

Bengt Molander,
Thomas Netland and **Mattias Solli** (Eds.)

KNOWING OUR WAYS ABOUT IN THE WORLD

Philosophical Perspectives
on Practical Knowledge

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Philosophical perspectives on practical knowledge

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Part 1
Setting the stage



Introduction

Bengt Molander, Thomas Netland, and Mattias Solli

A potter feels the strengths and weaknesses of the material, moulding marvellous things out of clay. In real-time interaction a group of jazz musicians communicates fluently, spontaneously, and with vigilance through their well-prepared bodily and aural musical languages. Dancers sense and understand the profound implications of human movement; only a few gestures with the hand can be enough for one dancer to show whole sequences of actions to another dancer. These artistic competencies do not fit into the epistemological dualism between, on the one hand, *thinking* as something going on “in mind,” expressible in words or mathematical formulas, and, on the other, the *bodily reality* of work and manual labour. Indeed, artistic competencies challenge the very idea of such division, showing its limitations. The artists *think in their media* – and the detours into words and formulas will never capture the profundities in play. Still, most philosophical theories of knowledge are based on the idea that the highest form of knowledge equals statements and theories *about* the world and ourselves, often defined as “knowing that” in contrast to the “knowing how” of practitioners. This focus has a long tradition in Western philosophy – and culture – reaching back to Plato’s idea of *theoria* as a “seeing” with your (properly educated) soul. It still exists in the conviction that scientific results must have “theoretical foundations” as well as attempts to make practices “evidence-based,” thus tacitly assuming evidence and knowledge proper must be expressed in words.

By contrast, in this anthology, we focus on “practical” forms and expressions of knowledge, like thinking in artistic media, without a dualism between intellectual and practical ways of engaging in the world. The use of *practical knowledge* in the title does not imply that such knowledge is not “theoretical.” The goal is to explore human knowledge and experience *from the perspective of human activities or practices*, professional, artistic, domestic, or whatever. This covers what has been called practical knowledge – and practical wisdom – tacit knowledge, and, quite generally, *knowing how*. Such a focus on human beings engaged in activities must situate knowledge in the context of what is worth doing and what has meaning for people. We will direct attention not only towards knowing “in” practices but also towards practices as ways of knowing and learning about the world. The latter

is perhaps most clearly seen in the contributions by Bjørn Alterhaug on jazz and Gisela Bengtsson on croquis drawing.

While practice-focused conceptions can also be traced back to ideas of ancient Greek philosophers, the contributing authors take their points of departure in more recent discussions about knowledge in practice. We have asked the authors to explore how such discussions can be further developed and how they can allow us – philosophers and others – to think more freely about knowledge in all forms. It is an important goal of the present anthology to give a voice to practitioners themselves – recognizing that we are all engaged as practitioners in some practices and also engaged in a number of other roles, for example, as customers, clients, or critics. It is, however, equally important to develop the philosophical discussions *about* such knowledge. Such discussions can and should also be practice-led or practice-near.

We can distinguish between four main lines of development in recent discussions. The first is the movement of establishing practice-based or practice-led research, that is, research from within various practices, essentially from the perspective of the practitioners themselves. Such research has mainly been developed – and is still developing – in creative, performative, and educational practices. Such inside and practically engaged knowledge involves the whole body, and its products unfold in music, drawings, craft objects, or whatever form of expression practitioner-researchers explore. Of particular interest is knowledge as it unfolds in closely connected collectives (communities), like in jazz music, as discussed (and shown) in the contribution of Bjørn Alterhaug and the joint contribution of Mattias Solli and Thomas Netland. In such communities, knowledge does not exist “in” the individuals but rather “between” them in the collective. Here we could indeed talk about co-knowing, co-perception, and co-creation.

The second line of development is the discussion about “tacit knowledge,” which focuses on the skills and insights that artisans, artists, and professional workers express through their actions and how they solve their tasks. Tacit knowledge means a kind of practical knowledge that challenges the dichotomies between body and mind and between the intellectual and the manual. The main influences here have been the British-Hungarian polymath Michal Polanyi, the later philosophy of Ludwig Wittgenstein, and the existential phenomenologists Martin Heidegger and Maurice Merleau-Ponty. These perspectives have led to very different discussions about forms of knowledge. Polanyi has emphasized that tacit knowledge is a kind of *personal* knowledge. Those inspired by Wittgenstein have pointed to knowledge in the form of familiarity with practices. The influence of Heidegger has come mainly through the American philosopher Hubert Dreyfus, who has argued that experts don’t really “think” but have learned to cope by

immediately responding to patterns in the environment. One of the editors of this anthology (Bengt Molander) has been one of the most influential contributors to the Scandinavian debate about tacit knowledge and “knowledge in action” since the 1990s (through many reprints of the book *Kunskap i handling*, also published in a revised and updated English edition, *The Practice of Knowing and Knowing in Practices*, 2015). He takes as his point of departure Wittgenstein’s later philosophy and American Pragmatism, which has been very influential in accounts of perception and knowledge based on and expressed through human activities.

In the 1970s and through the 1980s, the idea of tacit knowledge was often voiced against the over-confidence in the possibilities of computer systems to represent all intelligent human behaviour. Hubert Dreyfus’s criticism of this over-confidence (*What Computers Can’t Do: The Limits of Artificial Intelligence* (1972), *What Computers Still Can’t Do: A Critique of Artificial Reason* (1992)) opened up at the same time for a more body-based and less rule-based understanding of human knowledge and intelligence. To sum up, the discussions about tacit knowledge developed in quite different ways, dependent on the different (philosophical) key influences. However, all the mentioned approaches to tacit knowledge share the perspective that knowledge is primarily expressed *in* our engaged and attentive acting (and perceiving) in the world, not in thoughts and theories *about* the world. That the relation between “practice” and “theory” is a main challenge for such perspectives is clearly expressed in Zhenhua Yu’s contribution to the anthology.

The third line of development evolved in cognitive science over the last three decades. During the late twentieth century, cognitive science was dominated by a view of the human intellect as structured as a computer. In contrast, during this century, research programmes in cognitive science have contributed to a radicalized and more open understanding of human perception and action – and, thereby, what it is for human beings to be and act in the world. Fundamental notions here are the “pragmatic turn” and the “four E theories”: *embodied, enactive, embedded, and extended* cognition. The label “pragmatic turn” was first used in philosophy as a notion for the revitalization and development of the American Pragmatist philosophy during the 1980s and 1990s, which like traditional Pragmatism emphasized that human beliefs and knowledge primarily are expressed in and through actions. The pragmatic turn in cognitive science – as witnessed, for example, in Engel et al.’s *The Pragmatic Turn: Toward Action-Oriented Views in Cognitive Science* (2016) – is, however, mainly a product of this century. It depends more on influences from biology than from (traditional) computer science. The active human being as a living body is at the centre, without any essential borderline between the human body and the rest of the world (tools, environments, what the world makes with us). In addition to Pragmatism and biology, there is a strong influence

from phenomenology, particularly from the works of Merleau-Ponty and his way of developing a philosophy of human perception.

Enactivism deserves to be separated out as a line of development of its own and will be our fourth line. The reason being that it has also evolved as a key perspective outside cognitive science. One of its key theoreticians, Alva Noë, contributes to this anthology. Enactivism draws from both Merleau-Ponty's phenomenology of perception and experimental cognitive research, proposing a radically embodied and activity-based view of perception. A central element here is the rejection of the idea of perception as sensory inputs that are processed in the brain. According to the enactivist perspective, perception is, to quote Alva Noë, "not a process in the brain, but a kind of skillful activity on the part of the animal as a whole."¹ By putting skillful activity at the centre of perception, enactivism has developed new perspectives that integrate practical knowledge (knowing how) and perception. In addition, enactivism has contributed to a better understanding of both artistic skills and the ways we perceive and engage with objects of art, which is indicated in Noë's contribution to this anthology, where he also in his commentaries to Bengt Molander's introductory chapter criticizes Hubert Dreyfus's idea of a primordial type of (non-intellectual) knowing. Indeed, in his critique of a dualism between thinking and practice, he argues that thoughtfulness "in itself is one of our engaged moods of orientation."

Enactivist approaches to various kinds of knowledge are still controversial and debated. Several chapters contribute to this debate and thus to a better and more comprehensive understanding of various forms and expressions of knowledge: in addition to Alva Noë's own contribution, Bengt Molander, Jonathan Knowles, and Mattas Solli and Thomas Netland discuss and develop ideas about knowledge along the enactivist line of thinking.

Even if the enactivist perspective is recent in cognitive science, it has roots that extend back to earlier philosophical traditions. We have already referred to the influence of Merleau-Ponty's phenomenology. From a classical Pragmatist perspective, John Dewey's arguments for an integrated view of action, art, and experience have been revitalized. Experience is, in Dewey's own words, seen as "primarily a process of undergoing: a process of standing something; of suffering and passion, of affection in the literal sense of these words."² And in *Art as Experience* he emphasizes that when artists think in their medium, they perceive

1 Alva Noë, *Action in Perception* (Cambridge, MA: MIT Press, 2004), 2.

2 John Dewey, "The Need for a Recovery of Philosophy," in *Creative Intelligence: Essays in the Pragmatic Attitude*, ed. John Dewey (New York: Holt, 1917), 10. (Quoted after "the Web Mead Project", https://brocku.ca/MeadProject/Dewey/Dewey_1917b.html (read November 8, 2017).)

each particular connection of doing and undergoing in relation to the whole they are about to produce.³ Bengt Molander points out the importance of Dewey's idea of "experimental empiricism" in his contribution, and Solli and Netland explore what it implies to think in the musical medium.

Here in the introduction it is also important to say some words about the British philosopher Gilbert Ryle's famous analysis of intelligent practices as forms of knowing how. His analysis is still a source of inspiration for thinking about knowledge in a way that covers at least three E's: being embodied, embedded, and extended, without the use of these more recent labels. His chapter on "Knowing How and Knowing That" in *The Concept of Mind* (1949) is a minor classic. However, his distinction between the two forms of knowledge – or intelligence – has become something of an epistemological dogma and treated as an unbridgeable dualism. This is, we think, far from what Ryle intended. He wanted to clarify how we talk about knowledge and intelligence, not what knowledge "really is." By pursuing *knowing how* in the general sense of this anthology, we believe we stay true to Ryle's initial idea without embracing his more unfortunate epistemological dualism.

Several of the contributing authors discuss Ryle's ideas and arguments in detail. Bengt Molander builds on some of Ryle's examples and argues that "knowing how" in an extended sense, without the "knowing that" dualism, opens a way towards a comprehensive idea of knowing in human practices. Jonathan Knowles discusses in detail both knowing that and knowing how as well as the distinction between *abilities* and Ryle's knowing how. Lars Hertzberg argues that Ryle has constructed a (false) dichotomy between *skill* (knowing how) and *habits*. With his clarifications we can approach the theme of skills, habits, and routines in a more productive way. Indeed, the theme of *habits and routines* has developed into one of the main themes of the anthology. The discussions by Hertzberg, Molander, and James McGuirk clearly show that this theme is one of the most central to a philosophy of practical knowledge/knowledge in practices. This discussion of this theme – like most of the other themes – will certainly continue after the end of the book.

Last but not least, Ståle Finke takes up a theme that is central to all discussions about embodied (practical) knowledge: bodily *passivity* and bodies that are injured and cannot make sense of what happens to them. His approach is in terms of phenomenology and psychoanalysis, but its relevance is not limited to only "theory." We think, for example, that the (enactive) idea of sense-making bodies – and broken patterns of (bodily) sense-making – can give material to further discussions about the formation and cultivation of habits and ways of attending to the world, as discussed by McGuirk.

3 John Dewey, *Art as Experience* (New York: Perigee, 2005), 47.

The book as a whole, we think, shows many promising lines for the further development of our understanding of knowledge in human practices. We have no grand synthesis and no final answers. Perhaps one can say that the most important part of the book is *between* the chapters, the part where the reader herself or himself has to continue and improve whatever is in need of improvement. And we need more discussions where philosophers and (other) practitioners can meet and create a better common understanding of what is at stake, human knowledge in practice(s).

We hope that the texts will be of interest and of use in both discipline-based and professional education: in philosophy, art schools, teacher education, and other programmes where tacit knowledge and practical knowledge are essential for the (future) practitioners. Most chapters are possible to read and profit from independently of the other chapters. Chapter 2 is an exception, because it is partly a response to Chapter 1. Otherwise the readers may start at any point in the book and continue to explore it according to what appears most interesting to them. However, we would recommend that it is profitable to start with our introduction in conjunction with Chapters 1 and 2 because these contributions set the scene for the main philosophical themes in the book. Most chapters presuppose that the readers are familiar with some main questions of (philosophical) epistemology and a basic philosophical terminology.

Most chapters of the book are revised versions of papers read at the workshop *Doing, Showing, and Saying: Knowing our ways about in world*, carried out online on 1–2 June 2021. We are grateful for a grant from NTNU's funding for open access publications as well as a generous supplementary grant from the Department of Philosophy and Religious Studies at NTNU. We also want to thank the two anonymous reviewers for the Scandinavian University Press for valuable feedback and the editorial team at the Press for good cooperation and support.



1. Knowing our ways about in the world

Bengt Molander

Abstract In this chapter I develop a framework for a comprehensive account of knowledge from the perspective of people engaged in practices in the world. This form of knowledge, with the key notion of *knowing one's ways about*, can be seen as a form of knowing how. It is in particular designed to accommodate tacit and practical forms of knowing, but at the same time acknowledges that it, like other kinds of human knowing, is also dependent, directly or indirectly, on language use. The framework is inspired by pragmatist and enactivist perspectives.

