4

# WITTGENSTEIN
# AND THE FABRIC OF
# EVERYDAY LIFE

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In a discipline that has sometimes seemed inexhaustibly voracious in its appetite for new philosophical delicacies, there has long – or so it has seemed to me – been a mystery. And that mystery has been the virtual absence of interest in the work of Wittgenstein. With few exceptions[1], geographers have simply had nothing to say about his work. This is, though, quite in contrast to the situation in other areas. In philosophy his work is widely discussed; the last ten years alone have seen the publication of over one hundred books – and about eight hundred articles – devoted to it. Moreover, others whose work has been often cited by geographers have themselves seen Wittgenstein as a central figure. In sociology, Anthony Giddens (1979) appealed to Wittgenstein's work as a cornerstone of his own; and Bourdieu used a quotation from Wittgenstein's *Vermischte Bemerkungen* (1977) as an epigraph to his *An Invitation to Reflexive Sociology* (1992). Indeed, and as Thrift (1996) has pointed out, where social theorists have claimed in chapter one that the work of Wittgenstein is the foundation of their own, geographers have tended to begin their appropriations with chapter two.

## The invisible man

One can of course come up with a number of explanations for this silence on the part of geographers. Perhaps the social theorists in question were merely currying favor with philosophers. Or perhaps it is a matter of the nature of Wittgenstein's work itself. It is, after all, notoriously difficult to summarize. If like most philosophers he is not partial to footnotes, in the case of his work more than that of others one needs – at the outset – to have a strong sense of the philosophical terrain within which he is operating. And in the end it is difficult to characterize his position. Is he a realist? An idealist? Interpreters have a myriad of views.

Yet whatever those views, his patent concern with language has made his work suspect among those concerned with 'material conditions' and the like. Indeed, some would argue that he can *only* be viewed as an idealist, as someone operating at the level of the superstructure. Here his concern with what he termed 'language games' seems, too, to suggest that his work is profoundly relativistic. And the validity of this interpretation has, in fact, been suggested by the ways in which his work has been used, by relativists like Peter Winch (1990 {Original, 1958}; 1964; 1959) and Richard Rorty (1979; 1982; 1983). At the same time – perhaps paradoxically – some have seen his work not as relativistic, but rather as dangerously conservative. Here, claims such as 'What has to be accepted, the given, is – so one could say – forms of life' (PI, II: 226)[2] have led some commentators to see his work as a sort of Oakeshottean traditionalism (Nyìri 1982; Wheeler 1988). Finally, of course, his work – and particularly his later work – might be seen as having very little to do with geography. What, after all, do statements like 'Thought can as it were *fly*, it doesn't have to walk' (Z § 273) have to do with geography? Perhaps, in the end, those geographers who have skipped to chapter two of Bourdieu and Giddens have been right; Wittgenstein's work is simply too abstract, too far removed from the everyday practice of geography to make a difference.

It seems to me, quite to the contrary, that Wittgenstein might be seen as *the* geographical philosopher. Indeed, and notwithstanding forays by others – I have in mind here Foucault's silly 'Of Other Spaces' (1986) – in this century Wittgenstein has been the philosopher whose work has most deeply and dramatically addressed problems that have exercised geographers. And he has addressed these problems – of the role of space in philosophy, social theory, and common sense; of the importance of places; and of the nature of the natural – in a truly radical way, in a way that gets to the root of the matter. But here we can best see his work not as that of the traditionally Olympian and architectonic philosopher, standing outside the world – and humanity – and legislating a new and better system for encompassing the whole. Rather, we need to see it as, in an important sense, the product of an empirical researcher who at every turn found evidence that philosophical problems arise out of the everyday activities of common people. Indeed, for Wittgenstein the history of Western philosophy can be seen as the result of this Olympian urge, to go beyond one's own social context, the context within which actions and utterances make sense, to stand outside, to see the world from a point of view that is not a point of view, and to see more clearly than do the rabble. By contrast, Wittgenstein promoted a view in which the rabble – men and women, children, adults, and the aged, the bright and the feeble-minded – need to be heard.

## An excursus

To say that Wittgenstein's work has been little understood by geographers is not, whatever I may have just said, to single out geographers, for the work *is* difficult, and in fact, that interpretations of his work have over the last eighty years undergone a sea change or two shows how difficult it is. It will be useful to think of those changes in terms of longstanding trends in the history of philosophy, and of social theory as well. As far back as Plato, one very important strand of philosophy has been based on the belief that the clarification of discourse is an important task. On this view many, perhaps all, of the problems that we think of as 'philosophical' derive from confusions in thinking. And the dialectical and dialogical become important tools for the clearing away of those confusions, those myths and prejudices that prevent us from 'seeing' the truth.[3] At the same time, many philosophers, from the Aristotle of the *Metaphysics*, through the Hegel of the *Phenomenology*, and on to today, have believed that more is needed, that the philosopher needs to construct a system. Here philosophy is seen as a science, but a very special sort of science, whose subject matter is not the 'real' world but rather the world behind it, of thought and ideas.

From the outset, this way of understanding philosophy infected the understanding of Wittgenstein's work. On the one hand, Bertrand Russell, in the introduction to Wittgenstein's *Tractatus Logico-Philosophicus* (1961), saw the work as an attempt to describe what an ideal language would look like. On this view Wittgenstein was operating in the tradition of people like the Aristotle of the *Metaphysics* (1941), the Descartes of the letters to Mersenne (1970), the Port-Royal Grammar and logic (Arnauld and Lancelot 1975; Lancelot, Arnauld, and Nicole 1816), and the philosophical language of Wilkins (1668).

Notoriously, Wittgenstein – who at the time did not have a PhD or an academic appointment, while Russell was at the top of his career – considered withdrawing the *Tractatus* from publication, just because he believed Russell to have misrepresented it so badly. In fact, he believed that what he had done in the *Tractatus* was to *clarify* the nature of factual assertions, and the reasons that they made sense. At the same time, he believed the assertions in his own work to be, strictly speaking, beyond the realm of sense:

> My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
>
> (TLP § 6.54)

Just as there was a debate, and within the traditional discursive structure, about the meaning and purpose of Wittgenstein's *Tractatus*, so too was there such an argument about his later work, work that began in the 1930s with his *Blue and Brown Books* (1958), and that culminated in his *Philosophical Investigations* (1968). Adding to the debate, though, was the formalization of the division between the clarificatory function of philosophy and the system-building, or architectonic. Drawing in part on Wittgenstein's own work, transmitted in the form of oral accounts and informal transcriptions of class notes, Anglo–American philosophy came increasingly, during the 1940s and especially the 1950s and early 1960s, to be associated with the view that the true purpose of philosophy is strictly one of clarifying the use of language, and that all metaphysics consists merely of linguistic miscues. Personified in the work of J. L. Austin (1975; 1970), who said that the first task of a philosopher faced with a problem was to resort to the dictionary, Anglo–American philosophy largely sundered its ties with the architectonic project.

