

The Journal of Practice Theory Vol 1.

Interviews

DOI: 10.71936/d11r-5r40 ISSN 3050-0370

# An Interview with Joseph Rouse: Careers and Ideas in **Practice**

Elizabeth Shove - Sociology, Lancaster University

Manuel Baeriswyl¹ – Institute of Marketing and Communication Management, Università della Svizzera italiana

Joseph Rouse - Philosophy, Wesleyan University

#### Abstract

In mapping out some of the key features of his interpretation of practice theory, Joseph Rouse begins by talking about the influence of science studies, and about the social organization of scientific practice. In all of this, Kuhn is an important figure, as are controversies about the socially constructed nature of knowledge. For Joe, practice theory provides a distinctive take on these debates and on the place of language, materiality, normativity, and power. All these issues prove to be important for big questions about the natural and the social world and for Joe's conclusion that practices underpin the basic structure of human biological environments.

## Keywords

language; nature; normativity; power; science

Received: 08/11/24 Accepted: 13/01/25 Published: 01/03/25

Peer Review: Editorial Review - This contribution was reviewed internally.

<sup>&</sup>lt;sup>1</sup> Corresponding author - contact: manuel.baeriswyl@usi.ch

## Introduction

As part of the inaugural issue of *The Journal of Practice Theory* on the theme 'Past, Present, Future', Manuel Baeriswyl and Elizabeth Shove interviewed three influential figures whose work has significantly shaped the development of practice theory. These conversations focus on pivotal moments and turning points in the interviewees' careers, and the evolution of the ideas they have championed. Together, these interviews form the 'Past' section of this issue and present some insight into how theories of practice have emerged within, and responded to, disciplinary, interdisciplinary, and generational contexts.

The interview schedule was shared with the participants in advance. Each interview was recorded, transcribed, and edited. The interviewees reviewed the transcripts, provided corrections, and added references.

Joseph Rouse is Professor of Philosophy, Science and Technology Studies, Environmental Studies, and Hedding Professor of Moral Science at Wesleyan University. Professor Rouse's research interests are in the philosophy of science, the history of 20th Century philosophy, and interdisciplinary science studies. His published books include: *Knowledge and Power: Towards a Political Philosophy of Science* (1987), Engaging Science: How to Understand its Practices Philosophically (1996), How Scientific Practices Matter: Reclaiming Philosophical Naturalism (2002), and Social Practices as Biological Niche Construction (2023).

In this interview, Elizabeth Shove and Manuel Baeriswyl talk with Joseph Rouse about practice theory and what it brings to big questions about the natural and the social world.

Manuel Baeriswyl: In describing those who have influenced your work on practice theory, you mention Bourdieu and Giddens as classic sources; Wittgenstein and Heidegger in the background, but also figures like Charles Taylor, Alasdair MacIntyre, Hubert Dreyfus, Thomas Kuhn, and Bob Brandom. These are very diverse sources of inspiration, so for you, what holds the field of practice theory together?

Joseph Rouse: Well, of course I came into this from a very specific direction. I was trained as a philosopher of science, with a background as much in continental philosophy, phenomenology - Heidegger, Merleau-Ponty, Foucault - as in the Anglo-American tradition. And I got started on this by reading Tom Kuhn's (1970) work in relation to that tradition. He provided not so much a different conception of

scientific knowledge, but a conception of scientific understanding as embedded in scientific practice.

That was really where I was starting, and of course, part of the difficulty in the philosophical context was that there was no vocabulary readily available for talking about social practices. And so, I was looking for people who were giving me resources to do this. And there, Charles Taylor and Dreyfus were initially very helpful, and then Alasdair MacIntyre's discussion about practices came out in the late seventies and early eighties (e.g. 1981). So, this was very, very useful for me. And part of what was going on was that most of these folks (except MacIntyre) were adamantly seeing practice-based approaches as a way of differentiating a social world from the natural sciences and a natural world.

And what I was struck by was how much their work helped us understand sciences and scientific understanding. So, I was both enormously influenced by their accounts of practices and also critical of uses they wanted to make of this to sharply distinguish between the social and the natural.