Keywords knowing how | practices | routines | Gilbert Ryle | Alva Noë

1. STARTING POINTS

I will define and defend an inclusive notion of (human) knowledge, with an emphasis on *knowing as a process*. It is, I will argue, wide enough to cover “theoretical” knowledge, usually associated with thinking and linguistically articulated knowledge, as well as “practical” knowledge, usually associated with human actions and practices. Most importantly, it does *not* assume a dichotomy between thinking and action. The rejection of this dichotomy is also one main feature of the pragmatist¹ tradition, which is part of my frame of reference. My focus is on participation in activities, *practices*, rather than the performance of particular actions. According to pragmatism, knowledge in the widest possible sense is shown and tested in how it *guides* or *leads* us – human beings – in the

1 I use the form “pragmatism,” with a small “p,” throughout my text. This marks a wider perspective than the classical American “Pragmatism,” with a big “P,” which indicates a fairly homogeneous movement. My pragmatist perspective has roots in Pragmatism but is not bound by it. Cf. footnote 2 below.

world. For example, knowledge in the form of beliefs and theories is tested by how well it is guiding us *in use*.²

Think now about a few common situations: you are on a hiking tour in a mountain area; if you have accurate ideas about the (relevant parts) of the landscape, have checked the weather forecast and decided where you want to go, and quite generally “know what you are doing,” you will *get along well enough* during the tour. Or you are in job situation; if you are familiar with the equipment, are sufficiently experienced, know the relevant facts, and are clear about your responsibilities and what a good or acceptable performance (result) is, you will *get along well enough*. These sketchy examples illustrate that knowledge is very much about *coping* (as used by Hubert Dreyfus, whose views will be discussed later) or *managing* well enough with a focus on *knowing how to proceed*. Coping in this sense also covers the knowing of facts, which is above all a matter of understanding *in use*, what facts “tell us” about how we can, or cannot, proceed. This is what I mean by the expression *knowing our ways about in the world*.³ It is experience-near knowledge and, I hope, resistant to being used as a metaphysical foundation. The elucidation of the notion of knowing our ways about in the world will continue throughout the chapter – in particular in the form of comments to examples.

2 In his classical “How to Make Our Ideas Clear,” Charles Sanders Peirce says that “belief is a rule for action.” From *The Essential Peirce: Selected Philosophical Writings. Volume 1*, edited by N. Houser and C. Kloesel (Bloomington: Indiana University Press, 1992), 129. In a retrospective text about early Pragmatist discussions (1907), he quotes “Bain’s definition of belief” as “that upon which a man is prepared to act” and adds: “From this definition, pragmatism is scarce more than a corollary.” From “Pragmatism,” in *The Essential Peirce: Selected Philosophical Writings. Volume 2*, edited by the Peirce Editions Project (Bloomington: Indiana University Press, 1998), 399. However, I rather follow William James in his emphasis on what *leads* or *guides* us. In *Pragmatism* he writes, with “her” referring to pragmatism: “Her only test of probable truth is what works best in the way of leading us, what fits every part of life best and combines with the collectivity of experience’s demands, nothing being omitted.” From *Pragmatism* in *Pragmatism* and *The Meaning of Truth* (Cambridge, MA: Harvard University Press, 1978), 44.

3 I have not consciously borrowed it from other authors, but the original inspiration can be G. E. M. Anscombe, *Intention*, 2nd ed. (Oxford: Blackwell, 1976), 89. Some later inspiration came from Wittgenstein, in particular, *On Certainty/Über Gewissheit*, ed. G. E. M. Anscombe and G. H. von Wright, trans. Denis Paul and G. E. Anscombe (Oxford: Blackwell 1974), §§ 355, 434, where it is used as translation of “sich auskennen.” He also uses it several times in *Philosophical Investigations*, ed. P. M. S. Hacker and Joachim Schulte trans. G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte, 4th ed. (Chichester: Wiley-Blackwell, 2009), §§ 123, 203, 664 and §180 in “Philosophy of Psychology – A Fragment.” I have later seen it used by, among others, Michael Polanyi, Hubert Dreyfus, Alva Noë, and Charles Taylor, though none of them uses it as a key notion.

To begin with, I will argue that the kinds of knowledge referred to in standard epistemology are not very helpful here.⁴

“Knowledge” – about the world – is usually presented as being of two main types: knowledge in the form of beliefs in (true) statements about something (“knowing that”) and knowing how to do things. The first kind is called propositional or theoretical knowledge – or knowing that – in the form of representations in language (and other formalisms) which actually correspond to how things are in the world. Here the (human) intellect, typically referred to as mind, reason, or some such, works as the main bridge between our sense experiences and our beliefs. The second kind is also called practical or ability knowledge, but most often (following Gilbert Ryle⁵) is only referred to as *knowing how*. It exists in more down-to-earth forms like manual work and sport skills, considered to be quite independent of the intellectual or “higher” forms of knowledge. It also exists in such “higher” forms, then supposed to be mediated by representations of human activities in the form of plans or instructions.

In addition to these two standard types of knowledge, other kinds are sometimes mentioned, like knowing (recognizing) other people, “knowing what” (to do), and “knowing why.” Actually, there is no limit to the number of types and subtypes that could be introduced, at least in theory. How types are sorted is also highly dependent on the language used (as exemplified by Lars Hertzberg and Jonathan Knowles in their contributions to this volume) as well on stylistic choices: I used “knowing how to proceed” above but considered “knowing in which direction to go” as an alternative.

Now, it is important to see that “knowing one’s ways about” covers the two standards types but that they do not exist as distinguishable parts or components of the skilful and insightful going on that makes up knowing one’s ways about. By implication, knowing one’s ways about cannot be reduced to or completely analysed in terms of these types. Adding further types as possible parts will not help. We go back to my two introductory examples:

The skills with which hikers walk (and sometimes climb) in a mountain area depend normally on verbal and other symbolic inputs, in the form of maps, books, and (good) advice, as well as on their personal experiences (*and* hopes, misunderstandings, etc.). It is tempting to say (and believe) that such skills also *exist as*

4 I think of standard introductions to epistemology, like for example, Duncan Pritchard, *What is this thing called knowledge?* 4th ed. (Abingdon: Routledge, 2018).

5 Ryle’s two classical texts are: (1) “Knowing How and Knowing That: The Presidential Address,” *Proceedings of the Aristotelian Society*, New Series, 46 (1945–46): 1–16. (2) “Knowing How and Knowing That,” *The Concept of Mind* (London: Hutchinson’s, 1949), 25–61. I will mainly follow the last one and refer to it as “Knowing How.”

a mixture of the two standard types of knowledge. Certainly, the hikers have real bodily skills (“knowing how”) and they believe or know lots of things (“knowing that”) that they realize (apply, implement) or *put to work* in their ongoing activity. They can often talk well and in detail about many of their activities and ways of going on, others can only be communicated to people with similar experiences, and some may be inherently tacit and resist linguistic articulation. The knowing they *use* is a *whole* of beliefs, tested (and non-tested) habits, and whatever additional components that can be worth mentioning. There seems to be no way of connecting *particular* beliefs with *particular* actions. Thus, there is no good reason to accept the (common) analytical picture of a hidden epistemological reality *divided* into the two standard types. I therefore *start* with a comprehensive kind of *knowing* – the active form is better than the nominal “knowledge”⁶ – and explore human knowledge-in-the-world, knowledge as knowledge-in-use, that way. Like in the case of the hikers, such knowing is also at the same time a *connectedness* with the landscape, and with a broad interpretation of the notion of landscape, broad enough to cover the “landscape” of tasks in most job situations; it works fine as a key notion (or key metaphor) for understanding knowing more generally.

The way forward is not to introduce other or further types of knowledge but rather to situate knowledge in the right place in the world. Knowledge is not a view from outside the world, not from a God’s-eye point of view. Knowledge is going on in the world – where people build houses, sing songs, and make chemistry experiments, or whatever – it is where people are: *we are in the world*. A good expression for what this means is what Ruth Anna Putnam says about taking pragmatism seriously:

... to take pragmatism seriously is to take oneself to be living in a world that one shares with others, others with whom one cooperates in inquiry, others with whom one may compete for scarce resources or with whom one may cooperate in seeking to achieve common goals. It is to see oneself not as a spectator of but as an agent in the world. And that means that one often confronts the question “What is to be done?”⁷

6 Michael Polanyi favours that both in *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge and Kegan Paul, 1978) and in *The Tacit Dimension* (Chicago: Chicago University Press, 2009). He also uses the expression “the art of knowing,” for example, in *Personal Knowledge*, 55.

7 Ruth Anna Putnam, “Taking Pragmatism Seriously,” in Hilary Putnam and Ruth Anna Putnam, *Pragmatism as a Way of Life. The Lasting Legacy of William James and John Dewey*, ed. David Macarthur (Cambridge, MA: Harvard University Press, 2017), 17. She also says (on p. 15) that “[t]o take your problems—where you stand as a representative of humanity—seriously, I must

I will talk about this as the *this-worldliness* of pragmatism. One can also call it naïve realism. It is in important ways similar to the position of Dreyfus and Taylor (to which we will return) in *Retrieving Realism*, that we are in “direct touch with the things with which we are dealing,” as part of an “unproblematic realism.”⁸

This-worldliness is as important in pragmatism as the emphasis on the agent perspective. Part of the this-worldliness is the (existential) precondition that human beings are what they are as social beings, who recognize other vulnerable human beings and are being recognized by them. This has, as we shall see, consequences for whether “bodily commerce,” a term used by Dreyfus and Taylor, can exist without being, so to speak, conceptually infected.

Another, but related, starting point is that there is nothing that is (absolutely) basic or “primordial” for us as human beings trying to find our ways about in the world. We are animals who move and react as animals. At the same time, we are animals with language, who try to make sense of the world and (thereby) find our ways about in it. For example, coping in the form of “bodily commerce” is no more basic than talking with people, planning and doing “theory” in the sense of imagining, thinking, and talking about what is possible but not the case, about alternative futures or something similar (this will be fleshed out and further discussed in Sections 4 and 5).

This starting point is perhaps both a preconception and a choice of strategy. Moreover, it can be seen as an aspect of (anti-metaphysical) this-worldliness. That nothing is (absolutely) basic or primordial is not to deny that some things *stand fast* in the sense that Wittgenstein discusses in *On Certainty*: there are some things that we in fact *do not* doubt or that it doesn’t make sense to doubt.⁹

2. KNOWING HOW TO GO ON – BEING IN TIME

In this section I will indicate the place of knowing, with an emphasis on *knowing how*, in human life, and its critical dependence on the dimension of time. Here I use the notion of knowing how in a wide sense, understood roughly the way it is

take it for granted that the toe I would step on, were I not to take care, is the toe in which you would feel pain.”

8 Hubert Dreyfus and Charles Taylor, *Retrieving Realism* (Cambridge, MA: Harvard University Press, 2015), 47. Cf. Charles Taylor, “Merleau-Ponty and the Epistemological Picture,” in *The Cambridge Companion to Merleau-Ponty*, ed. Carman Taylor and Mark. B. N. Hansen (Cambridge: Cambridge University Press, 2005).

9 This theme is running through Ludwig Wittgenstein, *On Certainty*. For the use of “stand fast,” cf. for example §§ 144, 152.

elaborated by Gilbert Ryle but without building on a contrast with “knowing that.” In this sense, knowing how is more or less equivalent to knowing one’s ways about.

I formulate here two central *landmarks* as part of the process to clarify my notion of knowing our ways about – the first two of seven. The first landmark is this:

- (1) Knowledge exists primarily only in the form of skilled and insightful human beings, persons.

It is possible to use words other than *skilled* and *insightful*.¹⁰ In my first language, Swedish, I can use one word, *kunnig*. To indicate unity it might be tempting to use a hyphenated expression like skilled-and-insightful, but unity is not created by hyphens. Whether we use one or two – or more – words is not crucial for my approach. The word(s) shall *point in the right direction* when we turn our attention and interests to the *people* that are actually proceeding with skill and insight. (This is a methodological comment on the way I construct my account.)

The message of the landmark is rather that the *form* of knowledge, or the *place* of knowledge, is human beings active in the world in all kinds of ways. Knowledge is not located *in* any object like a book or a computer program, nor for that matter *in* human beings understood as objects, nor in any “part” of human beings, like the mind or brain.

The plural form is important; knowledge can only exist in the form of human beings being together. Knowledge is, in many ways, dependent on intercourse with others: recognition, correction, negotiation – as well as knowing together. In some cases the knowledge exists only collectively, *between* persons.¹¹

The second landmark is:

- (2) Knowing how is to be understood as knowing how to go on.

Epistemological textbooks typically explain knowing how with reference to cycling or swimming – and perhaps playing chess and driving a car. The focus is on the momentaneous, snapshot views of the world, for example, that of cycling as keeping balance, moving forward, and keeping a direction, which often is explained (or explained away) in physical terms.

Knowing how to *go on* is, however, not only a matter of adding up a sequence of snapshot views – keeping balance, moving forward, and keeping a direction understood in physical or mechanical terms. It is rather to cycle as a meaningful

10 There is a number of further examples in Ryle’s “Knowing How.”

11 Cf. the chapters of Bjørn Alterhaug and Mattias Solli & Thomas Netland in this volume.

human activity (practice) over time. Knowing demands some understanding. To understand cycling means – normally and roughly – to understand it as a means for transportation and pleasure, according to local standards, and being able to talk about it in everyday terms.¹² Knowing how (to go on) is then not to know a (timeless) *way* of doing something. In a sense the knowing is “in the doing,” but the knowing how to go on is more comprehensive than so. With a formulation that I used in the first paragraph, knowledge is very much about managing (or coping) well enough, mastering a practice well enough – including knowing what to do next, in normal cases at least. Knowing how in this sense covers knowing what, knowing when, and much else. In some cases, like in improvised jazz, “knowing what to do next” is created jointly and on the spot *in going on*.¹³

Knowledge crucially depends on time, exists in time. Understood in this way, learning (from experience and from others) is a part of knowing, and the verb form catches that better than the noun form. This doesn’t mean that progress is always possible. Nor that it is necessary. In adverse circumstances, keeping a practice alive may be enough. Knowing how to go on may also cover cases when you “don’t know what to do” – which here means: *don’t know beforehand* – if you have strategies or intuitions or whatever that can, possibly via detours, lead forward. Moreover, it is often essential to know what not to do, knowing when to stop or use the emergency escapes.

There are almost always ways of going on. To sum up the message of landmarks 1 and 2: *Knowledge exists primarily in the form of knowing persons in activities (practices) going on over time.*

A move that can make the dimension of time invisible is to turn (too quickly or too much) to abilities or dispositions, as something underlying and outside the human dimension of time. Sometimes, Ryle is doing that move in his discussions about knowing how. However, most of his examples do speak another language. The simple move to avoid talking about abilities and dispositions is simply to stop at *responding and (at best) learning persons* and not “try to go further back.”¹⁴

Here is one of Ryle’s good examples, his marksman case. It is a rather long quotation here, but it is good to have all of it for later references.