That project, though, remained alive in two places. On the one hand, it remained in Anglo–American circles in the tradition – now centered around the philosophy of science – that arose from early logical atomists, then logical positivists, and finally logical empiricists (Frege 1952; Ayer 1952; Russell 1956). From Russell on, many of them saw themselves as intellectual heirs of Wittgenstein's *Tractatus*; as Gustav Bergmann put it (Bergmann 1971), the *Tractatus* was the 'glory' of Wittgenstein and the *Philosophical Investigations* the 'misery.' On the other hand, it remained alive in continental philosophy, which was seen among Anglo–American philosophers, by and large, as incomprehensible myth-making.

The analysis of Wittgenstein's work remained through the 1950s bound by the continued hegemony in Anglo–America of this split. On one side advocates of philosophy as a clarifying project preferred the *Investigations*; on the other remained the architectonic logical-empiricists, whose allegiance was to the *Tractatus*. Both sides, though, shared an inability to see the elements of Wittgenstein's work that were not firmly within the Anglo–American mainstream. But a breakdown began in the late 1950s, with the publication in the same year of Peter Winch's *The Idea of a Social Science* (1990 {Original, 1958}) and Norwood Russell Hanson's *Patterns of Discovery* (1958), the first an application of Wittgenstein's later work to the social sciences and the latter an application of those ideas to the natural sciences. The two were soon followed by what came to be the longest-lived of the genre, Kuhn's *The Structure of Scientific Revolutions* (1970 {Original, 1962}). In effect, each of those works took Wittgenstein's later project into the heart of scientific orthodoxy. Each attacked the possibility of science as a disinterested view from nowhere, equally enthralled with and in thrall to an equally disinterested philosophy. Still, scholarship on Wittgenstein's *Philosophical Investigations* remained,

by and large, locked into the view that his was a critical project (Pitcher 1964).

However, in 1973 the tide turned. In a remarkable work, Janik and Toulmin (1973) redrew Wittgenstein, as an alienated, exiled Viennese, and as one whose philosophical roots were much closer to Schopenhauer than to Frege. And followers of this interpretation, now increasingly the orthodox one, have come to see in Wittgenstein's *Investigations* strong echoes of the Continental hermeneutic – and architectonic – project (Chew 1982; Gadamer 1976). This stream has, in turn, led to the use of Wittgenstein's work as the underpinning of a number of projects, perhaps most notably in the sociology of science, where his work is widely cited. For some there, this work, this Continent-inspired architectonic project, could lead only in one direction, to the view that all is conversation, that conversation is permanent, that all standards are equal (Rorty 1979; 1982), or that scientific knowledge is not better than any other (Bloor 1981; 1983).

But if the literature on Wittgenstein, and especially on his later work, has increasingly seen it not simply as clarifying, but rather as an architectonic project, it seems to me that this may not be much of an improvement. Indeed, locked into the view that philosophy is one or the other, it fails to see the way in which his work is, in fact neither, but rather a very different project indeed. In what follows I shall lay out the lineaments of this view, through a consideration of a series of central questions about the nature of space, of rules, and of forms of life.

## On space

In the *Tractatus* Wittgenstein laid out a conception of the relationship between propositions and the world, a conception that is nothing if not spatial. There:

> The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.

> Let us call this connexion of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture.
>
> (TLP § 2.15)

> Pictorial form is the possibility that things are related to one another in the same way as the elements of the picture.

> *That* is how a picture is attached to reality; it reaches right out to it.
>
> (TLP §§ 2.151–2.1511)

According to Norman Malcolm, Wittgenstein

> was in a trench on the East front, reading a magazine in which
> there was a schematic picture depicting the possible sequence of
> events in an automobile accident. The picture there served as a
> proposition; that is, as a description of a possible state of affairs.
> It had this function, owing to a correspondence between the parts
> of the picture and things in reality.
>
> (Malcolm 1966: 7–8)

If representation, here, involves a kind of mapping of propositions onto
the world, both the propositions and the world are seen as occupying a
kind of space: 'The facts in logical space are the world . . . Each thing is,
as it were, in a space of possible states of affairs. This space I can imagine
empty, but I cannot imagine the thing without the space (TLP § 1.13,
§ 2.013).

Now, if 'The totality of true propositions is the whole of natural science
(or the whole corpus of the natural sciences' (TLP § 4.11), and if 'Logic
pervades the world: the limits of the world are also its limits' (TLP § 5.61),
it might seem that Wittgenstein is promoting a view of space as infinite
and pre-existing, a kind of Newtonian space. It might, that is, appear as
though for Wittgenstein we are locked in a universe of atoms, a universe
whose constituents are in turn locked in the embrace of the propositions
that mirror them.

And, indeed, this view, of Wittgenstein as ready, like Hume before
him, to say of a work 'Does it contain any abstract reasoning concerning
quantity or number? No. Does it contain any experimental reasoning
concerning matter of fact and existence? No. Commit it then to the flames:
for it can contain nothing but sophistry' (Hume 1975 {1777}: 165) has
been supported, some would argue, by his assertion that '*The limits of my
language* mean the limits of my world' (TLP § 5.6). Olsson, for example,
put it this way:

> As my language changes so does my view of the world, because
> Heidegger (1968: 277)[4] was correct in his claim that the being of
> man is found in his language. Conversely, as my view of reality
> changes so does my mode of expression. What counts, therefore,
> is both my conception of the facts and the facts themselves,
> for facts cannot exist outside of conception and my conception
> reflects the particular language I am using. Since language is the
> medium in which the mind operates, the issue is not the collec-
> tion of facts but the communication of how these facts are ordered
> in the mind.
>
> (Olsson 1980: 6b)

But Wittgenstein's approach to the issue of space in the *Tractatus* is more complex than that, and in a way that presages – as does so much of the *Tractatus*, on a more contemporary reading – his later work, and what I want to argue is a rich and fertile conception of place. For in fact, the assertion here is not that the limits of language *are* the limits of my world, but rather that those limits *mean* the limits of my world, and for Wittgenstein language to which the term 'meaningful' can be rightly applied is language that is factual. Indeed, for the Wittgenstein of the *Tractatus* there is much about our lives that cannot be put in the language of facts – and of science. For '*How* things are in the world is a matter of complete indifference for what is higher. God does not reveal himself *in* the world' (TLP § 6.432). In fact, 'The whole modern conception of the world is founded on the illusion that the so-called laws of nature are the explanations of natural phenomena' (TLP § 6.371).