And the two things that were very important to me were emphasising the material component of practices - and of course, this was coming out of philosophy of science and thinking about experimental systems and theoretical models and so forth – and thinking about language as a social practice. And that's where Brandom became especially helpful, because he was developing the most articulated account of language as a social practice. And so that was the set of resources that initially I found helpful.

At the same time, I had, much earlier than most philosophers of science, close connections to the emerging tradition of social constructivism. Both the British folks, at Bath and Edinburgh,<sup>2</sup> but especially Karin Knorr-Cetina and Bruno Latour and so forth. And also the emerging feminist science studies. So those people, Evelyn Fox Keller, Donna Haraway, were very, very important in helping me think about scientific practice and in seeing scientific practice not as something isolated and special and separate, but as an integral part of the social world.

**Elizabeth Shove:** So, can I interrupt there? Kuhn is really interesting as a starting point. As far as I know, Kuhn doesn't talk about practices. Implicitly he does, as the basis of shared understandings, but definitely not about materiality. So I'm curious, who else was putting these pieces together?

Joseph Rouse: Kuhn was definitely shifting the philosophical focus from scientific knowledge to the practice of scientific research - "normal science" is a kind of practice. He also was much more interested in practices, instruments, and the material basis of research than has been widely recognized. I have written about these aspects of Kuhn. But there wasn't really anyone else putting all those together. You know, I was also steeped in the classical tradition in philosophy of science and at that point, what was interesting to me was that I was seeing pieces coming from different places that were very helpful. For example, Dreyfus put me on to Pierre Bourdieu. And so, for me, reading Bourdieu and Giddens on the one hand, was very reassuring to see that people working in the social sciences were working on these themes. At the same time, I wasn't finding much new in their work, and so up through the nineties I was mostly talking about practices in relation to Taylor, MacIntyre, Dreyfus, Brandom, and so forth.

**Elizabeth Shove:** Back tracking a bit, the authors that you mentioned are working with different ideas, so it's a bit hard to say where you first met practice theory. You've told us a little bit about your own background, but there are many, many topics that you could have followed. So why this route?

Joseph Rouse: Well, it seemed to me that for thinking about the sciences and scientific understanding, looking at practices as temporally extended, and looking at practices as always looking ahead, as building on a path

<sup>&</sup>lt;sup>2</sup> Here Joe refers to the 'strong' programme in science studies, and the idea that all forms of scientific knowledge are shaped by dominant paradigms. This is associated with authors such as Harry Collins, at the University of Bath, and David Bloor and Barry Barnes at Edinburgh University.

of past performances, but taking them in new directions, that seemed to be what was being left out.

And so, the other part here is that I was very much steeped in Heidegger and Wittgenstein. You know, Wittgenstein on rule following and norms as embedded in practice rather than as specified, and Heidegger on intersubjectivity and the anonymous [meaning collective or shared] character of social practice. From my point of view, practice theory really goes back to Heidegger and Wittgenstein.

**Elizabeth Shove:** But as you mentioned, there is also the parallel track of social constructivism and science studies, and the Edinburgh School,<sup>3</sup> and so on. What were you bringing to that debate?

Joseph Rouse: That's where it makes a difference that my first encounter with that tradition was with people like Latour and Knorr-Cetina, because they very much were doing ethnographic studies of everyday practice and research orientation in the sciences. You know, Karin was my colleague for a year, at Wesleyan, so I got to know her very well and Bruno [Latour] gave the paper, 'Give Me a Laboratory and I Will Raise the World' (1983) at Wesleyan before it was published. So that was much more indicative of science studies to me than the folks in Bath or Edinburgh, although they were also interesting and important, especially in looking at experimentation. I was also reading the anthropologists and the feminist theorists who were taking this in some different directions. So, you know, reading Haraway in the early eighties even before Primate Visions (1989) came out.

**Elizabeth Shove:** Okay, but what was happening to 'practice theory' in the early 1980s? What were the main issues amongst the people you met and who were influential?

