies’. The ethnomethodological version of constitutive reflexivity proposes no unreflexive counterpart. The ‘essential’ reflexivity of accounts is ‘uninteresting’ and ordinary (and not a transcendental projection of ‘essentialism’); it is part of the infrastructure of objective accounting no less than of self-conscious efforts to be reflexive. Consequently, there is no special reason to be for or against such a conception of reflexivity. Studies of ‘our own’ investigative practices may, in some cases, be interesting, insightful and cleverly written, or they may come across as tedious, pretentious and unrevealing. Close textual studies of scientific or administrative reports may reveal significant contingencies covered over by unequivocal claims, or they may turn up nothing of great interest to anybody. *Ordinary* and *occasional* virtues and difficulties can be ascribed to thinking about what one is doing or reflecting on the moral consequences of one’s actions, but reflexivity *in general* offers no guarantee of insight or revelation.

So, what would be gained by adopting a version of reflexivity that implies no antonym, confers no definite methodological advantage, and elevates no particular theory of knowledge, cultural location, or political standpoint above any other? Obviously, the ethnomethodological version appeals

to a relatively few of us who are interested in pursuing studies of locally reflexive orders of action. Others, who are not interested in conducting detailed studies, may find it therapeutic to eschew the dubious notions of illumination that are frequently ascribed to the 'light' of reflexivity. If reflexivity shines for nobody in particular and its illumination is controlled by no special theory, method or subject position, it loses its metaphysical aura and becomes ordinary. Hopes for enlightenment and political emancipation would then return to the streets where they belong.

Notes

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1. Escher's drawings are sometimes used as emblems of radical reflexivity, because of the way they expose paradoxical features of representation (see, for examples, Ashmore's (1989) book cover, and Woolgar's (1988a) reproduction of Escher's hand drawing itself).
2. Giddens (1984: 44) also addresses reflexivity at the level of individual 'reflexive monitoring of action'.
3. Pels (1998) points out that Western philosophers have shown an ambivalent regard for the Socratic injunction to 'know thyself'. This ambivalence is also expressed in Christian allegory about the fruit of the tree of life. For the sake of simplicity, I will ignore Eastern philosophies, although self-transcending reflection certainly has a prominent place in many Eastern mystical doctrines and regimens.
4. Other feminist writers like Dorothy Smith (1992) and Donna Haraway (1997: 36) seek to dissociate their epistemologies from any form of objectivity, 'strong' or otherwise. Smith's version of feminist epistemology identifies marginality with a phenomenological understanding of everyday life, which she contrasts to 'relations of ruling' embodied in objectified (often written) discourse. Like Harding, Smith identifies general philosophical positions with existential (and, specifically, gendered) categories. Haraway substitutes an alternative optical metaphor – diffraction – for the monolithic focus implied by Harding's standpoint. Haraway's critical programme 'diffracts' objectivistic discourses, but without implying a single focal point from which to launch the critique. Instead, the shifting temporal positions of a guerrilla campaign replace Harding's war machine. The cogency and efficacy of any such oppositional campaign must be secured through work; abstract concepts like 'reflexivity' offer no guarantee of success, and presumably the work will be more or less effective depending upon whether the colleagues the worker seeks to enrol already align themselves with the relevant existential and political categories. Consequently, for Haraway, 'reflexivity' as such is a non-issue, if what is wanted is an effective oppositional movement. See Pels (1997) for a review and criticism of the various efforts to develop standpoint epistemologies.
5. Giddens (1993: 9–12) acknowledges that he relies upon a demarcation between ordinary and scientific interpretations that is rejected by many sociologists today. He nevertheless argues in favour of the demarcation because it enables sociology to sustain hopes for developing theories that anticipate progressive social change.

6. As a kind of experiment, I began a paper on the topic of constructionism, which I read at an academic meeting (Lynch, 1996), with long excerpts from Davis's (1959) presidential address. At first, I did not reveal the source, and replaced Davis's references to functional analysis with references to constructionism. I revealed the ruse later in the paper, and from comments afterwards it seemed that the passages did not seem outmoded when associated with a more fashionable social science perspective.

7. 'Confessional' modes of self-reflection have ancient precursors, but even the work of examining one's conscience can require programmatic instruction. Jonsen and Toulmin (1988: 90ff) observe that medieval casuistry manuals were written for parish priests to instruct the laity on how to examine their consciences. It seems that examining one's soul does not come naturally.

8. There can be further difficulties on this point. Giddens (1984: 3) equates reflexivity with the rationalization of knowledge, meaning that actors 'maintain a continuing "theoretical understanding" of the grounds of their activity'. It seems likely that such 'theoretical understandings' are highly variable, and that the investigative resources and substantive consequences of rationalization will vary from one 'reflexive' programme to another. In Giddens's terms, a programme of reflexivity that attempts to counteract a particular theoretical programme of rationalization (one dominated by scientism, rationalism and objectivism) is not simply a matter of supplementing unreflexive with reflexive inquiries, but of replacing one programme of theoretical understanding with another.