> Thus people today stop at the laws of nature, treating them as something inviolable, just as God and Fate were treated in past ages.
>
> And in fact both are right and both wrong: though the view of the ancients is clearer in so far as they have a clear and acknowledged terminus, while the modern system tries to make it look as if everything were explained.
>
> (TLP § 6.372)

And so

> My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them – as steps – to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
>
> He must transcend these propositions, and then he will see the world aright.
>
> (TLP § 6.54)

Here, then, we see at the end of the *Tractatus* that Wittgenstein had in mind a very different way of thinking about space. This is not the infinite space of Newton, but rather a space that is finite and delimited. And it is this view, from the end of the *Tractatus*, that begins to be elaborated in Wittgenstein's *Philosophical Investigations*. Early in the work he describes some very basic languages, one for example used by a builder and the builder's assistant, consisting only of a few words, 'block,' 'slab,' and so on.

Do not be troubled by the fact that languages (2) and (8) [i.e., the builder's language] consist only of orders. If you want to say that this shews them to be incomplete, ask yourself whether our language is complete; – whether it was so before the symbolism of chemistry and the notation of the infinitesimal calculus were incorporated in it; for these are, so to speak, suburbs of our language. (And how many houses or streets does it take before a town begins to be a town?) Our language can be seen as an ancient city: a maze of little streets and squares, of old and new houses, and of houses with additions from various periods; and this surrounded by a multitude of new boroughs with straight regular streets and uniform houses.

(PI § 18)

Now we are beyond the image of space, to one of place. And it is an image wherein language may legitimately take on a variety of functions, well beyond the one of making factual assertions. According to Malcolm, the decisive moment in this change of mind was the following:

Wittgenstein and P. Sraffa, a lecturer in economics at Cambridge, argued together a great deal over the ideas of the *Tractatus*. One day (they were riding, I think, on a train) when Wittgenstein was insisting that a proposition and that which it describes must have the same 'logical form', the same 'logical multiplicity', Sraffa made a gesture, familiar to Neapolitans as meaning something like disgust or contempt, of brushing the underneath of his chin with an outward sweep of the finger-tips of one hand. And he asked: 'What is the logical form of *that?*' Sraffa's example produced in Wittgenstein the feeling that there was an absurdity in the insistence that a proposition and what it describes must have the same 'form'. This broke the hold on him of the conception that a proposition must literally be a 'picture' of the reality it describes.

(Malcolm 1966: 69)

Whatever the reason, Wittgenstein over the next years developed a very different way of thinking about philosophy and philosophical problems. And that view had, at its heart, the rejection of what Malcolm called the 'proposition' – though it would be better to call it the 'image' – that propositions are pictures of reality. With it went the purified idea of logical space, as language, logic, and even mathematics were rethought, exposed to the ethnographic eye, and seen at their heart to be possible only when embodied in the actions of real people in real places. The older view, the view of the *Tractatus*, came to be seen not so much to be a view from nowhere as a view from a very distinct place, the academy. And here, as

96

it turns out, Wittgenstein does agree with Heidegger's assertions in *Hölderlin and the Essence of Poetry*. For there, notwithstanding Olsson's interpretation, Heidegger avers that

> We – mankind – are a conversation. The being of men is founded in language. But this only becomes actual in *conversation* [emphasis in original]. Nevertheless the latter is not merely a manner in which language is put into effect, rather it is only as conversation that language is essential. What we usually mean by language, namely a stock of words and syntactical rules, is only a threshold of language.
>
> (Heidegger 1965: 277)

We imagine, Heidegger suggests, that we can think about something that is 'just language', a set of words and rules that is neither written nor spoken, but rather a pure system. But this is just an image.

## On following a rule

Like Heidegger, Wittgenstein notes that when we think about language we typically imagine it as a system, and a simple one at that. If we may be inclined to think of that view of language as a modern one, Wittgenstein in fact suggests that we see it as far back as Augustine, who in the *Confessions* related:

> When they (my elders) named some object and accordingly moved towards something, I saw this and I grasped that the thing was called by the sound they uttered when they meant to point it out ... Thus, as I heard words repeatedly used in their proper places in various sentences, I gradually learnt to understand what objects they signified; and after I had trained my mouth to form these signs, I used them to express my own desires.
>
> (Quoted in PI § 1)

Wittgenstein notes,

> These words, it seems to me, give us a particular picture of the essence of human language. It is this: the individual words in language name objects – sentences are combinations of such names. – In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.
>
> (PI § 1)

But in fact, this view of language both assumes and leaves out a great deal. It assumes a model of language. And it leaves out a great deal of what counts as language. Moreover, it renders language impossible. To begin – and this of course takes us back to the incident on the train – Wittgenstein notes that contrary to the image propounded by empiricists like Hume (1975 {1777}) and Ayer (1952), language is complex indeed,

> But how many kinds of sentence are there? Say assertion, question, and command? – There are countless kinds: countless different kinds of use of what we call 'symbols', 'words', 'sentences'
> . . .
>
> It is interesting to compare the multiplicity of the tools in language and of the ways they are used, the multiplicity of kinds of word and sentence, with what logicians have said about the structure of language. (Including the author of the *Tractatus Logico-Philosophicus*.).
> (PI § 23)

Indeed, he suggests, we need not only to see the 'the multiplicity of kinds of word and sentence', we need to see that we can treat those various kinds separately. We might, he suggests, see them as very much like games, what he termed 'language games'.

> Review the multiplicity of language games in the following examples, and in others:
>> Giving orders, and obeying them
>> Describing the appearance of an object, or giving its measurements
>> Constructing an object from a description (a drawing)
>> Reporting an event
>> Speculating about an event
>> Forming and testing a hypothesis
>> Presenting the results of an experiment in tables and diagrams
>> Making up a story; and reading it
>> Play-acting
>> Singing catches
>> Guessing riddles
>> Making a joke; telling it
>> Solving a problem in practical arithmetic
>> Translating from one language into another
>> Asking, thanking, cursing, greeting, praying.
> (PI § 23)

Now, if we think of concepts in the traditional way, one that we have inherited via Aristotle from Plato – and one that is very much built into common-sense ways of thinking about science – we imagine that it is possible to define a given concept in terms of a set of defining characteristics, or an essence. Is this the case with language games – or with language more generally? Wittgenstein denies that it is.

> For someone might object against me: 'You take the easy way out! You talk about all sorts of language-games, but have nowhere said what the essence of a language-game, and hence of language, is: what is common to all these activities, and what makes them into language or parts of language . . .