Joseph Rouse: Right. Well, I mean there, there were two, no, three things that seemed to me, really central. One was the question of whether practices were a locus of commonality, shared norms, and common performance, or whether they involved contestation and difference all the way down. That was where I was finding the anthropologists very helpful, you know, Sherry Ortner's (1984) paper on theory in the sixties came out about that time and that helped me a great deal. Especially in thinking about practices as ways in which people depended on what other people do, even if they didn't have the same concerns, the same needs, or the same backgrounds. And so that was one issue.

A second, of course, was the nature-culture divide or the social-natural divide. And of course, part of why I was interested in this was because I saw that as a false division.

The third issue was the importance of language and the ways that practices involve contestation over meaning. There was a line in Charles Taylor that was very influential for me early on which basically said that you could only engage in a certain set of practices if you also had the relevant kind of vocabulary to talk about what you were doing. And you could only make sense of that vocabulary if you were engaging in those practices. And so, seeing language and practice as both closely integrated, and indeed, I mean language as itself a practice and as integral to social

<sup>&</sup>lt;sup>3</sup> For example, the work of David Bloor and Barry Barnes and their arguments about the social organisation of even 'hard' science.

practices was very, very central to my thinking about that. That would be the third thing.

Elizabeth Shove: This is an odd combination, isn't it? I mean, we've got Latour, who doesn't really bother with these issues of language and practice, we've got the materiality that you're bringing in, following Latour, but that's not centrally part of debates about scientific knowledge and social constructivism. I mean, you're either a real magpie here, which is possible, or there's something that holds this package together for you, or both.

Joseph Rouse: Latour was much more interested in language and practice than you suggest. Look at the emphasis on inscriptions and writing in Laboratory Life (1987), and in Science in Action (1988) or the Pasteur work (1993) as concerning practices. But what holds it together is the sense that our, you know, our lives together, the things we do, the ways we make sense of ourselves, are focused on these different kinds of practices and the ways we make sense of them. So that the notion of meaning and the ways in which each meaning is not something in the head, but out in the world, in our engagements with one another, that's where it lies.

Elizabeth Shove: OK, so the next bit of discussion is about landmark contributions, your own, but others as well. We've read an article by you from 1993, What are Cultural Studies of Scientific Knowledge? (Rouse 1993). In that article you are distinguishing between the cultural production of knowledge and the social organization of science, versus social constructivism as a position, and as a stance on the status of knowledge. In a sense, you are bringing your philosophical tradition to what was then quite a live debate in science studies. So, what difference did that paper make?

People carried on talking about social constructivism, despite you, Joe, despite your intervention (*laughter*).

Joseph Rouse: Well, part of the point of that article was to explain that there is an alternative tradition emerging in how to think about scientific practice and scientific understanding in practice, that was different from mainstream social constructivism.

Different from the Bath School, the Edinburgh School, and so forth. The exemplars were people like Donna Haraway, Sharon Traweek, a lot of feminist work, and anthropological studies.

And what struck me at the time was two things. One was that there was a lot of this work being done that was really fascinating, but it didn't have the kind of programmatic articulation that, let's say, David Bloor had given for the strong programme, that the Edinburgh folks had done, or that Harry Collins had been doing. And so, this paper was an attempt to say that there is something important going on in science studies that shares themes and concerns with classical social constructivism. This is about treating scientific knowledge as a social and cultural phenomenon and scientific understanding as practice.

And the point was that the Edinburgh and Bath folks were head on in argument with a lot of the philosophers. And part of my point was that they were meeting one another head on because of how many assumptions they shared. Their debate was really about rationality or irrationality, internal and external factors, and what was striking was that this other work [Joe's own approach, and feminist work] didn't accept those assumptions. So, this was coming out just at the same time as the Pickering volume *Science as Practice and Culture* (1992),

which was also doing some of the same things, and which saw Latour and Woolgar and others moving in the sort of direction that my 1993 paper was taking.

#### Elizabeth Shove: OK.

Joseph Rouse: But that paper (1993) was probably the most widely cited paper I've ever written. Partly because it spoke to this emerging group that didn't have a programmatic articulation of their position, that was important, and the fact that it was the first paper in the first issue of a new journal in the field.