9. Barbara Herrnstein Smith (1997) argues that epistemological relativism is compatible with political activism, and she effectively rebuts critics who insist that feminism requires subscription to objective (or something like objective) epistemological and moral standards. Also see Grint and Woolgar (1995) for a critical discussion of inconsistent uses of relativist and constructionist idioms in feminist analyses of technology, and Gill (1996) for a rebuttal.

10. Latour and Woolgar's (1979) book is an apt example of a constructionist text, but it should be mentioned that Latour (1988) and Woolgar (1988a) later changed their conceptions of reflexivity and social construction. The 'radical reflexivity' that Woolgar later espoused differs, both from the version of reflexivity in his and Latour's book and from Latour's later version.

11. Button and Sharrock (1993) dispute this argument that 'facts' are constructed by deleting qualifications (or, 'modalities' in Latour and Woolgar's language) from the initial form of a statement, so that, for example, 'I think it's an optical pulsar' or 'It might be an optical pulsar or an artifact of our machinery' eventually becomes 'It is an optical pulsar, with location x, y and a period of z' (also see Lynch, 1993: 93ff). The problems with Latour and Woolgar's argument include the following: the argument identifies a fact with the form of a statement without reference to its context of use, it treats the construction of a fact as though it was achieved through 'work' on the surface of the statement, and it treats different expressions as variants of an identical statement with separable components (modalities) added or removed. Wittgenstein's famous 'cutlery' example – 'One doesn't "*take*" what one knows as the cutlery at a meal *for* the cutlery' (1958: 195) – challenges the analytic translation of a statement into a more elaborately qualified expression, so that, in the present case, 'A pulsar!' becomes 'Scientist z *takes* the image to be "a pulsar".' There is no reason to suppose that the initial exclamation is a 'statement of fact' or that the analytic translation explicates modalities that were implicit in that exclamation.

See Coulter and Parsons (1991) for further criticisms of misunderstandings of 'seeing as' in the philosophy of science.

12. Emily Martin (1996: 337) argues that the stereotypical imagery of eggs and sperm cannot simply be replaced by a neutral, unbiased vocabulary. Nevertheless, it seems difficult to avoid the conclusion that the textbook accounts of fertility Martin examines not only lead to politically objectionable 'effects', but that, as her examples demonstrate, they also express mistaken biological conceptions of conception.

13. Hacking (1999: 22) characterizes generalized constructionist arguments, which are not about particular objects or ideas, as being about 'elevator words' like facts, truth, reality and knowledge. He goes on to say that, leaving aside straw or parody versions, few if any constructionist arguments are about 'everything' without distinction.

14. A common reply to this question is to say that scientists, or those who assume a scientific point of view, presuppose the representationalist framework in question. Latour (1988, 1993) effectively rebuts such an argument by noting that the allegedly unreflexive 'modern' scientist, believing in unmediated 'objective reality', is a philosophical fiction that has little to do with the way scientists conduct their investigations and arguments.

15. There are exceptions, such as Czyzewski's (1996) criticisms of Heritage's (1984) treatment of reflexivity.

16. Kyung-Man Kim (1999) also develops a critique of the apparent ethnomethodological turn away from 'radical' reflexivity, and proposes links between a reflexive ethnomethodology and postmodernist theory.

17. See Woolgar (1981) on sociology of science explanations; Woolgar and Pawluch (1985) on the construction of social problems; Woolgar (1991) on formulaic versions of 'social construction of technology'; and Grint and Woolgar (1995) on feminist studies of technology.

18. There are a number of versions of ethnomethodology, and I cannot speak for all of them. See Button (1991) for exemplary discussions of ethnomethodology's approach to key topics in the human sciences.

19. A reflexive analysis of relativist sociology of knowledge superficially resembles familiar criticisms to the effect that sociological relativism leads to an infinite regress and is self-refuting. In fact, those who do not share the initial commitment to relativism may be inclined to recruit such arguments. Allan Franklin (1990), for example, cites Woolgar (1981) to support a standard *tu quoque* argument against relativism and in favour of a pragmatic experimental realism. Woolgar did not intend his criticism of interest explanations in SSK to be a refutation of relativism; instead, his argument demanded a more thorough or consistent relativism from the studies he reviewed. See Ashmore (1989: Ch. 3) for an extensive discussion of *tu quoque* arguments.

20. To borrow another metaphor, we also should keep in mind that even a reflexive spade is liable to be turned (Wittgenstein, 1958: §217) when it attempts interpretatively to dig into the ground of (its own) action and intelligibility.

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