Our inquiry is not into causes (and *a fortiori* not into occult causes), but into capacities, skills, habits, liabilities and bents. We observe, for example, a soldier scoring a bull’s eye. Was it luck or was it skill? If he has the skill, then he can

12 Assuming people who master a natural language reasonably well.

13 Cf. the emphasis on being prepared in Bjørn Alterhaug’s text in this volume.

14 Cf. Wittgenstein, *On Certainty*, §471: “It is so difficult to find the *beginning*. Or, better: it is difficult to begin at the beginning. And not try to go further back.”

get on or near the bull's eye again, even if the wind strengthens, the range alters and the target moves. Or if his second shot is an outer, his third, fourth and fifth shots will probably creep nearer and nearer to the bull's eye. He generally checks his breathing before pulling the trigger, as he did on this occasion; he is ready to advise his neighbour what allowances to make for refraction, wind, etc. Marksmanship is a complex of skills, and the question whether he hit the bull's eye by luck or from good marksmanship is the question whether or not he has the skills, and, if he has, whether he used them by making his shot with care, self-control, attention to the conditions and thought of his instructions.

To decide whether his bull's eye was a fluke or a good shot, we need and he himself might need to take into account more than this one success. Namely, we should take into account his subsequent shots, his past record, his explanations or excuses, the advice he gave to his neighbour and a host of other clues of various sorts.¹⁵

Here we see some of the interrelated components of the art of marksmanship, making up the continued work to maintain and improve knowing how to go on in and with the practice.¹⁶ After the quotation above, Ryle concludes by saying that “[t]here is no one signal of a man's knowing how to shoot.”¹⁷ In my reading, the example shows not only signals but how knowledge exists – how it is constituted. We often talk about “having” knowledge and “having” (for example) capacities, skills, habits, liabilities, and bents. This can be misleading, because the capacities, skills, etc. are not given “foundations” for the practices we engage. The participants, together with other people and things, make and remake the practices and thereby their capacities and skills – and the other way around.

The exposition of my key notion “knowing our ways about” – in the singular “knowing one's ways about” – is so far made in terms of knowing how (to go on). Part of the reason was to give due recognition to the importance of Ryle's discussion of knowing how. Unfortunately, knowing how is often understood as essentially contrasted to knowing that. Knowing our ways about is a better expression because no such contrast is indicated by it.¹⁸ In addition, it brings to the fore the moment of knowing how to get about in *a comprehensive whole*:

15 Ryle, “Knowing How,” 45–46.

16 Ryle calls it a “complex of skills.” I would prefer to call it *a comprehensive skill*, but the knowing how story can be told in both ways.

17 Ryle, “Knowing How,” 46.

18 “Knowing our (one's) ways about” is also a better notion because it can easily be used both without any specification – situating skills and insights in a wider life and culture context – and

Using the same cycling example as above: knowing one's ways about with a bicycle demands an understanding of it as an intentional action – which in turn demands an understanding of why and when it can be worthwhile to cycle. Of course, you must know how to actually physically cycle and find your way about in (at least) the local landscape. *Orientation* in the (natural and cultural) landscape can be used as a key word to make explicit what cannot be understood as only a physical skill. This includes an understanding of cultural codes for (good) cycling and for talk about cycling: orientation in the (local) world and a lifeworld. I am not talking about expert cycling; children pick up most of what I have referred to pretty fast.

My second landmarks can now be reformulated to:

- (2*) Knowing how is to be understood as knowing how to go on, that is, *knowing our ways about*.

3. THE IMPORTANCE OF HABITS AND ROUTINES

Routines anchor us in the world, a world of changes, some recurrent and some not. Routines, for example in working life, work excellently when they are restricted to the right level of regularities. Whether anything is absolutely exactly regular does not really make (this-worldly) sense. Practices are very much defined by the scope of their routines as solutions to recurrent tasks and issues. This-worldliness is, we can say, constituted by habits and routines.¹⁹ This is one reason why Peirce emphasizes beliefs as habits – habits that works – in his foundational pragmatist papers.²⁰ Routines are worth a song of praise, because they provide trust in our knowing our ways about and, at the same time, allow us to focus our attention on what is unusual and unique. However, we focus first on how (not) to talk about habits and routines.

Here is my third landmark, first formulated in a quite categorical way and with a touch of metaphysics:

- (3) There are no merely habitual practices or mindless routines.

Put less metaphysically: common ways of talking about routines and the “merely habitual” are misleading and cloud how important (and interesting) the notion

with a wide variety of specifications: a landscape (whether metaphorically or not), a subject matter, a practice, a situation.

19 Cf. Lars Hertzberg's nuanced discussion about the notion of habits, in this volume.

20 Cf. Charles S. Peirce, “How to Make Our Ideas Clear,” 129–31.

of routines is. This is also valid for people writing well about practical skills and knowing how, like Gilbert Ryle and Julia Annas. The first example is from Ryle:

It is of the essence of merely habitual practices that one performance is a replica of its predecessors. It is of the essence of intelligent practices that one performance is modified by its predecessors. The agent is still learning.²¹

The last sentence in the quotation is quite right, whereas the second is too categorical with a literal reading; let us now focus on the first. The attitude expressed here is similar to what Julia Annas expresses in her in other ways insightful discussion about skill and knowing how in *Intelligent Virtue*.²² The expert pianist, she says, “plays in a way not dependent on conscious input, but the result is not *mindless routine*...”²³ Annas never quite explains what mindless routine is, but it sounds mechanical and machine-like, and it is certainly not a word of praise. A key word for her understanding of skill that is not mindless is *aspiration*. She says, for example: “Where the aspiration to improve fails, we lapse into simple repetition and routine.”²⁴ We will shortly return to that.

What then could Ryle’s and Annas’s, and our, image of the “merely” habitual and “simple” or “mindless” routines be? Ryle uses the notion of replica and Annas uses repetition. The idea seems to be that of doing (exactly) the same a number of times. What the same means in the context of human activities (practices) is not self-explanatory, but let us suppose that it makes sense:

It is *difficult* to make an exact replica, in the sense of repeating *exactly* the same performance, at least if the standards of being the same or indistinguishable are high. In which sense is the way you write your signature exactly the same on different occasions? And in which sense does an actor or musician perform in exactly the same way several times? Certainly, it makes sense in certain situations to copy as exactly as possible your own earlier (successful) performance or that of another person – for example in the context of training or showing the *skill of copying* in the practice in question.²⁵ Moreover, if we think of a practice in terms of rule following, the rules for being a good performer are not the same as for copying (as exactly as possible) a good performer.²⁶

21 Ryle, “Knowing How,” 42.

22 Julia Annas, *Intelligent Virtue* (Oxford: Oxford University Press, 2011).

23 Annas, *Intelligent Virtue*, 13.

24 Annas, *Intelligent Virtue*, 18.

25 Cf. the cello master class example in my *The Practice of Knowing and Knowing in Practices* (Frankfurt am Main: Peter Lang, 2015), 14–16.

26 The same point can be made in terms of a *good performance*.

Now, what is relevant here are the notions of performing or practicing in the same way or in a different way *according to the standards of the practice*; and standards are strongly connected to routines. Understanding and recognizing the relevant notion of same/different ways are part of learning to master a practice (a trade). A good (qualified, skilled) practitioner is one who masters the routines that make her or him carry out most of the recurring tasks of the practice successfully, which of course also involves the skill of being aware of the limits of one's skill and insight as well as the limits of one's trade (profession). Routines (habits) in this sense allow – indeed demand – adjustments dependent on the circumstances.

Having reached this point, we can stop worrying about “simple” repetition and routine and the “merely” habitual,” not to mention “mindless” routines. However, there is more to say about the use and importance of habits and routines in human life. We turn again to Ryle. Immediately before the quoted words about habitual practices above, he says:

After the toddling-age we walk on pavements without minding our steps. But a mountaineer walking over ice-covered rocks in a high wind in the dark does not move his limbs by blind habit; he thinks what he is doing, he is ready for emergencies, he economises in effort, he makes tests and experiments; in short he walks with some degree of skill and judgment. If he makes a mistake, he is inclined not to repeat it, and if he finds a new trick effective he is inclined to continue to use it and to improve on it. He is concomitantly walking and teaching himself how to walk in conditions of this sort.²⁷

All this he does as a matter of routine or as good habits. Moreover, toddlers (children who have only recently learnt to walk) certainly don't walk by blind habit. Children do few if any things by blind habit. And, again, we should be careful with the use of “knowing how.” The toddlers are learning *to walk*, not how to walk – and people walk, and learn to do (routinely) other things, with some “degree of skill and judgment.” This includes educated responses, intelligent reactions, adjusting the natural wisdom of our bodies, *and much more* that does not fit the dichotomy between the intelligent activity and (simple) routine performances.

To sum up so far: good routines, or good working habits, are at the core of this-worldliness and the knowing their ways about of professional (good) practitioners. Good routines are to be contrasted with (for example) sloppy, careless, or inattentive ways of going on, not with “simple” routine; and it is best to avoid

27 Ryle, “Knowing How,” 42.

“mind”-talk. Above all, routines are both the basis for and demand continued adjustments, that is, continued *learning*.

Ryle’s example of the mountaineer catches in few words the importance of learning. What one can learn from can vary; it could be from mistakes, from good advice, or from finding an improvement by good luck. Learning here includes learning to become better prepared for future situations – both like the ones that one has met *and* the ones that one has not met. Learning to adjust, or negotiate, certainly does not mean learning fixed rules for adjusting. Good practitioners are like the toddler; they learn *in going on*. I think this is worth summing up as a fourth landmark:

- (4) Knowing how to go on, that is, knowing one’s way about, is a matter of *continued learning*.²⁸

Continued learning means to be and to become attentive to possible *corrections*, *adjustments*, and *adaptations* and to make them part of how one goes on. Such adjustments can be within a routine or break with it, establishing a new routine, or an exception to learn more from.

Now, back to aspiration. We “lapse into simple repetition and routine” where *the aspiration to improve* fails, Annas says. The notion of aspiration is essential to her view of (expert) *practical skills*: “. . . we can recognize at least some skills as having these two important features of the need to learn and the drive to aspire: to aspire, that is, to understanding, to self-direction, and to improvement.”²⁹

There are certainly people, experts, and others who have such drives. In the case of an expert pianist, it is easy to think in terms of conscious aspiration to keep up and to improve their skill. However, Annas is presumably not thinking about so-called manual labour, like logging, and the word aspiration does not capture very well the learning that goes on in people’s daily life and work. Not to speak of the toddlers. A wider perspective is called for to catch the relevant learning processes.

To widen the perspective, we turn to the Norwegian logger and poet Hans Børli. In an essay called “Logging,” he says: “I have worked in the forests in more than forty years and still I am far from fully qualified. All the time I spot small secrets of the work.”³⁰ The small secrets can be about how to (slightly) adjust a tool or

28 I prefer the open expression “is a matter of.” There is no strict logical or genetical priority between knowing and learning, as long as we stick reasonably much to common language.

29 Annas, *Intelligent Virtue*, 20.

30 Hans Børli, “Tømmerhugger,” in *Med øks og lyre* (Oslo: Aschehoug, 1993), 109. (My translation)

how to stand more securely in certain kinds of forest floor. Here it may seem natural to use expressions like those that Dreyfus and Taylor use with reference to Merleau-Ponty. They talk about “an unmediated body-based intentionality”³¹ and say that this intentionality “is directly sensitive to *conditions of improvement* in the world.”³² We will get back to the perspective of Dreyfus and Taylor and what is (not) direct or unmediated in the next section. Here we only keep the idea of a (natural) *sensitivity* to conditions of improvement, which is in line with my fourth landmark.

The logger, like the toddler, knows their ways about in a world with sense where there is no borderline between acting in the world and talking (and thinking) about it. Moreover, people can “read” what others do and often show as much by the acting as by talking about it.

At this point we have to avoid the tempting dichotomy between the more materially infected practice – the “body-based”, like logging – and the more mind infected, associated with, for example, aspiration, understanding, and self-direction. The logger and the expert pianist are not far away from each other.

Learning and improvement presuppose, in many cases, *something like* aspiration, interest, engagement, a will to learn, or attentiveness, or with Dewey’s expressions, which we will touch upon later: “suffering and passion”, “affection.” What one aspires to or wants to learn is sometimes open for choice. In other cases, learning seems to be something simply *natural* and *normal* for human beings. In such cases, there is some drive or engagement that need not (and perhaps cannot) be *chosen*. It is basically natural, at least in the sense of not being in need of any justification, but it can be disciplined and normatively anchored as well, for example in rules for good professional conduct; and it can be obstructed or prevented. In a similar way, it is natural for people to be always *on the way*, looking or attending ahead, finding better ways of *going on*.

4. PRACTICES ARE THE MEDIUM OF KNOWLEDGE

We now turn to my fifth landmark, which is already with us in the background:

- (5) Practices are the medium of knowledge.

31 The common use of “body-based” or “embodied” is confusing for us that do not think there is something above or beside the body as a wonderful natural organism.

32 Dreyfus and Taylor, *Retrieving Realism*, 48–49. The most relevant pages about improvement are 47–51.

The notion of practice is used here as a fairly open concept, but I am primarily thinking of professional and vocational practices, but also about domestic practices (like cooking, cleaning, child care) and some sports and games. Practices are social institutions, which can be organized in many different ways.³³ For example, shooting as (peaceful) practice is organized in rifle associations, shooting clubs, and a variety of competitions. The scope of a practice as a “complex of skills” can be seen in Ryle’s marksman example quoted in Section 2 above.

The marksman’s knowing his ways about exists *in the form of* shooting activities (over time), which bind together the marksman with the social-physical environment (over time), guns and bullets, and a lot of other things included, not least other human beings. It can, however, be misleading to say that the activities bind together the marksman with his environment. Rather, by referring to the human-social whole as a practice, a complex of activities, it is *brought to light* that all the (human and non-human) bits and pieces *are* bound together. The social practice is constitutive for the knowing. Talk (language use, conversations) – before the “physical” shooting, during breaks, and afterwards – is part of what binds the activities together. To introduce the adjective bodily on some, or all, of the performances doesn’t help us on the way.

All practices involve – are constituted by – the use of language (or symbols) as part of the practice. However, understanding is as much carried by or constituted by other activities than uses of language.³⁴ This indicates a kind of (open) hermeneutic circle structure in all practices. To understand a part you must understand the whole – and carry on. Here we are really talking about a hermeneutics of learning and improvement – no practice is perfect – and I can refer back to my fourth landmark again.