> And this is true. – Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common which makes us use the same word for all, – but that they are related to one another in many different ways.
>
> (PI § 65)

Here he takes the ethnographic stand. 'Consider for example' he says,

> the proceedings that we call 'games'. I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all? – Don't say: 'There *must* be something common, or they would not be called 'games" – but *look and see* whether there is anything common to all – For if you look at them you will not see something that is common to *all* but similarities, relationships and a whole series of them at that. To repeat: don't think, but look!
>
> (PI § 66)

Here again we see the importance of not being misled by the sort of spatial imagery that dominated the *Tractatus*:

> For how is the concept of a game bounded? What still counts as a game and what no longer does? Can you give the boundary? No . . . 'But then the use of the word is unregulated, "the game" we play with it is unregulated.' – It is not everywhere circum-scribed by rules; but no more are there any rules for how high one throws the ball in tennis, or how hard; yet tennis is a game for all that and has rules too.
>
> How should we explain to someone what a game is? I imagine that we should describe games to him, and we might add: 'This

and similar things are called "games"'. And do we know any more about it ourselves? Is it only other people whom we cannot tell exactly what a game is? – But this is not ignorance. We do not know the boundaries because none have been drawn. To repeat, we can draw a boundary – for a special purpose. Does it take that to make the concept usable? Not at all! (Except for that special purpose.) No more than it took the definition: 1 pace = 75 cm. to make the measure of length 'one pace' usable. And if you want to say 'But still, before that it wasn't an exact measure', then I reply: very well, it was an inexact one. – Though you still owe me a definition of exactness.

(PI §§ 68–9)

In the end, 'we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail' (PI § 66). So Wittgenstein argues that far from being a matter of mapping an abstract system onto the world, language in fact consists of sets of practices – some spoken, some not. There is the language game of ordering a pizza, giving an academic lecture, arguing with one's spouse, and so on. Indeed, one could say that to acquire culture, to become civilized, is just a matter of learning the appropriate language games, of learning what to say, where, and when. And this brings up what is surely a central issue for Wittgenstein, the notion of a 'rule.'

It is a commonplace, one drummed into us all from grammar school on, that language operates in accordance with rules. And it is just as much a commonplace that the way in which rules work – even if they have exceptions – is relatively straightforward. The number of the subject and predicate of a sentence need to agree, or the gender of a noun and an adjective; one learns the rule and then applies it. Yet when we put the matter in this way, a problem immediately arises. For where *is* the rule? In the modern age we are likely to say, 'In my mind, of course.' And indeed, this has been very much the way in which rules, and the idea of culture, have been thought out in the twentieth century: they are in one's head. Or in the collective head of the group to which one belongs. But if this is the case, and if rules define what others are doing, how can we ever know what that is? With respect to others we fall into what Stanley Cavell has called a Manichean view, where you have your rules, I have mine, and never the twain shall meet (Cavell 1969). It is a view in which the other is truly, irrevocably the other. Indeed, it is a view in which *I* am unknowable to myself; as William Lyons (1986) has shown, the view of the mind as something that an individual can know, a view whose origins extend back through Descartes (1983) to Augustine (1963), has fallen distinctly out of favor in this century. Further, this view of rules appears not to be able to give a plausible account

of the ways in which rules actually work. Consider the following example, from Saul Kripke's controversial *Wittgenstein on Rules and Private Language*:

> Let me suppose, for example, that '68 + 57' is a computation that I have never performed before. Since I have performed – even silently to myself, let alone in my publicly observable behavior – only finitely many computations in the past, such an example surely exists . . .
>
> I perform the computation, obtaining, of course, the answer '125'. I am confident, perhaps after checking my work, that '125' is the correct answer.
>
> Now suppose I encounter a bizarre sceptic . . . Perhaps, he suggests, as I used the term 'plus' in the past, the answer I intended for '68 + 57' should have been '5'! . . . After all, he says, if I am now so confident that, as I used the symbol '+', my intention was that '68 + 57' should turn out to denote 125, this cannot be because I explicitly gave myself instructions that 125 is the result of performing the addition in this particular instance. By hypothesis, I did no such thing . . . In the past I gave myself only a finite number of examples instantiating this function . . . So perhaps in the past I used 'plus' and '+' to denote a function
>
> $$x \ y = x + y, \quad \text{if } x, y < 57$$
> $$\qquad = 5 \qquad \text{otherwise.}$$
>
> Who is to say that this is not the function I previously meant by '+'?
>
> (Kripke 1982: 8–9)

And if this seems a bizarre example, consider another: I ask you to 'continue the following series of numbers': 11, 9, 7, . . . You continue, 5, 3, and then stop. Well, I say? I'm done you reply. Well, what of one? In classical Greece it was not a number, but 'unity.' And zero? A recent invention. Negative numbers? More recent still. Still, we imagine, Wittgenstein suggests, that the rule has built into it its own application. But the number of numbers, like the number of sentences, is infinite; in fact, as Kripke's example shows, any pattern that I have created might be seen to be in accord with an unlimited number of rules. Yet, Wittgenstein notes, if you say

> But how can a rule shew me what I have to do at this point? Whatever I do is, on some interpretation, in accord with the rule. . . . This was our paradox: no course of action could be determined by a rule, because every course of action can be made out to accord with the rule. The answer was: if everything can be

made out to accord with the rule, then it can also be made out to conflict with it. And so there would be neither accord nor conflict here.

(PI § 198, § 201)

But, he continues,

It can be seen that there is a misunderstanding here from the mere fact that in the course of our argument we give one interpretation after another; as if each one contented us at least for a moment, until we thought of yet another standing behind it. What this shews is that there is a way of grasping a rule which is *not* an *interpretation*, but which is exhibited in what we call 'obeying the rule' and 'going against it' in actual cases.

(PI § 201)

Indeed, 'To obey a rule, to make a report, to give an order, to play a game of chess, are *customs* (uses, institutions) (PI § 199).' So in the end, we need to see that to obey a rule – in mathematics or language, chess or football or the workplace – is not – or not merely – to act in accord with some image. Rather, it is to do something within a broader social context. Rules are defined and maintained only, as David Bloor (1997) has forcefully argued, within institutions.

And so, if we return to our belief about the mathematical series, that 'All the steps are really already taken,' we see that that description 'only made sense if it was to be understood symbolically. – I should have said: *This is how it strikes me* . . . My symbolical expression was really a mythological description of the use of a rule' (PI §§ 219–21).

It may appear that these 'mythological descriptions' are doing the work, rather like a computer program is said to guide the workings of the computer. But 'Remember that we sometimes demand definitions for the sake not of their content, but of their form. Our requirement is an architectural one; the definition a kind of ornamental coping that supports nothing' (PI § 217).

In the end, the explicit formulation of a rule is not 'a visible section of rails invisibly laid to infinity' (PI § 218), not an appeal to a Tractarian image of space.

## Forms of life

The notion of context has suggested to many commentators a further concept, that of 'forms of life'. Wittgenstein used it only a few times – five in the *Philosophical Investigations* and here and there elsewhere. Yet to many this concept, for better or worse, constituted a kind of foundation to his later work, a new and perhaps better way of thinking about context.