So that was it, it provided a moment of crystallisation of some new directions in science studies. Not that I was initiating these, but this was what I was seeing other people do, and I helped to formulate it as "this is what we're up to and this matters." And it was very much a practice-oriented conception, but one which saw practices as contested, power laden, and differentiated.

Manuel Baeriswyl: We'd also like to talk about your chapter in *The Practice Turn in Contemporary Theory*. 'Two Concepts of Practices' (Rouse 2001) contributes to a discussion about how practices are shared and is a response to some of Stephen Turner's work. We can go into more detail about this text, but we're interested in learning about the history of this chapter and why you wrote on the topic that you did. You focus on the extent to which participants are normatively accountable to each other, so why was normativity an issue worth writing about at that time?

**Joseph Rouse:** Well, normativity has always been as far as I'm concerned, the central issue in practice theory. That is, how is it that people engage in performances that are open to

assessment as appropriate or inappropriate, or in all the other terms that are used - good or bad, just or unjust. And of course, that was part of what was going on in Heidegger and Wittgenstein: seeing norms not as explicit rules, but as embedded in how people's performances responded to one another.

And so, that issue was central. Now, what prompted it? *Engaging Science* (1996), my second book, had just been published and I had a full-blown account there of what I take practices to be, and then I read Turner's book *The Social Theory of Practices* (1994), and my response was double edged. I thought, you know, Turner was attacking two different conceptions of practices.

Practices as regularities - people who do the same things and thereby build a tradition together on the one hand, or practices as performances - governed by norms or shared presuppositions on the other. You know, he had two different lines of argument there. And on the one hand I thought he was spot on in his criticisms of both these conceptions, but he took those to be exhaustive. And, you know, the kind of work I'd been doing had been giving a very different account.

So, the point of my chapter was to, on the one hand, say that Turner's doing something really significant here that challenges a lot of the familiar ways of talking about practices. But there is an important absence, and that was also a way of saying what's going on in the account of practices that I had been developing. Part of what I argued was that you could even discern this third alternative between the lines of Turner's criticisms of the other two, even though he did not recognise its possibility.

Elizabeth Shove: Can I follow up on that? For you, the normativity and to some extent a language as well situates people as the kind of central point, but there are other versions of practice theory. Andreas Reckwitz, for example, writes about people as the carriers of practice, arguing that practices exist beyond people. Sometimes it seems as if that is what you are saying, but you often go back to an idea about the centrality of relations between people. What do you think about the suggestion that people are 'merely' the carriers of practices?

Joseph Rouse: I mean carriers isn't the word I would use, but I think the point you're making is right. That is that practices are not just about relations among people, it's the settings, and patterns of action in which people participate, that enable them to act meaningfully, understand themselves, and so forth.

**Elizabeth Shove:** So, what word would you use if you don't use "carriers"? What word would you use?

Joseph Rouse: Maybe the "site" (*laughter*), right? That is, humans' ways of life go beyond just what people do, but they're focused around us. I mean, you know, in my recent book, I take practices to be this basic structure of human biological environments.

**Elizabeth Shove:** I was wondering whether there has been a shift in your own thinking on that or whether you've held to the same view of practices from the 90s onwards?

**Joseph Rouse:** There were common streams of concern all the way through. But, as I read more work and brought in more elements, the view gets developed and expanded. Robert

Brandom's work on languages as practices and the reinterpretation of Donald Davidson's work on language as a practice theory enabled me to say much more, but it didn't change my view in the sense of making me reject things I used to say.

And likewise discovering niche construction theory,<sup>4</sup> I'd already been involved in the philosophy of biology and in looking at the criticisms of genocentric accounts of molecular biology and the modern evolutionary synthesis, but niche construction theory fitted beautifully into what I was already doing and enabled me to do a lot more with it. So, it's about discovering new resources that help articulate and develop my account.