A practice in the sense used here is structured. It must contain at least a core (repertoire) of performances that can be judged as correct or incorrect – or as *developing in the right direction* – from the perspective of qualified participants and judges. Indeed, Harald Grimen has once suggested that to call something a practice the performances must be mutually criticizable and correctible by the participants.³⁵

33 The notion of practice can be further developed in a number of ways. What I say is, for the most part, compatible with Annemarie Mol’s view that reality is “performed in a variety of practices,” with the consequence that “reality itself is multiple,” as she says in her “Ontological Politics. A Word and Some Questions,” *Sociological Review* 47 (1999): 47. Her view can be challenging to use together with my notion of this-worldliness. However, my main inspiration for how to talk about practices come from Wittgenstein’s *Philosophical Investigations* and *On Certainty*.

34 Here it is natural to use Wittgenstein’s notion of language-game, and his emphasis that “the *speaking* of a language is part of an activity, or a form of life,” in *Philosophical Investigations*, §23.

35 Harald Grimen, “Praksis, handling og sikkerhet. Ein analyse av tre tema frå Ludvig Wittgenstein’s *Über Gevissheit*” (Master’s thesis, University of Bergen, 1982), 24.

Practices are organized. Alva Noë argues – as part of an enactivist perspective – that all kinds of perception are organized activities, by the environment and by ourselves (individually and collectively). Seeing, he says “is a temporally extended, dynamic exchange with the world around us, one that is guided by principles of timing, thoughtfulness, movement, spontaneity, function, and pleasure, like those we see in operation when we drive or walk or breast-feed, but that is also governed by all manner of learned understandings and expectations and engagements with this or that task (watch repair, typing, driving home, etc.)”³⁶ Here he catches also, I would say, in a wonderful way *practices* as organized wholes, though I prefer to see ways of perceiving as (constitutive) parts of practices. Noë says that all kinds of perception “is the *organized activity* of achieving access to the world around us.”³⁷ Access here is not a way of getting out of a Cartesian mind, but rather of achieving access to parts and aspects of the world in the world, access from a this-worldliness perspective. Here the notion of *medium* can be put to good use: practices are the medium *through which* knowledge (skill, insight, ...) is expressed, realized, or enacted (and perhaps even performed). *Perhaps* we can also say that perception is realized and enacted that way (we return to this in Section 5).

A dictionary explanation of “medium” catches quite well my use of the term: “the material or the form that an artist, a writer, or a musician uses,”³⁸ if we read it with emphasis on *form* and covering the way skilful people, not only artists, express themselves – their skills, insights, and shortcomings – in their various practices. However, this doesn’t take us very far. To get a better understanding of “medium” and what is (not) mediated, we turn to a discussion with reference to Dreyfus and Taylor’s *Retrieving Realism*. Here they distinguish between *mediational* (or representational) and *contact* theories of knowledge:

Where a mediation theory seeks knowledge as arising through some mediational element, so that we have contact with the real in knowledge only through some intermediary, depiction, or category, contact theories give an account of knowledge as our attaining unmediated contact with the reality known.³⁹

Descartes is a typical mediational thinker, along with the classical empiricists, while on the other side (the heroes) Heidegger and Merleau-Ponty (and Wittgenstein)

36 Alva Noë, *Strange Tools. Art and Human Nature* (New York: Hill and Wang, 2015), 9.

37 Noë, *Strange Tools*, 10.

38 A. S. Hornby, *Oxford Advanced Learner’s Dictionary*, 7th ed. (Oxford: Oxford University Press, 2005), s.v. “medium” (entry 3).

39 Dreyfus and Taylor, *Retrieving Realism*, 17.

are contact thinkers. Their idea of (absorbed) *coping*, as elaborated primarily by Dreyfus, is a (body-based) basis for a contact theory.

In an earlier article (more or less repeated in *Retrieving Realism*), Charles Taylor includes quite a lot in the category of media. He gives an account of “the sense of my world” which, he says, rules out “a representational or mediational picture of our grasp of the world” and gives the following examples of media: *formulated thoughts, things never raised as a question but taken as a framework in which our formulated thoughts have the sense they do, my knowing Weber’s theory of capitalism, my being able to ride a bicycle.*⁴⁰ In this context he also says that “the boundaries between media are fuzzy, and many of the most important understandings are multimedia events.”⁴¹ In his list of examples he also includes *the understanding implicit in various abilities to cope*. However, to express and show understanding in action and through action may well, and even better, be called *explicit*.

With reference to an “unreflective football player,” which refers to an example used by Merleau-Ponty,⁴² Dreyfus and Taylor say: “He too is straining every faculty to get an accurate take on the ever-changing lines of force in the field. But the medium here is not moral reflection or theoretical representation, but the behavioral affordances of attack and defence.”⁴³ The idea is, I think, that media is all right *as contact* as long as the medium in question cannot be understood as or conceptually made into an (independent) object that we have to know in order to know (or grasp) the world. Practices are not such objects, nor is our *use of language in the world* in carrying out practices; in typical mediational theories, representations in the mind or in the brain are.

Dreyfus and Taylor say, with a notion that comes from Heidegger, that coping in the form of body-based intentionality – that is, our “animal existence” – is *primordial* and what all coping basically builds on. As stated at the end of the introduction, this perspective seems to me to lead nowhere. However, they also talk about our animal existence as “unavoidable,”⁴⁴ which is difficult to deny. Any *general* ordering of what is more or less basic seems superfluous.

There are many ways of talking (philosophically) about “where” knowledge is and “what” connects us to the world. Alva Noë talks (as quoted above) about our “dynamic exchange” with the world around us. In connection with the example

40 Taylor, “Merleau-Ponty and the Epistemological Picture,” 32. The same – or almost the same – is also revived in *Retrieving Realism*, 45–46.

41 Taylor, “Merleau-Ponty and the Epistemological Picture,” 32.

42 Maurice Merleau-Ponty, *The Structure of Behavior*, trans. Alden L. Fisher (Pittsburgh: Duquesne University Press, 2011), 168–69.

43 Dreyfus and Taylor, *Retrieving Realism*, 76.

44 In, for example, Dreyfus and Taylor, *Retrieving Realism*, 132.

of walking and climbing a path, Charles Taylor says that his understanding and know-how resides in his “negotiating the path. The understanding is in the interaction”⁴⁵ Dewey uses both interaction and transaction. Referring to practices as medium, however, catches better the dynamics of wholes over time. Using an example makes it even easier to say what it is all about; think about Ryle’s mountaineer: *the knowing is in – exists in the form of – the walking and climbing.*

Practices are *social*. The world we share with others is a world that we, at least partly, share with other people in the medium of language(s). Or in other words, language use is an intrinsic (constitutive) aspect of all practices. It also connects various practices and forms of (human) life.⁴⁶ This goes against the perspective of Dreyfus (and Taylor) according to which there is at the bottom of all knowing our ways about forms of “body-based” coping – constituted by our animal existence. This form of coping is, they say, preconceptual, which must imply that it is (radically) independent of human language or anything similar to such. This is not a viable position. I will indicate why, again in terms of Ryle’s marksman case:

Shooting, in the example and more generally, means coping socially, that is, coping with (and coping together with) other people in the shooting/marksman culture and with people who are connected to this culture in various ways (reporting, selling equipment, arranging competitions, etc.).⁴⁷ Anything they do – or are – as part of this practice is *socially and conceptually marked*. This can also be said about Merleau-Ponty’s football player who follows lines of force. The so-called lines of force are inserted (constituted) by football as a social and cultural practice, including a multitude of language games. Even if an activity is “in itself” not social, like Taylor’s climbing a path or Ryle’s mountaineer’s walking, it is dependent on other people’s recognition and exists in a linguistic-historical setting (as shown for example by the possibility of discussing these cases). Questions about what is done and how can be asked, and sometimes answered, by the persons involved – even if, from the point of view of an outsider, it is generally better to ask questions before or after critical moments in an activity. The conceptual and social are there as parts of what constitutes the relevant wholes, practice wholes. This is actually worthy of being called a landmark:

6. Practices, and thereby knowing our ways about, are conceptually marked in criss-cross ways.

45 Taylor, “Merleau-Ponty and the Epistemological Picture,” 38. Almost the same formulation is also in Dreyfus and Taylor, *Retrieving Realism*, 72.

46 Wittgenstein uses “forms of life” in *Philosophical Investigations*, for example in §23.

47 Here, of course, I use “cope” in a more inclusive sense than Dreyfus (and Taylor).

5. HOW WE MEET THE WORLD – AND OURSELVES – IN THE WORLD

Knowing is a process in the world (stretching also outside the person who knows) as well as a way of approaching it. Sometimes this is described as *extended* knowing or cognition.⁴⁸ Such a description makes sense only in comparison with a perspective that locates knowledge (literally) in the subject (the human organism), a perspective that is perhaps more Cartesian than Descartes's own position. Of course, knowledge is in the world, with us and not in us – this is an aspect of this-worldliness.

In this section I will take up some ideas from John Dewey's pragmatism and Alva Noë's enactivism, which are both, in Dreyfus and Taylor's words, contact theories. Dewey talks more about experience and intelligence than about knowledge. Noë's enactivism is above all a perspective on perception, which, however, widens into experience more generally.⁴⁹ Ryle talks about intelligent practice. This is all, in my words, about *knowing* our ways about. I will in particular argue that perception – or rather perceiving – is organized *in the form of* practices, and thus find its natural place in knowing our ways about in the medium of practices.

The expression “knowing our ways about” may seem to put too much emphasis on the knowers/agents and too little on the world. We meet the world and it meets us, without any absolute or categorical borderline between us and (the rest of) the world. However, there is no full symmetry; (in knowing) *we* explore the world from the point of view of being agents (and patients).

Dewey emphasizes (the mutual) encounter between us and the world by using the notion of transaction. “Whatever else organic life is or is not,” he says in *Logic: The Theory of Inquiry*, it “is a transaction extending beyond the spatial limits of the organism. An organism does not live *in* an environment; it lives by means of an environment. ... The processes of living are enacted by the environment as truly as by the organism; for they *are* the integration.”⁵⁰ Knowledge, for Dewey as well as for Noë, exists in the form of human beings, a form of organic life in (fragile) contact with the world.

In his classical “The Need for a Recovery of Philosophy,” Dewey emphasizes both the receptor and the agent side of experience (knowing). Experience, he says,

48 The expression is new, but not the fact that “the place” of knowledge is not in us, but also outside us. Cf. Ryle, “Knowing How,” 51, even if he here talks in terms of the “place” of mind.

49 Cf. Alva Noë, “The Enactive Approach: A Briefer Statement, with Some Remarks on ‘Radical Enactivism,’” *Phenomenology and the Cognitive Sciences* 20 (2021): 957–70.

50 Dewey, John. *Logic: The Theory of Inquiry*. In *Later Works, 1925–1953*, Vol. 12: 1938. Ed. by Jo Ann Boydston (Carbondale: Southern Illinois Press, 2008), 32.

“is primarily a process of undergoing: a process of standing something; of suffering and passion, of affection, in the literal sense of these words.”⁵¹ On the other side, “the most patient patient” is also an agent, “a reactor, one trying experiments, one concerned with undergoing in a way which may influence what is still to happen.”⁵²

Experience is here a species of knowing our ways about. The key notions are (in my words) this-worldliness and passive-active openness to what is happening, with a future directed perspective. Alva Noë talks about conscious experience in terms very similar to Dewey: “Now, conscious experience, I believe, ... is active; it consists in the circular process of doing and undergoing and keeping track – the very expression of intelligence – of the effects of the ways what one does affords opportunities for new doing and new undergoing.”⁵³

Dewey and Noë share the view that knowledge (intelligence, experience) is not situated in any part of the human beings (organisms), in particular, not in the brain or in the neurological system, which is in agreement with my first landmark. In Dewey’s words, experience “is the entire organic agent-patient in all its interaction with the environment, natural and social.”⁵⁴ Alva Noë, talking about perception, says that it “is not a process in the brain, but a kind of skillful activity on the part of the animal as a whole.”⁵⁵ This is a cornerstone of Noë’s enactivism.

This is so far a brief description of the perspectives of Dewey and Noë. We now turn to a critical discussion of how Dewey treats the way that we meet the world and ourselves. I will point out a certain one-sidedness in how he talks about our doing-undergoing, our “suffering and passion.” After that I will show how Noë avoids this one-sidedness and how this leads to an important aspect of practices as the medium of knowing our ways about.

With his repeated emphasis on consequences, Dewey’s time perspective is a one-way affair: the organism “has to endure, undergo, the consequences of his own actions” and learn from these consequences and from experiments “what is still to happen.”⁵⁶ What should experience be, he asks, “but a future implicated in

51 Dewey, John. “The Need for a Recovery of Philosophy,” in *Creative Intelligence: Essays in the Pragmatic Attitude*, ed. John Dewey (New York: Holt, 1917), 10. (Quoted after “the Web Mead Project”, https://brocku.ca/MeadProject/Dewey/Dewey_1917b.html (read November 8, 2017).)

52 Dewey, “The Need for a Recovery of Philosophy,” 11.

53 Alva Noë, “The Writerly Attitude,” in *Symbolic Articulation: Image, Word, and Body Between Action and Schema*, ed. Sabine Marienberg (Berlin/Boston: De Gruyter, 2017), 76.

54 Dewey, “The Need for a Recovery of Philosophy,” 36.

55 Alva Noë, *Action in Perception* (Cambridge, MA: MIT Press, 2004), 2.

56 Dewey, “The Need for a Recovery in Philosophy,” 11.

the present!”⁵⁷ His perspective here seems to be that we act forward in time, on the basis of what we have experienced so far. This means we have some *end-in-view*, and if we do not reach or move in that direction, we change our end-in-view or the way we proceed, or both. This is a form of empiricism which he calls experimental:

[Experimental empiricism] recognizes that experience, the actual experience of men, is one of doing acts, performing operations, cutting, marking off, dividing up, extending, piecing together, joining, assembling and mixing, hoarding and dealing out; in general, selecting and adjusting things for reaching consequences.⁵⁸

This is beautifully expressed, but one question is missing: *who* is doing (and understanding) this? And moreover: *who* is telling the story? This is to ask for a (here) invisible, reflected, and reflective agent. It is not to ask for a ready-made knowing subject or a subject of experience behind and independent of the process of experience, which Dewey argues strongly against. He stresses that “the self or subject of experience is part and parcel of the course of events, it follows that the self *becomes* a knower,”⁵⁹ and even says that “[p]rivate consciousness is an incidental outcome of experience of a vital objective sort.”⁶⁰

Learning to know the persons acting and reacting – ourselves – and our identity and authenticity as agents-patients is also part of knowing our ways about, indeed is part of experience. This is critical in social life, in social and communicative experiences *with* other persons. We live with and through our own histories – and those told by others. Life is a matter of what could be called histories-in-view and identities-in-view, not only ends-in-view.