Wittgenstein uses the concept early in the *Investigations*. Noting that 'It is easy to imagine a language consisting only of orders and reports in battle' (PI § 19), but that 'the speaking of language is part of an activity' (PI § 23), he asserts that 'to imagine a language means to imagine a form of life' (PI § 19). And

> It is what human beings say that is true and false; and they agree in the language they use. That is not agreement in opinions but in forms of life.
>     If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments.
>
> (PI §§ 241–42)

Indeed, 'what has to be accepted, the given, is – so one could say – forms of life' (PI: 226).This is more or less all that he has to say about forms of life, but here as elsewhere in his work a cottage industry has grown up, devoted to its interpretation. In his characteristically tough-minded way, Ernst Gellner put the problem this way: Wittgenstein, he said, has 'switched to a cult of *Gemeinschaft*, in the very curious disguise of a theory of language and philosophy' (Gellner 1988: 18–19). Gellner's attack, like that of Stephen Turner (1994) on Kripke's Wittgenstein, focuses on the appeal to something that must be shared. Kripke, for example, says that

> The set of responses in which we agree, and the way they inter-weave with our activities, is our form of life ... Wittgenstein stresses the importance of agreement, and a shared form of life, for his solution to his sceptical problem.
>
> (Kripke 1982: 96)

But are forms of life indeed shared? Well, on the face of it they are; after all, Wittgenstein has argued that language and rules must be public. And, indeed, many analysts have drawn just that conclusion. Malcolm, for example, suggested that 'I believe that [Wittgenstein] looked on religion as a 'form of life' (to use an expression from the *Investigations*) in which he did not participate' (Malcolm 1966: 72). And Peter Winch, too, offered such an understanding of forms of life,

> [C]riteria of logic ... arise out of, and are only intelligible in the context of, ways of living or modes of social life ... For instance, science is one such mode and religion is another; each has criteria of intelligibility peculiar to itself.
>
> (1990 {Original, 1958}: 100; see also 1964)

Finally, and most wildly, Popperian Peter Munz appealed to Wittgenstein's claim that the aim of philosophy is 'to shew the fly the way out of the fly-bottle' (PI § 309) in arguing that 'the bottle in which the fly found itself was hermetically sealed and not transparent.' With the idea of a form of life, then, Wittgenstein provided 'a philosophical foundation for the totalitarian claims of the sociology of knowledge,' because

> it is established that each speech community is a law unto itself because it prescribes the rules which determine the meaning of the sentences permitted in it. This conclusion is by itself quite stultifying for it permits the espousal or perpetration of any nonsense and mischief provided one can perform it within a speech community or find a speech community which has adopted rules or which is already sporting rules which will allow such acts or such thought behaviour. All outside criticism and any scrutiny in terms of external standards is automatically eliminated.
>
> (Munz 1987: 75)

Positive or negative, these interpretations of the concept share an appeal to Cavell's 'Manichean' understanding, one in which a form of life is metaphorically a region, an enclosed arena within which something is shared among a group of people.

Now there is a difficulty with this idea of a shared form of life, and a difficulty that has long been recognized by students of culture. (One need not stop with Mitchell's 'There's no such thing as culture: Towards a reconceptualization of the idea of culture in geography' (1995), but can trace the concept back, certainly, to Malinowski some sixty years before (1931).) The problem, simply put, is that to appeal to something 'shared' seems to be, right at the outset, to appeal to a concept just as ineffable as 'rule' is, at least on the usual mentalistic understanding. In fact, though, it seems to me here that Gellner and Kripke have misunderstood Wittgenstein, and that Turner's position is, in the end, much closer to Wittgenstein's than he believes.

There have, actually, been alternative interpretations, which on the face of it appear more consistent with other elements of Wittgenstein's work. For example, according to J. F. M. Hunter, a form of life is

> 'something typical of a living being': typical in the sense of being broadly in the same class as the growth of a living organism. . . . I shall therefore sometimes call this the 'organic account' . . . [since it involves activities that flow] from a living human being as naturally as he walks, dances, or digests food
>
> (Hunter 1971: 278–9)

In fact, 'however a person does something, it is his simply functioning that way which is a form of life' (*Ibid.*: 293). This view does seem to draw support from Wittgenstein's discussion of the nature of rules.

'How am I able to obey a rule?' – if this is not a question about causes, then it is about the justification for my following the rule in the way I do.
    If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: 'This is simply what I do.'

(PI § 217)

But in fact, this very statement suggests a different reading of the concept. Consider the sorts of concerns that Wittgenstein's later work evinces. First, he is concerned about the propensity that people have to extend the application of concepts beyond their legitimate scope – and then to be puzzled by the results. This often happens when we are misled by grammatical similarities among statements. So, for example, from the fact that I can say 'I have a toothache' and 'I have your book,' we imagine that we ought to be able to say 'I have your toothache' – and are puzzled about a person's relationship to his or her body when that statement makes no sense. Similarly, we imagine that we can go from 'People seek happiness' to 'Plants seek light,' with no problems. A second area of concern was the propensity to create reified abstractions. Certainly central here was the way in which people commonly go from the assertion that words have meanings to the assertion that there must be something *called* a meaning, that exists somewhere 'out there'. We imagine that because we can talk about 'equilibrium' or 'capital', that they must be things that somehow exist in the world. Or from 'I think' we conclude that there must be an 'I' that thinks.
    In the end, these two propensities lead us at once to find the explicable inexplicable and the inexplicable explicable. The nature of the infinite comes to be a simple issue, resolvable using set theory. While the nature of the mind, and how it can be connected to the body, baffles us all. In the latter case we are tempted to embrace metaphysical answers, to create theories – and to imagine that if we just create the right set of basic elements, like culture or forms of life, everything will fall into place, and the mystery will be removed.
    In part, the problem here is that those who have seen forms of life as basic elements have failed to see what is at issue when Wittgenstein asserts that 'If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: "This is simply what I do"' (PI § 217).
    For them, Wittgenstein's argument runs something like this: We usually imagine that there must be solid justifications for what we say. When asked

why objects fall to earth we refer to gravity; when asked why a compass works, to magnetism. As he put it in the *Tractatus*, 'The whole modern conception of the world is founded on the illusion that the so-called laws of nature are the explanations of natural phenomena' (TLP § 6.371).

And in fact, when one asks a scientist about the nature of gravity, say, one is referred to further phenomena, variously to apparatuses and laws and institutions and practices. But, Wittgenstein is saying, at some point, we are all in the position of the parent faced with a two-year old who insists on asking 'Why?' If most people 'today stop at the laws of nature, treating them as something inviolable, just as God and Fate were treated in past ages' (TLP § 6.372), the scientist too is forced, in the end, to say, 'That's just how it is.' Or again, 'Then I am inclined to say: "This is simply what I do".' And when we say this, when we appeal to what we take to be the bedrock in our lives, we are appealing to 'what must be accepted', to 'forms of life'. So to say that a form of life, for Wittgenstein, must be accepted is just to say that something *becomes* a form of life by virtue of having that role, that function. Now it may seem that this is a transparent and unproblematic process: You ask me a series of probing questions about my actions, and at some point I say, 'This is just the way we do it around here,' or 'This is just the way we do it in our family,' or 'It's a women's thing.' The suggestion is that both the asking and the answering are undertaken with the motive of finding the truth. Yet as social scientists we all know that when we go into the field people often dissemble; they often attempt to put a good face on things. We know that the everyday images, descriptions, and stories that surround our customary activities are often window dressing, or as some would have it, ideology, or bad faith, or wishful thinking, or self promotion, that they themselves are elements of particular practices in particular contexts.