**Manuel Baeriswyl:** So maybe on that note, do you think the practice turn happened or not?

**Joseph Rouse:** Oh yes, absolutely. Well, here's the thing. It happened, and in some areas, there were also turns away from it. In philosophy, and social philosophy, there was a turn away from practice theory, right? A huge area in philosophy, social ontology, starts from presumptions that just leave out the possibilities of practice theory. And practice theory is now coming back into that field as people realise what has been left out. So there has been both a development of practice theory in various disciplines and, you know, a number of my papers start by talking about how the notion of practice has been so influential across a wide range of disciplines, but it's also been contested within those disciplines, right?

Practice theory is not the dominant approach anywhere, I think, but it's a prominent

<sup>&</sup>lt;sup>4</sup> Niche construction theory is a form of evolutionary biology that takes account of the fact that organisms modify their environments and the selection pressures that follow.

approach almost everywhere (*laughter*) in thinking about human life. And of course, I think that it's on the right track. Now, you mentioned Reckwitz. I think that after the turn of the millennium, practice theory in the social sciences has developed in ways that are quite consistent with the conceptions that I've been developing. I mean, there are points I would disagree with Reckwitz about, but that's an approach that's very sympathetic to mine.

Manuel Baeriswyl: To go back to another big issue, you say that you are interested in overcoming any conceptual or practical divide between social world and the scientific intelligibility of nature. You mentioned this earlier, but it is also important in your most recent book, so maybe you could elaborate on this.

Joseph Rouse: That has been a theme of my work going back to my first book, *Knowledge and Power* (1987). Of course, the original idea was that a great deal of practice theory initially developed as an account of what makes the human social world different from the natural world and the social sciences different from the natural sciences. I was greatly influenced by that account of practices while criticising the claim that it differentiated a social world from nature.

And so, I had already been arguing that this was a false distinction from one side.

That is, scientific practice is very much a practice in this way, and that how we understand and deal with the natural world is part of a single set of engagements in the world. Then of course, on the other side, I discovered that [some forms of] biology gave us a very rich resource for understanding human embodiment, human engagement with the world, and with one another in practices

that didn't separate embodied skills from discursive articulation.

A large part of that was providing the resources for making that connection, because that was always a divide between bodily skill and language, right? You see it even in Bourdieu between habitus as a kind of bodily phenomenon and then rules and norms. And part of what my work was doing was arguing that those are false distinctions, that language and conceptual articulation and explicit rules were embedded in embodied practice and engagement with the world.

And so, avoiding those two kinds of separation between tacit embodied skill and explicit articulated knowledge, and between culture and nature seemed to me a really important thing. And I think it is one that more recent work in practice theory has become more sympathetic to. Both because of very good recognition of the material dimension of practices, which is of course the world, the natural world. And partly because social scientists are no longer committed to the project of distinguishing the social and the natural, partly because of the influence of science studies, which overall has been very constructive, and I think it has also moved in the direction that I'm suggesting.

This includes the ways in which social studies of science have moved beyond debates about constructivism and knowledge, and incorporated anthropological, feminist, and other perspectives.

**Elizabeth Shove:** A second big theme you mentioned was relations amongst practices and between them, and questions of power. So again, the science studies angle is interesting in

terms of power. Why did you pick that as a second theme you'd like to talk about?

Joseph Rouse: Well, because that has been there all along. As I noted, I began with a book about how scientific knowledge and power were integrally connected. The question of whether practices are the locus of a community, of shared presuppositions, of common ways of doing things, or whether power, contestation and difference run all the way down has been a theme and an issue throughout. And of course, another figure who we haven't mentioned here, but who is I think very important in this context is Foucault. He was enormously influential on my work as well, so seeing practices not as defined by shared things - norms, performances, presuppositions, whatever - but instead as ways in which people both depend on one another and on the settings in which they engage with one another, and at the same time have different goals, interests, needs, and so forth. I think here, Ortner's (1984) early paper was actually very, very good on, on bringing that vision out.

And so, for me, power has always been at the centre of practices. Not as something that people possess, but as - again, this is a broadly Foucauldian idea - as something that runs through interactions among people in everything being... and power is, in Foucault's terms, capillary, it's in the ways in which small actions shape the field of possible actions.