We leave Dewey and turn our attention to the works of Alva Noë, who in more ways than I can cover here shows promising ways of going on. His enactivist position grows out from a perspective on perception – as a kind of skilful activity on the part of the animal as a whole – and becomes also a perspective on experience. Although his position is similar to Dewey’s as shown by his emphasis on “the circular process of doing and undergoing and keeping track” (as quoted above), he has in addition worked out a wider reflective perspective on the process of experiencing – and thereby on knowing our ways about.

57 Dewey, “The Need for a Recovery in Philosophy,” 12.

58 John Dewey, *The Quest for Certainty*, 125.

59 Dewey, “The Need for a Recovery in Philosophy,” 59; cf. also, for example, *Logic: The Theory of Inquiry*, 518.

60 Dewey, “The Need for a Recovery in Philosophy,” 11.

What he says about perception as an organized activity (as quoted in the preceding section) indicates where we shall focus our attention: on activities, practices of all sorts. Activities also organize us:

The first-order activities that organize us—walking, talking, singing, thinking, making and deploying pictures for this task or that—structure the landscape in which we find ourselves. But we may lack a sense of the lay of the land; we may be lost....⁶¹

Noë refers to art and philosophy as “organizational or reorganizational practices, practices for making sense of the ways we are organized.”⁶² I would prefer a wider scope of reorganizational activities: all kinds of critical, experimental and reflective activities that are (re)organizing us in various practices of life; but perhaps these could be included as forms of art and philosophy *in* our daily lives. This would nicely match a remark Noë makes after the quotation above: that a reorganizational practice “is not a view of that activity from on high; it is an attempt *from within the activity* to make sense of where we find ourselves.”⁶³ He has elaborated on this in connection with *writing* as a way to (re)organize a practice in “The Writerly Attitude” and more generally in terms of fragility and entanglement in his contribution to this volume:

The use of language to adjudicate and regulate and indeed to reflect on language is one of language’s fundamental *first-order* modes. To worry about language, to reflect on it, to take up the writerly attitude to language, is *not* to interrupt language, but to enact it. Language contains its own meta-theory; or better, language contains, always, and from the start, the problem of *how to go on?* as well as that of *what’s going on?* Reflection on and argument about language, second order though they may be, are already contained within language as a first-order phenomenon.⁶⁴

The best way of regarding language, for the purpose of understanding knowledge, is to see it primarily as an open and changeable set of language games, in – or connected to – various practices. In addition, there are certainly also more comprehensive language games connected to national cultures and other inter-communicative

61 Noë, *Strange Tools*, 30.

62 Noë, *Strange Tools*, 30.

63 Noë, *Strange Tools*, 31.

64 Noë, “The Writerly Attitude,” 84.

cultures. However, language as a whole set aside, Noë's remarks are easily transformed to practices and language games as parts of practices. A formulation of this will be my seventh and last landmark:

7. First-order modes of carrying on practices also contain second-order (reorganizational) modes.

This also supports (or explains) my third thesis, that there are no *merely* habitual practices. Moreover, to reflect on practices and argue about them is of course as fallible as other attempts to improve our knowing our ways around in the world – or in Ryle's terms, can be carried out intelligently or unintelligently.⁶⁵

Now we turn to the last topic in this section, which is also the concluding part of this chapter. I want to make visible the connection between perceptual skills – perceiving our ways about – and (a wider) knowing our ways about in a this-worldly perspective. This perspective implies a focus on practices that can be mastered and improved by (real) human beings. It is important here not to refer to philosophical theories *without* showing how they can fit into this world in, as it were, first-order mode.

In a rather early formulation of the enactive approach, Noë says that “the perceiver's ability to perceive is constituted (in part) by sensorimotor knowledge (i.e., by practical grasp of the way sensory stimulation varies as the perceiver moves).”⁶⁶ How does this practical (sensorimotor) grasp exist in the world?

My answer goes like this: we sense (perceive) and move *in* doing other things in life, in walking, shooting, looking for things, etc. Nobody learns plainly “to move” and “to see” and their (“sensorimotor”) interconnections – although these *words* of course can be used in a variety of practices. Think about a skilled cello player; they move their fingers with extreme precision, in ways that are only (realistically) possible to learn by playing the cello.

The sensorimotor terminology can unfortunately also be read as pointing to something absolutely basic, or primordial, or part of our animal existence, with other layers – concepts, culture – built on top of it, even if this certainly is not Noë's perspective (cf. his contributions to this volume).

What *is* (this-worldly) basic is that we have *learnt* to walk, speak, make coffee, carry out cognitive (psychological) experiments and a multitude of other things – and as part of that we have learnt *conditions of improvement* (cf. Section 3 above).

65 Cf. my discussion in “Have I Kept Inquiry Moving? On the Epistemology of Reflection,” *Phenomenology & Practice* 2, no. 1 (2008): 4–23.

66 Noë, *Action in Perception*, 12.

All practices may *become* basic, so to speak.⁶⁷ Adding the proviso that all judgments about something being (or made) basic shall be understood as relational, more or less basic than something else.

Seeing, when understood this way, cannot be separated from the other senses, nor from the activities in which we use our senses (or tools) to *attend* to the world – which is better than “access” because from a this-worldliness perspective we are always in (fallible and fragile) contact with the world. This can also be put in the following way: our sensory experiences, as (part of) practices, mediate this contact. As language does – we still talk about animals with language. This implies, as argued before, that no perception or practice, nor parts of practices, is beyond conceptual form. I earlier also used the expressions conceptually “marked” or “infected.” Or put otherwise: our second nature is or becomes part of our first nature. This can be seen as a reformulation of the seventh landmark.

The idea is really very simple: the finger movements of the cello player as well as what they feel in their fingers, what they hear, and (perhaps) what they see are conceptually marked as part of cello playing, music performance (and so on).

Knowing our ways around is a normatively anchored notion. Carrying out practices can be done in correct, good, or intelligent ways – contrasted with incorrect, bad, or unintelligent ways – but the key notions are learning and improvement, as summed up in the fourth landmark. Or even more compressed: knowing and learning are becoming one concept. In a this-worldly perspective this refers to actual (developing) practices which are possible to judge, evaluate, and correct (in second-order mode) with a reasonable degree of (developing) agreement.

From my discussion so far, where I approach knowledge in terms of the *learning* and *improvements* of skills, including, of course, the (re)organization of skills, and thinking along the lines of Noë, a conclusion about how to improve our “sensory” and “sensorimotor” skills follows:

The most basic and simple idea, when thinking about perception, is perhaps this: you can only learn to see better, to hear better, etc., by engaging in practices where differences of what is seen, heard, etc., matters. The practices may be domestic (housework), caring, artistic, or of any other kind. This means a kind of human engagement which is dependent on what is *worth* seeing and listening to. That is, what is worth *doing* in a quite general sense. Here we must stick to normal human life.⁶⁸

67 One aspect of this is the transformation of *objects* to *tools* when we learn to use them in practices, such as they form “parts of ourselves,” as discussed by Polanyi, in particular in *Personal Knowledge*, Ch. 4 (“Skills”), and in *The Tacit Dimension*, 12–13, 16. However, Polanyi works within a too individualistic perspective.

68 I am grateful for comments and criticism from Bjørn Alterhaug, my co-editors, and the two anonymous reviewers for the Scandinavian University Press.

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2. Reflections on the myth of the primordial

Alva Noë

Abstract Bengt Molander has identified a myth of the primordial which he believes distorts our understanding of skillfulness in human life. In this chapter I offer reflections on experience that lead to the very same conclusion. States of flow and engagement are, of their very nature, sensitive to their own fragility. This means that we are always attuned to a rich context of reflective possibilities and, indeed, that these are features of the landscape of our first-order engagements themselves. There is no such thing as a primordial engagement with the world not because our lives are governed by intellect and control, but because reflection and engagement are entangled.

Keywords skillful coping | engagement | Dreyfus | fragility | entanglement | choreography | attention

1. STARTING POINTS

According to Bengt Molander: “there is nothing that is (absolutely) basic or ‘primordial’ for us as human beings trying to find our way ways about in the world.” He adds to this statement the following elucidation: “For example, coping in the form of ‘bodily commerce’ is no more basic than talking with people, planning and doing ‘theory’ in the sense of imagining, thinking and talking about what is possible but not the case, about alternative futures or something similar.”¹

I agree. We can get a sense of what is at stake if we frame for ourselves a standpoint which denies Molander’s proposition. Such a standpoint, I think, and as Molander suggests, is to be found in the work of Hubert L. Dreyfus. So I turn in this direction first.

1 Bengt Molander, Talk notes for the introductory lecture of the workshop *Doing, Showing and Saying: Knowing Our Ways About in the World*, 1 June 2021. Ch. 1 in this volume is based on these notes.

2. WHAT MYTH?

Dreyfus develops the idea that what he calls “skillful coping” is our basic, ground-level, primordial orientation to the world.² We achieve orientation (in a situation, etc.) not by thought, or analysis, not thanks to language, or culture, but by a kind of bodily mastery, a responsiveness to the solicitations of the situation itself. This is the paradigm for human expertise and thriving across the board. The competent human being is one who is oriented in such a way to the world that the world, as it were, makes decisions for them. We don’t have to *think* about where to stand when we are talking; we spontaneously find ourselves drawn to the right spot, and so throughout our lives. Skillful coping is the achievement of *optimal grip*, and this in very diverse areas of our lives. The chess player, the one who is truly a master, that is, lets the board speak; the situation on the board solicits the next move. Building on Heidegger, as well as Merleau-Ponty, for Dreyfus the basic modality of the way the world shows up is its *unthought readiness-to-hand*.

One important feature of this skillful-coping orientation to the world, this unthought readiness-to-hand, is that it is meant to defy explicitness, and articulation; it is a zone of feeling rather than thought, one in which we are guided by a sense of tension that is released as we approach the optimal. And it is this fact that suggests, for Dreyfus, why there cannot be a science of the human. Human affairs are situational; they are contextual; they resist being made explicit or set forth. To do so would be to distort and alter what for Dreyfus is our basic, most primordial relation of engagement.

Dreyfus, at least as I read him, is committed to a rigid scheme: engagement versus detachment, flow in opposition to breakdown, readiness-to-hand as opposed to mere presence, openness to the world’s solicitations in contrast with thoughtful deliberation, true mastery as against more dreary forms of human work. While this is not quite the same as articulating a belief in the absolutely basic and primordial, it comes close enough. Taking our inspiration from Molander, we can think of Dreyfus as subscribing to the myth of the absolutely basic or participating in a kind of fantasy of the primordial.

What’s wrong with the myth? The problem is precisely the rigidity, expressed here as a tendency to neglect the inescapably fragile character of the world’s presence, as well as that of our skillful engagement with it. There is no optimal grip, not really, as Molander suggests. Or rather, the optimal grip is a concern or problem, an

2 For example, in Hubert L. Dreyfus, “The Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Experience,” in *Skillful Coping: Essays on the Phenomenology of Everyday Perception and Action*, ed. Mark Wrathall (New York: Oxford University Press, 2014), 104–124. Originally published 2005.

ideal maybe, but always only something ever partially achieved. The most skilled player bumbles, finding themselves needing to wonder what the situation on the board solicits; and the most experienced hiker may fall. These are not, at least not always, breakdowns, disruptions to ground-level flow and skillful coping, but are themselves rather modalities of such coping. Fragility, as I call it, is pervasive, and it is the enemy of the sort of clean division that supports a belief in the absolutely basic or primordial in human life.

Take vision, for example. We occupy cluttered environments. As a result of this, what is there for us is also both readily available to perceptual consciousness, but also hidden from view. As we move, parts of the things around us come into view, other parts, faces, aspects, hide themselves. Our achievement of perceptual access to the world is not *despite* the fact of occlusion, but is rather something that incorporates that very condition; perceptual access is intrinsically fragile, vulnerable, partial; it is not static and given, but achieved, enacted, performed. I do not mean, of course, that each of us is a little Viking Warrior taking on the cluttered world around us. No, we are, by and large, comfortably at home in the environment, and it is only in exceptional circumstances that we need to make heroic efforts. The point is that our abilities, in this case our ability to know the world visually, are no mere Can Do; it is a participation in the situations in which we find ourselves and an accommodation to the fact that every perceptual achievement is the achievement of entering into fragile relationships with the environment around us.

Even with such an apparently ground-level, indeed, biological capacity such as the ability to see, we can speak of doing it more or less well, but also of the aspiration, mentioned by Julia Annas,³ to do it better, with greater reach and refinement. Everyone *can* see, if they can see at all; but visual consciousness is a theater in which growth, invention, and accomplishment are possible (although it would be odd to speak of “mastery” here). As Molander reminds us, professions and practices like music and art, but we might also mention reading, are natural settings for this kind of perceptual cultivation.

Or take *talking*. Where there is understanding, there is the possibility of misunderstanding, and where there is communication there is the possibility of miscommunication. But crucially, misunderstanding is not the disruption of language, and it is certainly not its interruption. It is rather an opportunity, for more language, for clarification, for explanation, for reformulation, or for reconsideration and retreat. We don’t just apply rules and meanings when we talk—as we might were we to speak a logical calculus—rather we make meanings and devise rules for this or that purpose, and we do all this inside language.

3 Julia Annas, *Intelligent Virtue* (Oxford: Oxford University Press, 2011), which is discussed by Bengt Molander in Ch. 1 of this volume.

To be a language user, then, is to be sensitive to the inherently fragile character of the work and play, of talking itself.

Notice that the urge to speak, the need to say something, to get it off your chest, is about as basic as it gets in human life. Like our most basic dispositions it is tied to feeling, affect, the body—to speak is to mobilize breath, throat, face, posture, orientation, social situation.

But it is also about as intellectual, about as culturally informed, as anything can be. Nothing is absolutely basic. Or perhaps we could say, when it comes to humans, almost anything can be.

This serves as a reminder that the myth of the primordial finds expression not only in the exaggeration of the primitive, unthought, engaged, and attuned character of bodily commerce, but also in a deformed picture of the place of thought, talk, and reflection in our lives. If the former are not nearly so basic as we might think, the latter are not nearly so sophisticated, nor are they expendable, as it were decadent after growths. Concepts are themselves like skills or techniques, as Wittgenstein suggested, and so they are as much the site of spontaneous engagement and bodily commerce as less obviously cognitive modes of skillfulness.