And we also know that within these contexts, it is not simply that people 'share' the same attitudes and beliefs, that within some given context we find a homogeneous set of actions and beliefs. Quite to the contrary, we need only consider almost any situation in which there are inequalities of authority. I am driving and am stopped by a well-armed police officer. We are certainly acting within a well-defined context; I know what to say and he knows what to say. But that does not mean that we share the same beliefs about the situation, or would say the same things about it. In the posthumously collected *Zettel*, Wittgenstein pointed to this fact, when he asserted that

> What determines our judgment, our concepts and reactions, is not what one man is doing now, an individual action, but the whole hurly-burly of human actions, the background against which we see any action.

106

Seeing life as a weave, this pattern (pretence, say) is not always complete and is varied in a multiplicity of ways . . . And one pattern in the weave is interwoven with many others.

(Z § 567–69)

What could be farther from Munz's 'hermetically sealed fly-bottle' than this 'hurly-burly', this 'weave', what Andrew Pickering (1993) has more recently termed 'the mangle'? But we cannot begin to see this until we see that whatever their differences, Munz is agreeing with Winch and Malcolm, and with Hunter, and even with Kripke; they agree that a form of life is something from which one constructs a world, something very much like a culture.

But in using this concept Wittgenstein is being *critical* of the idea that a form of life is 'something typical of a living being', and particularly where that seems to imply that a person, for example, could be said to be the sum of his or her parts. Rather, the focus here is on the ways in which what Foucault (1972) would later term 'discursive formations' come to exist. Wittgenstein uses the concept of forms of life – and uses it rarely – to note that although we live in a world of difference, where no event is ever exactly repeated, 'we, in our conceptual world, keep on seeing the same, recurring with variations. That is how our concepts take it. For concepts are not for use on a single occasion' (Z §§ 567–9).

If life is 'a weave', that weave is at once evanescent and enduring. And the concept of 'forms of life' is meant to undercut the temptation to ignore that fact, to create a home of new linguistic 'boroughs with straight regular streets and uniform houses.' But at the same time, it is meant to show that we ought not to be taken in by, to romanticize the 'maze of little streets and squares, of old and new houses, and of houses with additions from various periods.'

Notice, though, that the very statement, 'That's how we do things,' and Wittgenstein's framing – 'If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: "This is simply what I do" (PI § 217)' – presumes a question, a disruption, the quest for a reason. We articulate those justifications when in the face of those disruptions we lose, as Yi-Fu Tuan (1980) has put it, the ability to be rooted.

For in fact, the key concept here is surely not 'sharing', but rather 'fitting', or 'belonging'. Most people do, in their everyday lives, go about their business with little reflection. Whether shopping or driving the children to school or pounding nails or giving a lecture, much of human life is routine, customary. We may live our lives among people whom we don't know, and with whom we may feel that we have little in common, but we by and large manage to fit in with them; not to do so is in the end to be

marginalized, to be judged a misfit or worse. Yet as Wittgenstein has shown, the very fact that we use language introduces into our lives a kind of metaphysical urge, a constant temptation to escape the bounds of our situation, criticizing it or generalizing about it, comparing it to others or theorizing about it. We live our lives in a world in which, as Naomi Scheman (1996) has so memorably put it, our words are in a state of diaspora, constantly exiled from their natural places.

In fact, Wittgenstein viewed much of the Platonist discourse in terms of which we describe the world as misleading, as positing without evidence a world of ideas or concepts that are free-floating guarantors of the structure of the world. For him the very possibility of understanding the actions of others – which we patently do – required that we abandon this way of looking at the world, and see the human world as one of habits and practices, one of customs. But the application of the methods of philosophy, the use of reason to recognize and overcome the tendency of words to escape their appropriate contexts, at the same time, he believed, leads us to see the world in a different way. We live not in the bifurcated world, partly human, partly sacred, of the middle ages; neither are we the isolated individuals in absolute space of the modern age. Rather, we are actors within the weave, the hurly-burly of life.

Consider an example: I am presiding over a seminar at a university in England. I have asked that people read material beforehand, and some have. There is the usual give and take; some people are quiet and some voluble. Now, many of us have been in a similar situation, and we know that there are certain ways that people act, and certain ways in which most don't. One view would be that we somehow share a set of values or expectations or dispositions. But on Wittgenstein's view, we need to see the situation as a complex one. As a guest I am surprised, or at least displeased, if I am not treated with a certain degree of respect. I wouldn't quite say that beforehand I 'expected' that, but if it is absent I am likely to say, 'Well I certainly didn't expect to be treated that way.' Further, some of what goes on makes sense not because I am a guest at this university, but because I am a member of an academic community, or a visitor to England, or a male of a certain age, or an American. And so on. Indeed, we can say the same about every member of the seminar. The critical point is that while in one sense we can be said to be doing one thing – engaging in a seminar – we are in fact doing a whole range of other things as well. And when Wittgenstein refers to the reaching of the end of justifications, he is speaking of the justification for one of those things. What I say about actions associated with my being a professor, or an American, or a male are sure to be different one from another.

Moreover, how 'far' one must go to reach the end of those justifications will vary; behind some actions there is a long story, behind others not much at all. Most Americans would answer the question, 'Why do

you salute the flag' with 'Because I am an American,' and would be done with it. So if we need to see life as a weave of interrelated activities, we also need to see the terrain of life as various in its textures; some is 'thick' and some is 'thin'. Similarly, some activities are longstanding, and some not. The practice of saluting the American flag is relatively old – and likely to be seen as simple and straightforward, outside of the South; in contrast, some activities, like watching 'Melrose Place,' may be just as basic – 'I watch it because I like it, that's all' – but are likely to be a bit more transient. Finally, and notwithstanding these differences, in texture and longevity, none of these actions is intrinsically more basic or central or fundamental than the others. There is no 'real' bedrock of capital or consumer preferences or emotional drives, beyond that which is granted that status. Equally, no intellectual activity is more basic; philosophy or literary studies, the quadrivium and the trivium, are social enterprises, whose relationship with other social enterprises is contingent.

Does this mean, though, that 'everything is relative?' Must we conclude that because what counts as reason or logic or truth arises out of human actions in particular contexts, that everything is up for grabs? From a practical perspective, Wittgenstein would say everything is certainly *not* up for grabs. Indeed, if we see our lives as making sense because of the foundations on which they rest, then they are only as secure as those foundations. If we view the theory of genetics as the underpinning of biology, then the entire edifice is only as secure as that foundation. On the other hand, the metaphor of a 'weave' functions to point attention to the interconnectedness of people's actions, where a change here can reverberate through the system, and where there may be a great many impediments to that change.