**Elizabeth Shove:** Is there anything extra to say about power and materiality and practice, when you put those three concepts together?

**Joseph Rouse:** Well, of course. History is absolutely central. I mean that was part of the point of seeing the material setting of practice and the reconstruction of those settings. So,

you know, this brings in all sorts of other things that are not explicitly part of a practice theoretical tradition, but which I see as consistent with it. For example, my friend Quill Kukla's (2021) lovely book, *City Living*, is about the ways in which interactions among urban dwellers shape the making of city life and the divisions in the territories and patterns of practice. This seems to be a lovely contribution to social practice theory, but it's very much about the interactions of people with spaces, buildings, equipment and so forth.

**Manuel Baeriswyl:** To finish, we'd like to know what you think about how practice theories are developing today.

Joseph Rouse: Well, I mean, first of all, I basically agree with your point that practice theory nowadays is rightly concerned with change, materiality, with the ways in which practices in different scales affect one another, transform one another, that this is about the dynamics of practices to steal the title from a book, right? (*laughter*)

But it seems to me that language is at the heart of that. That is, the ways in which languages themselves are practices that are changed and contested. Another book that is not coming from the practice theory tradition at all but draws on it and makes a lovely and important contribution to it, is David Beaver and Jason Stanley's (2023) new book on *The Politics of* Language. They start from things like slurs and other non-assertive uses of language, but they're emphasising the ways in which language shapes the ways we interact and the terms in which we do so, and that it often guides fragmentation and contestation over various practices and various issues. And similarly, normativity. Now one of the big issues of course is that broadly speaking, and

there are lots of exceptions, social theorists and philosophers tend to think about normativity differently. I think in social theory it's about the imposition of norms, right? And you know, it's describing norms as something that governs or either are accepted or are imposed.

Whereas in the most interesting philosophical uses, it's about how we hold one another open to assessment, and how the norms according to which that assessment takes place are not already settled but are at issue. And so again that shows how normativity, the very terms in which we assess and make sense of one another, is part of that discussion about change, materiality, the interconnections among practices, scale and power, right? This is about the ways in which changes in language enable some things to be said more clearly and to close off others.

There's always been a tradition in sociology of thinking about conversation as itself a social practice. And there is some very good work done along those lines, but it's certainly the case that thinking about language as a practice has been much more on the side of philosophy. And part of the difficulty, of course, is that that literature engages a whole set of themes that go beyond the traditional concerns of the social sciences. Another part of the problem is that there are different traditions for thinking about language. One of the things that has been central to my work all along is discovering that there are these things going on in different places [disciplines] which have important things to say to one another.

And so, one of the points here is that there is important translational work to be done to be able to say how work being done on language here is actually very helpful to the kinds of things you're doing over here in practice theory. Or, in my case, thinking about human bodies biologically as organisms in an environment can actually be very helpful for thinking about everyday social practices.

One of the things I hope that your journal will do is to provide these kinds of translational opportunities to see how people from different disciplines are working on similar themes and providing resources that one another can use without having to say, "oh you have to be trained in eight different disciplines to do that."

**Elizabeth Shove:** One last question about practice theory and everyday life. Has this tradition made any difference to your own daily life, and if so, how?

Joseph Rouse: Absolutely yes. I'll start with a very simple way. Manuel and I were talking earlier about my nearly lifelong involvement in competitive sports. Understanding volleyball and fencing as practices and embodied skills, and how they change the way you understand things and see things, that's been an important back and forth between philosophy and everyday life. But there is a bigger context, right? You know, I grew up in the American South when it was still legally segregated, and amidst the civil rights development. I became an adult in the middle of second wave feminism. I became a science studies scholar in the 80s in the middle of the AIDS epidemic. Thinking about race, gender, and sexuality as embedded in practices, and the way which everyday practices can be both oppressive or liberating, and thinking about my own activities and ways of life in those terms, has been enormously influential in my day to day life.