Dreyfus is right to emphasize (after Heidegger) the difference between readiness-to-hand (“access”) and presence-to-hand (“occurrence”). But these are not stable zones of difference, but problematic tendencies that always require negotiation and that exist only in the setting of their known and manifest fragility. Everything shows up not as one or the other but, as rather, a kind of shuddering fluctuation of readiness-to-hand and mere presence. The hammer is never only ready-to-hand, and correspondingly, the electrons in the hammer, no less than the wood or metal it is made out of, are never only entirely hypothetical.

And so there is no such thing, finally, as an unself-conscious, merely habitual, first-order activity (whether of looking, walking, dancing, talking, whatever). This is so, first, owing to the fragility, but also to the resilience, of our activities and practices, to use Molander’s term.

Which does not make us hyper-intellectual slaves to reflection. Thoughtfulness is itself one of our engaged modes of orientation to the world and is not the child of detachment. And crucially, the *shuddering fluctuations* of what there is—things now show up this way, now that way—is our basic, our problematic, situation.

3. ENTANGLEMENT

The point is not that we are plagued by fragility and unable to escape reflection and thought. The point, rather, is that second-order reflection resides within the first

order as one of its live possibilities. Every habit carries within it the seeds to our own resistance to it. I call this feature of our lives “entanglement.”

Take the case of language, again. To be a speaker is not just to do something; it is not just to “follow rules,” and it is certainly not to follow rules blindly; it is to participate in a practice that includes, as a part of itself, worrying about how to deal with problems raised by the activity itself. Language doesn’t take care of itself; it is more like a ship that requires constant maintenance and ingenuity and inventiveness on the part of those who live and work onboard. Language is not a rule-governed activity. It is an activity in which we make up the rules as we go along.

Talking and thinking about talking are entangled, and part of what it means to say this is that although these are distinct moments, they are moments of one process; we can’t actually ever succeed in separating them.

Or consider dancing. Dancing is surely basic, but it is not, to use Molander’s language, absolutely basic. Even a dancing child, one who is attuned to their impulses, to the movements of those around them, and to the demands of music, is also always aware of themselves as participating in an activity with others; they have a sense of how they present themselves to others, and, in particular, of how they or one ought to look or appear or present themselves to others dancing; that is, they have in their stock of knowledge an understanding of what dancing is supposed to look like. Even when they are free and playful or joyful and spontaneous, they are also *informed*, or *conformed*, to a model or an idea or a standard; they have incorporated this standard, this model. They are, in this sense, very literally, *the embodiment* of the entanglement of doing and reflecting on or thinking about one’s doing. In this case, in the case of dancing, there is a name for the second-order reflective practice: this is choreography or the art of dance. Dancing and choreography are entangled and we, our bodies, our impulses, are the sites of this entanglement.

Now consider this: choreography looks like the mere staging of dancing; we can think of it, in a way, as exploring what dancing is by putting dancing itself on the stage. But the model of dancing the choreographer provides—what is really a model of *us*, we people who, like people everywhere, dance—affords an image or picture or model of what dancing is for us that in turns serves as a tool or prop for thinking about dancing ourselves or about our dancing selves. The choreographic model becomes the standard by which we engage our own dancing. Like literature in relation to speech, it becomes a resource for dancing in new ways. And thus the dancing is changed by the choreography which started out as its representation. If you think of dancing as first order and choreography as second order, then the second order reorganizes the first order; or perhaps we should say: it liberates us at the first order. Dancing/dance becomes in turn a locus of entanglement. You can no longer disentangle the two.

Our first-order selves are made and remade by our second-order makings, our choreographies, our philosophies, and our reflections. In this way fragility, reflection and entanglement give rise to something like a genuine creativity or, rather, productivity.

But this thing that gets made and remade by our reflective concern with ourselves is ourselves.

4. ATTENDING TO THE WORLD/TRANSFORMING OURSELVES

We are fragile and entangled, and for that very reason, we are creative and productive, always changing and becoming.

The intellectualist envisions a human being as like a ship under the control of a strong and well-informed captain. The anti-intellectualist thinks of the person as more like a surfer, riding the wave, without the luxury of time to make decisions, successful when they can let go and just feel the wave.

But a good captain isn't just a thought machine and must also be engaged (focused, attentive, interested, alert); and a good surfer is one who can intelligently understand the conditions in the water.

In conclusion, consider a final idea. If you look closely at an artwork or at anything—a machine, a rock—and really pay attention to what is there, describing its features, you may find that as you do so, you can detect more and more; it is almost as if the artwork itself changes under the glare of your interrogatory gaze. Focus, or attention, is, in this sense, disclosing and creative.

But what is created? Not the artwork, at least not thought of as a thing. That was already there. And certainly not the rock or the machine. What is created, or what is altered, is our seeing. We somehow change ourselves through our engagement with things.

This may be the particular source of the value we assign to playing musical instruments, studying works of art, or plunging into the work of fine craft. Our real work is with ourselves (a point made by Matthew B. Crawford⁴).

But *not* because we are thinking about ourselves or targeting ourselves. The work of transformation only happens if we turn our attention to the work itself. We achieve ourselves precisely by not paying attention to ourselves. This is the chief insight in the sort of anti-intellectualist position championed by Dreyfus. The self gets in the way.

4 Matthew B. Crawford, *Shop Class as Soul Craft: An Inquiry into the Value of Work* (New York: Penguin, 2010).

I have suggested, and in this I agree with Molander, that we can make room for this insight without going so far as to subscribe to the mythological idea that there is a kind of pure involvement or absolutely basic connection in which the world takes over and the self and its limitations and concerns disappear.⁵

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3. On the genesis of theory: Heidegger and pragmatism

Zhenhua Yu

Abstract Heidegger and pragmatism converge on the thesis of the primacy of practice. But there is a limit to the pragmatic aspect of Heidegger’s thoughts. One will recognize this when one reflects on the issue of the genesis of theory, namely, the issue of how theory arises from everyday practice. Two competing positions in this regard are the change-over model represented by Heidegger and Hubert Dreyfus and the extension model represented by Joseph Rouse and William Blattner. Although the former is more convincing than the latter, it needs some revision.

Keywords the genesis of theory | the change-over model | the extension model | Martin Heidegger | Hubert Dreyfus

1. INTRODUCTION

According to Richard Bernstein, in their revolt against modern philosophy, represented by Cartesianism, the classical American pragmatists, Heidegger, and the later Wittgenstein have much in common. He claims that the best philosophical thinking in the past 150 years has been variations on the pragmatic themes. The common pragmatic way of thinking makes the analytic/Continental split in philosophy superficial. In this context he describes the twentieth century as “the pragmatic century.”¹

With this grand narrative of the pragmatic turn in philosophy as a background, I will focus on the relation between Heidegger and pragmatism. Heidegger distinguishes *Zuhandensein* (readiness-to-hand) and *Vorhandensein* (presence-in-hand) in *Being and Time* and argues for the primacy of readiness-to-hand. This, according to Bernstein, “echoes the pragmatic claims about *the primacy of practice and conduct*,” and he adds that “although ‘being-in-the-world’ is not an expression

1 Richard Bernstein, “The Pragmatic Century,” in *The Pragmatic Century: Conversations with Richard Bernstein*, ed. Sheila Greeve Dawaney and Warren Frisina (Albany: SUNY Press, 2006); *The Pragmatic Turn* (Cambridge: Polity Press, 2010).

that any of the classical American pragmatists ever used, it beautifully articulates the pragmatic understanding of the transaction that takes place between human organisms and their environment – a transaction that involves know-how and is the basis for knowing-that.”²

Heidegger and pragmatism converge on the thesis of the primacy of practice. But there is a limit to the pragmatic aspect of Heidegger’s thoughts. One will recognize this when one reflects on the issue of the genesis of theory. Two competing positions in this regard are the change-over model represented by Heidegger and Dreyfus and the extension model represented by Joseph Rouse and William Blattner. In my view, the former is more convincing than the latter. On the one hand, in defending the change-over model I will meet the challenges raised by Rouse and Blattner; on the other hand, fully acknowledging Dreyfus’s contributions to the clarification of the change-over model, I will nevertheless point out the inadequacies of his interpretation. A revised version of the change-over model is my conclusion.

Theory and practice are two important aspects of our being-in-the-world. The challenge that we have to face is how to give an adequate account of the genesis of theory from everyday practice. “Theory” here is used in a broad sense which covers both ancient and modern theories, with an emphasis on the latter, and on modern science in particular. The change-over model and the extension model diverge on the issue. While the extension model attempts to solve the problem in a thoroughly pragmatist spirit, as illustrated by Blattner’s genetic pragmatism, the change-over model is aware of the delimitation of pragmatic thinking. The debate between the two models offers us a wonderful opportunity to investigate the genesis of theory in a critical manner. Aiming to get things right, I enter into the debate. The approach that I adopt might be characterized as argumentation via interpretation.

2. THE CHANGE-OVER MODEL

According to Heidegger, the problem of the genesis of theory is not about the ontical history and development of science, but about the ontological genesis of the theoretical attitude.³ He proposes a solution to it in *Being and Time* which can be characterized as the change-over model. According to Dreyfus’s interpretation, the model has two components: decontextualization and recontextualization.⁴

2 Bernstein, *The Pragmatic Turn*, 20.

3 Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962), 408.

4 Cf. Hubert Dreyfus, *Being-in-the-World* (Cambridge, MA: MIT Press, 1991), Ch. 4.

To make sense of the change-over model about the genesis of theory, people usually pay attention to Section 16 and Section 69b of *Being and Time*,⁵ but in my opinion, Section 13 has already articulated its outline, which deserves attention. The main purpose of that section is to clarify that “knowing is a mode of Dasein founded upon Being-in-the-world.” Heidegger says:

If knowing is to be possible as a way of determining the nature of the present-at-hand by observing it, then there must be a *deficiency* with our having-to-do with the world concernfully. ... This kind of Being toward the world is one which lets us encounter entities with-in-world purely in the way they *look*, just that. ... Looking *at* something in this way is sometimes a definite way of taking up a direction towards something—of setting our sights towards what is present-at-hand. ... Perception is consummated when one addresses oneself to something as something and *discusses* it as such. This amounts to *interpretation* in the broadest sense; and on the basis of such interpretation, perception becomes an act of *making determinate*. What is thus perceived and made determinate can be expressed in propositions, and can be retained and preserved as what has thus been asserted.⁶ (Italics in original)

According to Heidegger, things have different modes of being in our practical and theoretical comportment with them, i.e., *readiness-to-hand* in the former and *presence-at-hand* in the latter. The change-over model attempts to account for the genesis of theory in terms of the transition from the former to the latter. When our practical dealing with things ready-to-hand gets stuck, things will switch their mode of being and show themselves to us as present-at-hand, and this constitutes the first component of the change-over model, i.e., decontextualization. On top of that we take up a specific direction to look at things present-at-hand, discuss them, interpret them, and express them in propositions, and this constitutes the second component of the change-over model, i.e., recontextualization, the upshot of which is to bring things present-at-hand into a certain theoretical projection. It might be said that in Section 13 the contour of the change-over model is sketched, and that Heidegger further elaborates it in Sections 16 and 69b.

According to Heidegger, average everydayness is what is closest to our way of being. In our everyday being-in-the-world, we deal with things with-in-the-world. Of all forms of dealing, the closest to Dasein is not bare perceptual cognition, but

5 Cf. William Blattner, “Decontextualization, Standardization, and Deweyan Science,” *Man and World* 28 (1995): 324–325.

6 Heidegger, *Being and Time*, 88–89.

the concern (*Bersorgen*) which manipulates things and puts them to use. Heidegger holds that theoretical cognition aims to grasp things present-to-hand, but the concern which manipulates things and puts them to use manifests itself primarily in dealing with things ready-to-hand, among which is equipment. Theoretical cognition of things present-at-hand only arises when our concerned dealings with things ready-to-hand encounter obstacles.

In Section 16 Heidegger lists a set of situations in which the *deficiency* of dealings with things ready-to-hand takes place, such as *conspicuousness* (the unusability of equipment), *obtrusiveness* (the missing of something ready-to-hand), and *obstinacy* (something standing in the way of our concern). He points out: “The modes of conspicuousness, obtrusiveness, and obstinacy all have the function of bringing to the fore the characteristic of presence-at-hand in what is ready-to-hand.”⁷ When our concerned dealings encounter obstacles and can hardly go on smoothly, the things ready-to-hand switch to things present-at-hand and become the object of theoretical cognition. Dreyfus follows Heidegger, but contends that Heidegger fails to distinguish the different roles played by three situations in the process of deriving the theoretical attitude. He rearranges the three scenarios, treating *conspicuousness* as “the malfunction of equipment,” *obstinacy* as a “temporary breakdown,” and *obtrusiveness* as “total breakdown.” In the light of the increasing obstacles, Dreyfus offers a detailed phenomenological description of the decontextualization of the change-over model.⁸

The ocular metaphor plays an important role in Western thinking. Heidegger also makes much out of it. In his view, the concerned dealing with things ready-to-hand and the theoretical examination of things present-at-hand represent two different ways of “seeing.” He claims that “when we deal with them by using them and manipulating them, this activity is not a blind one; it has its own kind of sight”, and that for such dealings, “the sight with which they thus accommodate is *circumspection*.”⁹ Circumspection is the way of seeing that is peculiar to Dasein’s dealing with things ready-to-hand. And when we give up activities such as production and manipulation, and focus instead on the theoretical investigation of the things present-at-hand, a new way of seeing emerges: “Theoretical behavior is just looking (*Nur-hinsehen*), without circumspection.”¹⁰ “Just looking” in theoretical activity is distinct from concerned circumspection. The theoretical “just looking” cannot

7 Heidegger, *Being and Time*, 104.

8 Cf. Dreyfus, *Being-in-the-World*, 69–83.

9 Heidegger, *Being and Time*, 98.

10 Heidegger, *Being and Time*, 99.

have access to what circumspection can get at, that is, things ready-to-hand; what it can see is only things present-at-hand.