Looking at the matter from another perspective, though, Wittgenstein would point out that there is a basic problem with the formulation of the question. For in formulating the question of relativism, in saying that 'All truths are relative to a social context,' we are imagining that we can speak of 'all truths' in the same way that we speak of 'all blue-eyed babies', as though we could take a census, and come up with the economists' 'perfect information'. But recall that 'If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments' (PI §§ 241–2). The claim of the truth of relativism must extend beyond concepts to judgments, actions, even technologies and institutions. In the end, the claim is empty; it is an assertion that looks as though it makes sense, but it is like a car with no engine.

## The place of Wittgenstein

This leads us to a final question, on the place of Wittgenstein within geography, and perhaps within the social sciences more broadly. I suggested at

MICHAEL R. CURRY

the outset that his work had been remarkably uninfluential within geography, but that is only partly true. Certainly on the evidence of citations and publications we find little within geography that deals explicitly with his work. Yet there are other forms of influence, and on those measures his is certainly far stronger. For there can be no doubt that his work has been influential in a broad range of works that themselves have been extremely influential within geography. In philosophy, it was central to the construction of an alternative to the empiricist philosophy of science that was hegemonic through the 1950s. Thomas Kuhn (1970 {Original, 1962}), and especially Norwood Russell Hanson (1958), drew on his work in developing alternative accounts of the nature of science. We find echoes his work in David Bloor (1983; 1997; 1976) and other advocates of the 'strong program' in the sociology of science; more recently, his work is prominent in Latour and Woolgar (1979), Shapin and Schaffer (1985), and Pickering (1992; 1993).

In the social sciences, works by Peter Winch (1990 {Original, 1958}) and A. R. Louch (1966) filled the same function. At the same time, in anthropology Geertz (1973; 1980; 1983) and Marcus (1992) have been influenced by his work. And I have already mentioned, in sociology, Anthony Giddens (1979). It seems to me, though, that his work has something to say more directly to geographers. For right at the heart of it is a deep appreciation of the nature of places and their role in everyday lives. And, too, there is a powerfully argued view, in which those places, far from being carved out of a pre-existing spatial container, are created and maintained through the everyday actions of everyday life. More than any other recent thinker, Wittgenstein managed to cut through the welter of spatial metaphors in which we live – level, scale, container, hierarchy – and see the extent to which all arise out of a human life that is carried out in places.

## Notes

1   The exceptions are Gunnar Olsson's *Birds in Egg/Eggs in Bird* (1980), on Wittgenstein's early *Tractatus*, a couple of little-noticed papers by myself (Curry 1989; Curry 1991), a discussion paper by Joe May (1980), and most recently, and visibly, a recent work by Nigel Thrift (1996).
2   In keeping with conventional practice, references to Wittgenstein are abbreviated as follows: TLP – *Tractatus Logico-Philosophicus* (references are to section numbers); PI = *Philosophical Investigations* (references in Part I are to section numbers, in Part II to page numbers); RFM – *Remarks on the Foundations of Mathematics* (references are to section numbers); and Z – *Zettel* (references are to section numbers).
3   It is perhaps odd that this dialogical approach, where conceptual clarity emerges from face-to-face argument, leads to knowledge that is characterized in terms of visual metaphors, like 'seeing'; here we might see Plato's *Republic* and his story of the cave as the fountainhead of much confusion.
4   The reference here is to Heidegger (1965).

110

# References

Aristotle. 1941: Metaphysica. In *The Basic Works of Aristotle*, edited by Richard McKeon. Translated by R. P. Hardie and R. K. Gaye. New York: Random House: 689–934.

Arnauld, Antoine and Claude Lancelot. 1975: *The Port-Royal Grammar: General and Rational Grammar*. Translated by Jacques Rieux and Bernard E. Rollin. The Hague: Mouton.

Augustine, Saint. 1963: *On the Trinity*. Translated by Stephen McKenna. Vol. 45, *The Fathers of the Church*. Washington, D.C: Catholic University of America Press.

Austin, J.L. 1970: *Philosophical Papers*. Second edition. Translated by J. O. Urmson and G. J. Warnock. London: Oxford University Press.

Austin, J.L. 1975: *How to Do Things with Words*. Second edition. Translated by J. O. Urmson and Marina Sbisa. Cambridge: Harvard University Press.

Ayer, A. J. 1952: *Language, Truth, and Logic*. Second edition. New York: Dover.

Bergmann, Gustav. 1971: The glory and the misery of Ludwig Wittgenstein. In *Essays on Wittgenstein*, edited by E. D. Klemke. Urbana: University of Illinois Press: 25–43.

Bloor, David. 1976: *Knowledge and Social Imagery*. London: Routledge and Kegan Paul.

Bloor, David. 1981: The strengths of the strong programme. *Philosophy of the Social Sciences* 11: 199–213.

Bloor, David. 1983: *Wittgenstein: A Social Theory of Knowledge*. New York: Columbia University Press.

Bloor, David. 1997: *Wittgenstein, Rules, and Institutions*. London: Routledge.

Bourdieu, Pierre and Loïc J. D. Wacquant. 1992: *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.

Cavell, Stanley. 1969: The availability of Wittgenstein's later philosophy. In *Must We Mean What We Say?* Cambridge: Cambridge University Press: 44–72.

Chew, Sing C. 1982: From Dilthey to Habermas: Reflections on Verstehen, hermeneutics, and language. *Current Perspectives in Social Theory* 3: 57–72.

Curry, Michael R. 1989: Forms of life and geographical method. *Geographical Review* 79: 280–96.

Curry, Michael R. 1991: The architectonic impulse and the reconceptualization of the concrete in contemporary geography. In *Writing worlds: Discourse, Text, and Metaphor in the Representation of Landscape*, edited by James Duncan and Trevor J. Barnes. New York: Routledge: 97–117.

Descartes, René. 1970: *Descartes: Philosophical Letters*. Translated by Anthony Kenny. Oxford: Clarendon Press.

Descartes, René. 1983: Discourse on the method of rightly conducting the reason. In *The Philosophical Works of Descartes*. Translated by Elizabeth S. Haldane and G. R. T. Ross. Cambridge: Cambridge University Press: 79–130.

Foucault, Michel. 1972: *The Archaeology of Knowledge*. Translated by A. M. Sheridan Smith. New York: Pantheon.

Foucault, Michel. 1986: Of other spaces. *Diacritics* 16: 22–7.

Frege, Gottlob. 1952: On sense and reference. In *Translations from the Philosophical Writings of Gottlob Frege*. Translated by Peter Geach and Max Black. Oxford: Basil Blackwell: 56–78.