And I think part of taking a normative concern seriously is recognising when the expression of it, and the concern, are at odds. That means

ISSN: 3050-0370

thinking about the times when you have to violate the rule or the norm in order to live up to why it matters. And thinking about norms in that way, as something that always outruns our efforts to express them and formulate it, important as that is, has been an important guide in everything I do. So, I was delighted when you asked, you know, when I saw that question because in fact thinking about

practices and the ways in which I think about practices has been informed by central issues in my life and has informed them.

### References

Beaver, D. and Stanley, J. (2023) The Politics of Language. Princeton University Press. https://doi.org/10.2307/jj.3079200

Haraway, D. (1989) Primate Visions: Gender, Race, and Nature in the World of Modern Science. Routledge. https://doi.org/10.4324/9780203421918

Kuhn, T. (1970) The Structure of Scientific Revolutions. University Of Chicago Press. https://doi.org/10.7208/chicago/9780226458106.001.0001

Kukla, Q. (2021) City Living: How Urban Dwellers and Urban Spaces Make One Another. Oxford University Press. <a href="https://doi.org/10.1093/oso/9780190855369.001.0001">https://doi.org/10.1093/oso/9780190855369.001.0001</a>

Latour, B. (1993) The Pasteurization of France. Harvard University Press. Translated by Sheridan, A. and Law, J. [No DOI available]

Latour, B. (1988) Science in Action: How to Follow Scientists and Engineers Through Society. Harvard University Press. [No DOI available]

Latour, B. (1983) 'Give Me a Laboratory and I Will Raise the World'. In Knorr-Cetina, K. and Mulkay, M. (Eds.) Science Observed: Perspectives on The Social Study of Science. Sage, pp. 141-70. [No DOI available]

Latour, B. And Woolgar, S. (1987) Laboratory Life: The Construction of Scientific Facts. Princeton University Press. https://doi.org/10.1515/9781400820412

Macintyre, A. (1981) After Virtue: A Study in Moral Theory. Notre Dame Press. [No DOI available]

Ortner, S. (1984) 'Theory in Anthropology Since the Sixties', Comparative Studies in Society and History. 26(1), pp. 126-166. <a href="https://doi.org/10.1017/S0010417500010811">https://doi.org/10.1017/S0010417500010811</a>

Pickering, A. (1992) Science as Practice and Culture. Chicago University Press. https://doi.org/10.7208/chicago/9780226668208.001.0001

Rouse, J. (2023) Social Practices as Biological Niche Construction. University Of Chicago Press. http://dx.doi.org/10.7208/chicago/9780226827964.001.0001

Rouse, J. (2002) How Scientific Practices Matter: Reclaiming Philosophical Naturalism. University Of Chicago Press. [No DOI available]

ISSN: 3050-0370

Rouse, J. (2001) 'Two Concepts of Practices'. In Schatzki, T., Knorr-Cetina, K. and von Savigny, E. (Eds.) The Practice Turn in Contemporary Theory. Routledge, pp. 198-208.

Rouse, J. (1996) Engaging Science: How to Understand Its Practices Philosophically. Cornell University Press. <a href="https://doi.org/10.7591/9781501718625">https://doi.org/10.7591/9781501718625</a>

Rouse, J. (1993). 'What Are Cultural Studies of Scientific Knowledge?'. Configurations, 1(1), pp. 1-22. https://dx.doi.org/10.1353/con.1993.0006

Rouse, J. (1987) Knowledge and Power: Towards A Political Philosophy of Science. Cornell University Press. [No DOI available]

Turner, S. (1994) The Social Theory of Practices: Tradition, Tacit Knowledge, and Presuppositions. University of Chicago Press. [No DOI available]

This work is made available under a <u>Creative Commons Attribution-NonCommercial 4.0 International</u> (CC BY-NC 4.0) license. Copyright remains with the author/s.

The *Journal of Practice Theory* is hosted by Lancaster University Library and is part of the work of the Centre for Practice Theory at Lancaster University.

See: https://ojs.library.lancs.ac.uk/jpt and http://wp.lancs.ac.uk/socialpractice

ISSN: 3050-0370