Historically, theory can be divided into the classical and the modern. In other words, to discuss the genesis of theory, it is important to distinguish the classical and the modern concept of theory. In Section 69b of *Being and Time*, Heidegger attempts to clarify the ontological genesis of theoretical attitude in terms of temporality. He says: “[W]e are asking which of those conditions implied in Dasein’s state of Being are existentially necessary for the possibility of Dasein’s existing in the way of scientific research. This formulation of the question is aimed at an existential conception of science.”¹¹ Here “science” refers to modern science, the paradigm case of which is Newtonian mechanics. Thus, in Section 69b, Heidegger’s exposition of the ontological genesis of the theory centers primarily on modern science. While Dreyfus is certainly aware of the difference between ancient and modern science, his interpretation of the change-over model also focuses on the latter. In my view, the change-over model is not only applicable to the modern concept of theory, but also to the classical concept of theory. I will elaborate more on this in the final section.

We have seen Heidegger-Dreyfus’s exposition of the decontextualization of the change-over model, now let’s turn to another component, namely, recontextualization.

Heidegger points out in Section 69b that the same proposition, such as “This hammer is heavy,” has different meanings in everyday life and in modern science. In the context of everyday concerned activity, “This hammer is heavy” means that it is hard to work with or that it is difficult to handle. But in the context of modern science, “This hammer is heavy” has acquired a new meaning: the hammer has weight, it has the “property” of being heavy, it exerts pressure on things under it, and once what is beneath it is taken away, it will fall, etc. Heidegger claims: “When this kind of talk is so understood, it is no longer spoken within the horizon of awaiting and retaining an equipmental totality and its involvement-relationships. What is said has been drawn from looking at what is suitable for an entity with ‘mass’. We have now sighted something that is suitable for the hammer, not as a tool, but as a corporeal Thing subject to the law of gravity.”¹² In the former context we see a hammer as a tool; in the latter context we see it as an object with mass that obeys the law of gravity. In the former context, the ready-to-hand (such as a hammer) has its place (Platz) in the equipmental totality; in the latter context, the

11 Heidegger, *Being and Time*, 408.

12 Heidegger, *Being and Time*, 412.

hammer occupies a “world point” (Weltpunkt) that cannot be distinguished from any other.¹³

It is not difficult to see that the latter context refers to mathematical physics that emerged in modern times. According to Heidegger, the essential feature of mathematical physics is the mathematical projection of nature. He says: “In this projection something constantly present-at-hand (matter) is uncovered beforehand, and the horizon is opened so that one may be guided by looking at those constitutive items in it which are quantitatively determinable (motion, force, location, and time).”¹⁴ Modern science investigates things present-at-hand quantitatively, which reflects a unique understanding of Being. Heidegger further points out that the mathematical projection of nature is a totality, the essence of which is thematizing. He interprets thematizing as follows: “Its aim is to free the entities we encounter within-the-world, and to free them in such a way that they can ‘throw themselves against’ a pure discovering—that is, that they can become ‘Objects.’ Thematizing Objectifies.”¹⁵ Thematizing frees the entities so that we can interrogate them and determine their character objectively. The essence of the mathematical projection of nature is thematizing, and thematizing is essentially objectifying. This catches the main feature of the recontextualization of modern science.

While Heidegger only briefly touches on the objectifying aspect of modern science in *Being and Time*, he offers us a more detailed exposition in “Science and Reflection,” a lecture that he gave in 1954. In this lecture, Heidegger traces the intellectual history of “theory.” He points out that the word “theory” comes from the Greek words *theorein* (verb) and *theoria* (noun), the original meaning of which is looking attentively at the outward appearance of something. The Latin translations for *theorein* (verb) and *theoria* (noun) are *contemplari* (verb) and *contemplatio* (noun). The German *Betrachtung* (view or observation) is used to translate the Latin *contemplatio*. *Betrachtung* has the meaning of viewing and beholding, and in this regard it is close to the original meaning of *theoria* in ancient Greek. But in modern science, according to Heidegger, observation has acquired a new meaning: “What does *Betrachtung* mean? *Trachten* [to strive] is the Latin *tractare*, to manipulate, to work over or refine [bearbeiten]. To strive after something means: to work one’s way *toward* something, to pursue it, to entrap it in order to secure it. Accordingly, theory as observation (*Betrachtung*) would be an entrapping and securing refining of the real.”¹⁶ Observation in modern

13 Heidegger, *Being and Time*, 413.

14 Heidegger, *Being and Time*, 414.

15 Ibid.

16 Martin Heidegger, “Science and Reflection,” in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977), 167.

science is not contemplative as in classical theory but is essentially experimental. Experimental observation corresponds to the modern way in which the real presents itself, i.e., *Gegenständlichkeit*/objectness. Heidegger claims: “The word *Gegenstand* first originates in the eighteenth century, and indeed as a German translation of the Latin *obiectum*. ...But neither medieval nor Greek thinking represents that which presences as object. We shall now name the kind of presence belonging to that which presences that appears in the modern age as object: objectness [*Gegenständlichkeit*].”¹⁷ In a word, taking things as objects is how the recontextualization of modern science proceeds with the mathematical projection of nature.

3. THE EXTENSION MODEL

Thanks to Dreyfus’s influential interpretation of Heidegger’s philosophy, the change-over model enjoys a wide circulation. But it is called into question by philosophers such as Rouse and Blattner. Rouse was the first to question the change-over model, and his work was echoed by Blattner. In challenging the change-over model Rouse and Blattner propose an alternative answer to the question of the genesis of theory, which might be characterized as the extension model.

3.1 Science as circumspective concern

Heidegger-Dreyfus’s exploration of the ontological genesis of theory focuses on the following process: from circumspective concern with things ready-to-hand to “just looking” at things present-at-hand. But in Rouse’s view, Heidegger never indicates what makes for this sudden leap to a new way of looking at things. Rouse makes a strong claim: “Heidegger does not account for the transition to a decontextualized viewing of the present-at-hand, because he cannot; it does not occur.”¹⁸ For Rouse the essence of theory is not to discover things that are present-at-hand, but to discover a new way of dealing with things ready-to-hand. He argues: “Science puts out of play some of our ordinary concerns with things, to be sure, but only in order to manipulate them in a new way, whose ontological character is no different from that of everyday practical concern.”¹⁹ The theoretical attitude arises with the breakdown of everyday concerned activity, but it does not

17 Heidegger, “Science and Reflection,” 162–163.

18 Joseph Rouse, “Science and the Theoretical ‘Discovery’ of the Present-at-Hand,” in *Descriptions*, ed. Don Ihde and Hugh J. Silverman (Albany: SUNY Press, 1985), 203.

19 *Ibid.*

imply the discovery of a new way of being (presence-at-hand); rather, it indicates a transition from one practical concern to another.

Rouse argues that the change-over model misunderstands the practice of scientific research. In his view, scientific research is essentially a form of circumspective concern with things ready-to-hand, rather than a theoretical discovery of what is present-at-hand. We have seen that in Heidegger's hammer example there is a difference between a hammer as a piece of equipment and a hammer as an object with mass obeying the law of gravity. Rouse is not happy with Heidegger's way of explaining the discovery of the concept of "mass" in terms of the transition from things ready-to-hand to things present-at-hand. He offers an alternative account in light of the history of science. The concept of "mass" emerged to solve the "flying arrow problem" proposed by Marchia and Buridan in the fourteenth century. Researchers had attempted to explain the motion of flying arrows and various other projectiles within the Aristotelian schema, but these efforts had failed. This prompted researchers to look for new directions, resulting in the discovery of "mass" and a series of concepts related to it, such as "acceleration," "force," "inertia," and "momentum," which contributed to a new understanding of motion. The discovery of "mass" is not substantially different from the activity of using a hammer in a workshop: Dasein repairs tools, replaces them, and even reconstructs tasks when they don't function properly. In other words, scientific research is essentially a circumspectively concerned activity. Rouse stresses: "The ability to see a hammer as a mass (that is, a resistance to acceleration) within a gravitational field is a *circumspective ability* which gradually arose over several centuries through a reinterpretation of the task of explaining motion in a unified way."²⁰ (Italics mine) The discovery of "mass" is a particular case, but of general epistemological significance. Like hammering things with a hammer, scientific research, as a circumspectively concerned activity, also uses various equipment (such as instruments, problem formulations and solutions, theoretical concepts, and mathematical techniques); and when the practice of scientific research collapses and the basic concepts of science are in crisis, the researcher will also face conspicuousness, obtrusiveness, obstinacy, etc.

Blattner is sympathetic to Rouse's critique of the change-over model. While Rouse claims that the discovery of things present-at-hand does not happen at all, Blattner emphasizes that the change-over model is a distorted phenomenological description of the genesis of theory. He also agrees with Rouse that scientific research is essentially a circumspective concern with things ready-to-hand.²¹

20 Rouse, "Science and the Theoretical 'Discovery' of the Present-at-Hand," 205.

21 Cf. Blattner, "Decontextualization, Standardization, and Deweyan Science," 325–326, 327–328.

3.2 Standardization: From everyday practice to scientific research

Scientific research is a kind of concerned activity, not fundamentally different from everyday concerned activities. Then why should we switch from one form of concerned activity to another? This points to the question of the genesis of theory. If the change-over model is rejected, how should one account for the genesis of scientific theory? Rouse does not address this issue directly, but his idea that the essence of scientific research lies in standardization is appropriated by Blattner, who thereby espouses the extension model.

Dissatisfied with the prevailing theory-dominant philosophy of science that focuses on the intellectual aspects of science, Rouse advocates that we should take science as a practical activity. In his view, science is not just a field of beliefs and reasons, but also a field of practical skills and activities. Science, as a practical activity, is often carried out by scientists in particular laboratories and thus is inevitably local. The locality of scientific research has various manifestations. In addition to the particular material settings of laboratories, the technical compositions, and the networks of social relations between researchers, Rouse also emphasizes the importance of the craft knowledge, experience, skill, knowing how, and tacit knowledge of the scientists.²² In his view, these forms of knowledge have obvious local characteristics and cannot be fully expressed by propositions, and we need to resort to practice/action for their adequate expression: "Scientific knowledge is fundamentally local knowledge, embodied in practices that are not fully abstractable into theories and context-free rules for their application."²³

At first glance, the emphasis on the locality of scientific practice is in obvious tension with the universal character of scientific knowledge. How to resolve this tension? Inspired by Heidegger's discussion of things ready-to-hand, Rouse recognizes that scientific practice not only is local, but also has the ability to transcend locality. Heidegger says in *Being and Time*:

The work produced refers not only to the "towards-which" of its usability and the "whereof" of which it consists: under simple craft conditions it also has an assignment to the person who is to use it as the work emerges. ...Even when goods are produced by the dozen, this constitutive assignment is by no means lacking; it is merely indefinite, and points to the random, the average.²⁴

22 Cf. Joseph Rouse, *Knowledge and Power* (Ithaca: Cornell University Press, 1987), 108–111.

23 Rouse, *Knowledge and Power*, 108.

24 Heidegger, *Being and Time*, 100.

In simple handicraft industry, the work produced points to a specific user; in mass production, the users pointed to by the goods are uncertain and average; in other words, they point to general users. Rouse believes that something similar happens in scientific research. He adopts Jerome Ravetz's term and characterizes the averaging efforts in scientific research as "standardization." Once the tools, procedures, facts, and even theories in scientific research are standardized, their reference becomes broader, and their validity extends beyond the original laboratory to other laboratories and even to the wider world. Standardization makes scientific results more robust and exoteric.

Unlike the theory-dominant view of science, which regards locality as an instance of universal knowledge, Rouse's theory of scientific practice holds that standardization transcends locality by leading us from one kind of local knowledge to another. Of course, the theory of scientific practice does not deny the universality of scientific knowledge; rather, it seeks to lay the foundation for it: "The description of the expansion of scientific knowledge outside the laboratory as a 'translation' of local practices to adapt to new local situations (themselves altered to ease the transition) has, I think, begun to be plausible. The claim is not that scientific knowledge has no universality, but rather that what universality it has is an achievement always rooted in local know-how within the specially constructed laboratory setting."²⁵ What Rouse is up to here is to reconcile the locality and the universality of scientific knowledge on the basis of the concept of standardization.

Blattner develops genetic pragmatism in response to the question of the genesis of theory. He distinguishes genetic pragmatism from substantive pragmatism. Substantive pragmatism is the view that highlights the means-end relationship in human activity, and genetic pragmatism applies it to a specific task, namely, to account for the genesis of scientific theory. According to Blattner, the everyday world described in Sections 15–18 in *Being and Time* is, in a substantial sense, a pragmatic world. It is task-oriented and structured by means-end relationships ("in-order-to," "for-the-sake-of," etc.). In such a world, people deal with things ready-to-hand. They act to accomplish a certain task, and one task leads to another. Tasks, actions, and various instruments involved ultimately point to human self-interpretation. In everyday practice, there are always problems of one kind or another, and a possible solution to these problems is to conduct scientific research. Genetic pragmatism sees scientific research not only as an activity structured by means-end relations, but also as a solution to problems that emerge from

25 Rouse, *Knowledge and Power*, 119.

everyday practice. Blattner attempts to understand the genesis of scientific theory from a thoroughly pragmatic standpoint, emphasizing that in scientific research people are still dealing with things ready-to-hand.

While Rouse's concept of standardization mainly focuses on scientific research itself, Blattner appropriates it to explain the relationship between everyday life and scientific research. In his view, the account of the genesis of scientific theory by genetic pragmatism is in accord with Rouse's characterization of the process of standardization in scientific research. Standardization makes the results of scientific research more portable and robust, extending their validity from a particular laboratory to other laboratories and even to the wider work world. Blattner believes that the transition from everyday life to scientific research, such as from using a hammer in a workshop to metallurgical research, is also a process of standardization. When hammering gets impeded, we are led to the study of metallurgy. With a better understanding of metals, we can make stronger hammers, so that we can hammer different, harder nails, hammer from different angles, and so on. Therefore, metallurgical research is essentially an effort aiming at standardization. "Standardization is the solution of practical (means-ends) problems,"²⁶ and its goal is to make our tools and capabilities more portable and robust.

In sum, Rouse and Blattner argue that the breakdown of everyday concerned activity does not lead to the discovery of things present-at-hand, that scientific research is invoked to discover new ways of dealing with things ready-to-hand, and that this is achieved by standardizing efforts. Because everyday concerned activity is not strong enough, not easily transferable, scientific research is needed to better solve the practical (means-end) problems and to discover stronger and more portable concerned activities. The genesis of theory does not lie in change-over, but in the extension.