Gadamer, Hans-Georg. 1976: The phenomenological movement. In *Philosophical Hermeneutics*. Translated by David E. Linge. Berkeley: University of California Press.

Geertz, Clifford. 1973: Thick description: Toward an interpretive theory of culture. In *The Interpretation of Cultures*. New York: Basic Books: 3–30.

Geertz, Clifford. 1980: Blurred Genres: The Refiguration of Social Thought. *American Scholar* 49: 165–79.

Geertz, Clifford. 1983: *Local Knowledge: Further Essays in Interpretive Anthropology*. New York: Basic Books.

Gellner, Ernst. 1988: The Stakes in Anthropology. *American Scholar* 57: 17–30.

Giddens, Anthony. 1979: *Central Problems in Social Theory*. Berkeley: University of California Press.

Hanson, Norwood Russell. 1958: *Patterns of Discovery*. Cambridge: Cambridge University Press.

Heidegger, Martin. 1965: Hölderlin and the essence of poetry. In *Existence and Being*. Translated by Douglas Scott. Chicago: Henry Regnery: 270–91.

Hume, David. 1975 {1777}: An enquiry concerning human understanding. In *Enquiries Concerning Human Understanding and Concerning the Principles of Morals*. Third edition. Oxford: Oxford University Press.

Hunter, J. F. M. 1971: 'Forms of life' in Wittgenstein's Philosophical Investigations. In *Essays on Wittgenstein*, edited by E. D. Klemke. Urbana: University of Illinois Press: 273–97.

Janik, Allan and Stephen Toulmin. 1973: *Wittgenstein's Vienna*. New York: Simon and Schuster.

Kripke, Saul. 1982: *Wittgenstein on Rules and Private Language*. Cambridge: Harvard University Press.

Kuhn, Thomas S. 1970 {Original, 1962}: *The Structure of Scientific Revolutions*. Second, enlarged edition. Chicago: University of Chicago Press.

Lancelot, Claude, Antoine Arnauld, and Pierre Nicole. 1816: *A New Method of Learning with Facility the Latin Tongue [The Port Royal Latin grammar]*. Translated by T. Nugent. London: Printed for F. Wingrave and J. Collingwood.

Latour, Bruno and Steve Woolgar. 1979: *Laboratory Life: The Social Construction of Scientific Facts*. Beverly Hills: Sage Publications.

Louch, A. R. 1966: *Explanation and Human Action*. Berkeley: University of California Press.

Lyons, William. 1986: *The Death of Introspection*. Cambridge: The MIT Press.

Malcolm, Norman. 1966: *Ludwig Wittgenstein: A Memoir*. London: Oxford University Press.

Malinowski, Bronislaw. 1931: Culture. In *Encyclopedia of the Social Sciences*. New York, Vol. 4: 621–46.

Marcus, George E. 1992: *Rereading Cultural Anthropology*. Durham: Duke University Press.

May, J. A. 1980: Wittgenstein and Social Studies. Toronto: Department of Geography, University of Toronto.

Mitchell, Don. 1995: There's no such thing as culture: Towards a reconceptualization of the idea of culture in geography. *Transactions, Institute of British Geographers* 20: 102–16.

Munz, Peter. 1987: Bloor's Wittgenstein or the fly in the bottle. *Philosophy of the Social Sciences* 17: 67–96.

Nyìri, J. C. 1982: Wittgenstein's later work in relation to conservatism. In *Wittgenstein and his Times*, edited by Brian F. McGuinness. Chicago: University of Chicago Press: 44–68.

Olsson, Gunnar. 1980: *Birds in Egg/Eggs in Bird*. London: Pion.

Pickering, Andrew. 1992: *Science as Practice and Culture*. Chicago: University of Chicago Press.

Pickering, Andrew. 1993: The mangle of practice: Agency and emergence in the sociology of science. *American Journal of Sociology* 99: 559–89.

Pitcher, George, ed. 1964: *The Philosophy of Wittgenstein*. Englewood Cliffs, NJ: Prentice-Hall.

Rorty, Richard. 1979: *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press.

Rorty, Richard. 1982: *The Consequences of Pragmatism (Essays: 1972–80)*. Minneapolis: University of Minnesota Press.

Rorty, Richard. 1983: Postmodernist bourgeois liberalism. *The Journal of Philosophy* 80: 583–88.

Russell, Bertrand. 1956: Logical atomism. In *Logic and Knowledge: Essays 1901–1950*, edited by Robert C. Marsh. London: George Allen and Unwin: 175–82.

Scheman, Naomi. 1996: Forms of life: Mapping the rough ground. In *The Cambridge Companion to Wittgenstein*, edited by Hans D. Sluga and David G. Stern. Cambridge; New York: Cambridge University Press: 383–410.

Shapin, Steven and Simon Schaffer. 1985: *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life*. Princeton: Princeton University Press.

Thrift, Nigel. 1996: *Spatial Formations*. London: Sage.

Tuan, Yi-Fu. 1980: Rootedness versus sense of place. *Landscape* 24: 3–8.

Turner, Stephen P. 1994: *The Social Theory of Practices*. Chicago: University of Chicago Press.

Wheeler, Samuel C. III. 1988: Wittgenstein as conservative deconstructor. *New Literary History* 19: 239–58.

Wilkins, John. 1668: *An Essay Towards a Real Character, and a Philosophical Language*. Menston, Yorkshire: Scolar Press.

Winch, Peter. 1959: Nature and convention. *Proceedings of the Aristotelian Society*: 231–52.

Winch, Peter. 1964: Understanding a primitive society. *American Philosophical Quarterly* 1: 307–24.

Winch, Peter. 1990 {Original, 1958}: *The Idea of a Social Science and its Relation to Philosophy*. Second edition. New York: Humanities Press.

Wittgenstein, Ludwig. 1958: *The Blue and Brown Books: Preliminary Studies for the 'Philosophical Investigations'*. New York: Harper and Bros.

Wittgenstein, Ludwig. 1961: *Tractatus Logico-Philosophicus*. Translated by D. F. Pears and Brian F. McGuinness. London: Routledge and Kegan Paul.

Wittgenstein, Ludwig. 1967: *Zettel*. Translated by G. E. M. Anscombe and Georg Henrik Von Wright. Oxford: Basil Blackwell.

Wittgenstein, Ludwig. 1968: *Philosophical Investigations*. Third edition. Translated by G. E. M Anscombe. New York: Macmillan.

Wittgenstein, Ludwig. 1977: *Vermischte Bemerkungen*. Frankfurt: Suhrkamp Verlag.

Wittgenstein, Ludwig. 1983: *Remarks on the Foundations of Mathematics*. Revised edition. Translated by Georg Henrik Von Wright, Rush Rhees, and G. E. M. Anscombe. Cambridge, MA: MIT Press.