4. RESPONSE, DEFENSE, AND REVISION

In questioning the change-over model, Rouse and Blattner propose their extension model. Is their questioning valid? Is their model convincing? In this section, I will respond to Rouse-Blattner's challenges to Heidegger-Dreyfus and defend the change-over model. My conclusion is a revised version of the change-over model.

26 Blattner, "Decontextualization, Standardization and Deweyan Science," 332.

4.1 Heidegger: Early and later

Rouse uses late Heidegger to argue against early Heidegger. In his view, Heidegger's understanding of science in the later period shows that he has abandoned the early change-over model and embraced the extension model. Rouse makes his case on the basis of Heidegger's "The Question Concerning Technology" (1950) and "The Age of the World Picture" (1938).²⁷ According to Rouse, later Heidegger's understanding of science places emphasis on experimentation rather than observation and on standing-reserve rather than object. I argue that Rouse's interpretation of the later Heidegger is indefensible and that Heidegger is consistent throughout his life on the issue of the genesis of the theory.

Let's first look at the distinction between experimentation and observation. In "The Age of the World Picture," Heidegger points out that the essence of modern science is research. "What is characteristic of such research is that it investigates by experiment rather than observation," explains Rouse.²⁸ Regarding experimentation, Heidegger says: "To set up an experiment means to represent or conceive the conditions under which a specific set of motions can be made susceptible of being followed in its necessary progression, i.e., of being controlled in advance by calculation."²⁹ Rouse interprets this claim as follows: "The decontextualization of things in order to encounter them in 'the way they look' has no place here, and with it has vanished the notion of presence-at-hand."³⁰ Does this interpretation hold water? Does later Heidegger's emphasis on experimentation of modern science constitute a refutation of the change-over model? My answer is negative.

Firstly, Rouse fails to see the continuity between early and later Heidegger with respect to experimentation. As mentioned above, the mathematical projection of nature is viewed as the main feature of the recontextualization of the change-over model. In this context Heidegger claims in Section 69b of *Being and Time*: "Only 'in the light' of a Nature which has been projected in this fashion can anything like a 'fact' be found and set up for an *experiment* regulated and delimited in terms of this projection."³¹ (Italics mine) Experimentation is taken as an element of the mathematical projection of nature. Of course, *Being and Time* only briefly touches on experimentation, whereas "The Age of the World Picture" fully articulates this aspect of modern science, especially emphasizing that experiment is based upon

27 Cf. Rouse, "Science and the Theoretical 'Discovery' of the Present-at-Hand," 200–10; "Heidegger's Later Philosophy of Science," *Southern Journal of Philosophy* 23, no. 1 (1985): 75–92.

28 Rouse, "Science and the Theoretical 'Discovery' of the Present-at-Hand," 207.

29 Martin Heidegger, "The Age of World Picture," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977), 121.

30 Rouse, "Science and the Theoretical 'Discovery' of the Present-at-Hand," 207.

31 Heidegger, *Being and Time*, 414.

the laying down of law. Therefore, with respect to experimentation, “The Age of the World Picture” further develops *Being and Time* rather than argues against it. Obviously, Rouse is blind to this and does not correctly understand the relationship between the two texts.

Secondly, Rouse seems to not fully understand that the change-over model involves both decontextualization and recontextualization. As far as the genesis of modern science is concerned, experimentation belongs to recontextualization rather than decontextualization. Heidegger argues:

Modern science’s way of representing pursues and entraps nature as a calculable coherence of forces. Modern physics is not experimental physics because it applies apparatus to the questioning of nature. Rather the reverse is true. Because physics, indeed already as pure theory, sets nature up to exhibit itself as a coherence of forces calculable in advance, it therefore orders its experiments precisely for the purpose of asking whether and how nature reports itself when set up in this way.³²

This brings out explicitly that experimentation is part of the theoretical projection of modern science. By emphasizing its experimental character, Rouse intends to challenge Heidegger-Dreyfus’s thesis that modern science discovers things present-at-hand through the decontextualization of everyday circumspective concern. But this will not work because they belong to different components of the change-over model and there is no tension between them.

Thirdly, it is rather unthoughtful of Rouse to simplistically contrast experimentation with observation. As mentioned above, according to Heidegger, modern science as theory involves observation (*Betrachtung*). Admittedly, in contrast to the contemplative observation of *theoria* in ancient times, the observation of modern science is essentially experimental.

Let’s examine another distinction that Rouse highlights: object and standing-reserve. Rouse believes that in terms of the understanding of science, later Heidegger no longer employs the terminology in *Being and Time* and that he has given up the distinction between readiness-to-hand and presence-at-hand and replaced it with the distinction between object and standing-reserve. He further points out that later Heidegger puts more emphasis on the standing-reserve. Rouse argues that given the essential congruence of modern science and modern technology, later Heidegger is of the view that “the interpretation of things as

32 Martin Heidegger, “The Question Concerning Technology,” in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977), 21.

autonomous objects (Gegenstände) is a misunderstanding which conceals their belonging to the essence of technology. We can represent things as being present-at-hand, but in doing so we fail to see them for what they are.”³³

I have two responses to this criticism by Rouse. First, Rouse’s equating objects with things present-at-hand is problematic. Things present-at-hand are the result of the breakdown of everyday concerned activities, and they belong to the component of decontextualization of the change-over model, whereas objects are the result of theoretical projection of modern science, and they belong to the component of recontextualization of the change-over model. In other words, it is only in the theoretical projection of modern science that things present-at-hand are presented as objects. Rouse seems not sensitive enough to this conceptual twist.

Second, Rouse’s understanding of Heidegger’s distinction between object and standing-reserve is one-sided. Closely related to the distinction between object and standing-reserve is the relationship between modern science and modern technology. In later Heidegger, the relationship between the two is rather complicated. On the one hand, Heidegger explicitly emphasizes the difference between object and standing-reserve. While modern science views reality as object in its theoretical projection, modern technology takes everything as standing-reserve. The essence of modern technology is the Enframing (*Ge-stell*). As a way of revealing (*Entbergen*), modern technology is characterized by challenging nature, putting to nature unreasonable demand so as to extract, store, distribute, and transform its energy. In this mode of revealing, Heidegger claims, “Everywhere everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it the standing-reserve [Bestand].”³⁴ Regarding the difference between object and standing-reserve, Heidegger puts it straightforwardly: “Whatever stands by in the sense of standing-reserve no longer stands over against us as object.”³⁵ But on the other hand, Heidegger also points out that, in an essential sense, modern science and modern technology are closely related, and under certain conditions, object will be transformed into standing-reserve. He says: “[W]hen man, investigating, observing, ensnares nature as an area of his own conceiving, he has already been claimed by a way of revealing that challenges him

33 Rouse, “Science and the Theoretical ‘Discovery’ of the Present-at-Hand,” 207. This criticism is also embraced by Blattner, who thinks that in the distinction between object and standing-reserve later Heidegger puts more emphasis on the latter, which shows that he has given up his view on science in his early philosophy. Cf. Blattner, “Decontextualization, Standardization and Deweyan Science,” 332–333.

34 Heidegger, “The Question Concerning Technology,” 17.

35 Ibid.

to approach nature as an object of research, until even the object disappears into the objectlessness of standing-reserve.”³⁶ Modern science and modern technology are guided by the same mode of revealing that challenges nature. They constitute a continuum, and object and standing-reserve are its two links. This mode of revealing first appeared with the rise of modern physics, but it was not fully manifested at that time. In this connection, Heidegger says, “Modern physics is the herald of Enframing.”³⁷ And with the transition from classical physics to atomic physics, this way of revealing is fully manifested:

[I]n the most recent phase of atomic physics even the *object vanishes* also, and the way in which, above all, the subject-object relation as pure relation thus takes precedence over the object and the subject, to become secured as standing-reserve ... (Objectness changes into the constancy of the standing-reserve, a constancy determined from out of Enframing.)³⁸

It might be said that object and standing-reserve have the same mode of revealing which challenges nature and that the difference between them is a question of degree of manifestation. When it is not fully manifested, object is different from standing-reserve; when it is fully manifested, object changes into standing-reserve. In a word, for Heidegger, modern science and modern technology, together with object and standing-reserve, have both differences and similarities. Rouse only emphasizes the former and ignores the latter, and his understanding is obviously one-sided.

4.2 The switch of perspectives

In my opinion, the biggest flaw of the extension model is that it obscures the fact that the rise of modern science exemplified by Newtonian mechanics marks a fundamental shift in perspective. Rouse embodies this defect symptomatically when he asserts that the turn from the ready-to-hand to the present-at-hand does not take place at all. The weakness of the extension model is precisely the strength of the change-over model.

The extension model has little to do with the classical concept of theory, because it is mainly concerned with modern science. Greek science and modern science represent different theoretical projections about nature which I will elaborate in

36 Heidegger, “The Question Concerning Technology,” 19.

37 Heidegger, “The Question Concerning Technology,” 22.

38 Heidegger, “Science and Reflection,” 173.

more detail later. For now let's focus on the difference between the two in terms of the confrontation between the Aristotelian tradition and the Galilean tradition. Georg Henrik von Wright says: "As to their views of scientific explanation, the contrast between the two traditions is usually characterized as causal vs. teleological explanation. The first type of explanation is also called mechanistic, the second finalistic."³⁹ While the Galilean tradition is focused on mechanical causality to predict and explain phenomena, the Aristotelian tradition is focused on understanding facts from a teleological perspective.

Correspondingly, Greek science and modern science have very different relations with the everyday circumspective concern. Heidegger's "in-order-to" and "for-the-sake-of" and Blattner's "means-end relation" are all expressions of the final cause. Everyday circumspective concern is defined by the final cause. As a human activity, Greek science contains the means-end dimension; not only that, it also makes theoretical projections of nature according to the final cause. Thus, there are two layers of congruence between Greek science and everyday circumspective concern. As a human activity, modern science also contains a "means-end" dimension, but, as far as the theoretical projection of nature is concerned, modern science is characterized by abandoning the final cause and focusing instead on the mechanical causality of things. Therefore, there is both continuity and discontinuity between modern science and everyday circumspective concern. Relatively speaking, the latter is more essential. For everyday circumspective concern, its essence is exhausted by the means-end relationship; but for modern scientific research, the means-end relationship only touches its surface, but not its essence. Therefore, we have good reasons to claim that there is a *difference in kind* between modern science and everyday circumspective concern.

Since the Scientific Revolution in the seventeenth century, the confrontation between the Aristotelian tradition and the Galilean tradition has constituted a fundamental human condition of our intellectual life. On a deeper level, to use Thomas Nagel's terminology, this confrontation can be characterized as the confrontation between the subjective and the objective perspectives, or the internal and the external perspectives. The so-called subjective perspective or internal perspective means that an individual views the world from a particular place that he happens to be (view from somewhere), and the so-called objective perspective or external perspective means that the individual strives to get out of himself and does not view the world from any particular place (view from nowhere) so as to attain a detached view of the world.⁴⁰ Nagel points out: "An objective standpoint

39 George Henrik von Wright, *Explanation and Understanding* (London: Routledge, 1971), 2.

40 Cf. Thomas Nagel, *View from Nowhere* (Oxford: Oxford University Press, 1986), 69–70.

is created by leaving a more subjective, individual, or even just human perspective behind.”⁴¹ The emergence of an objective perspective or an external perspective is a great achievement of humanity, reflecting the human impulse to transcend. However, it cannot exhaust the whole content of reality. To fully grasp reality, a subjective or inner perspective is indispensable. Nagel says: “The tension between the very fruitful transcendent impulse of human reason and the subjective perspective that it leaves behind and that must coexist with it is a source of philosophical problems in metaphysics, epistemology, ethics, political theory, and the understanding of human action.”⁴² The tension and coexistence between the subjective and the objective perspectives, or between the internal and the external perspectives, run the whole gamut of human life. The Aristotelian tradition tends to make teleological explanation of things, revealing a subjective or internal perspective; the Galilean tradition focuses on the mechanical causality of things, revealing an objective or external perspective. From the perspective of the history of human cognition, the rise and development of modern science reveals that in the past four hundred years the objective perspective or external perspective has been extremely fruitful.

In the transition from everyday circumspective concern to modern science, there is a twist and turn, the essence of which is a switch from the subjective perspective to the objective perspective or from the internal perspective to the external perspective. While Rouse-Blattner’s extension model ignores this major shift in perspective, Heidegger-Dreyfus’s change-over model takes it seriously. It can be said that the two components of the change-over model, namely, decontextualization and recontextualization, redeem the substance of this perspectival shift: the breakdown of our everyday concerned activity leads to the discovery of things present-at-hand, then by objectifying them and bringing them under the mathematical projection, we reach a theoretical understanding of them. The combination of the two components gives a clear answer to the question of the genesis of modern science as theory.

4.3 A revised version of the change-over model

In this debate about the genesis of theory, I prefer Heidegger-Dreyfus’s change-over model. As mentioned above, we should give credit to Dreyfus for making his model well known. Rouse-Blattner’s questioning of the change-over model is largely directed to Dreyfus’s interpretation of Heidegger’s thoughts. However,

41 Nagel, *View from Nowhere*, 7.

42 Thomas Nagel, “Analytic Philosophy and Human Life,” *Economia Politica* 26, no. 1 (2009): 6.

there is room for improvement for Dreyfus's interpretation, and I will highlight two aspects.

Firstly, as mentioned above, Dreyfus's interpretation of the change-over model is mainly focused on modern science, and I want to make a complement to it by inquiring tentatively into the two components, i.e., decontextualization and recontextualization, of the classical concept of theory. Drawing on the relevant writings of later Heidegger, we may obtain a broader historical perspective and work out a more adequate formulation of the change-over model than that offered by Dreyfus.

The Greeks provide us with a paradigm case of the classical concept of theory. As mentioned above, "theory" goes back to the Greek words *theorein* (verb) and *theoria* (noun). Heidegger says: "[F]or the Greeks, *bios theoretikos*, the life of beholding, is especially in its purest form as thinking, the highest doing."⁴³ Aristotle gives an account of the genesis of *Sophia* (theoretical wisdom) in the first chapter of Book I of *Metaphysics*. At the end of the chapter, he points out that *episteme* (theoretical knowledge) arises on the condition that all kinds of *techne* (crafts) are fully developed: "[W]hen all such inventions were already established, the sciences which do not aim at giving pleasure or at the necessities of life were discovered, and first in the places where men first began to have leisure."⁴⁴ The theoretical attitude emerges when people are freed from technical activities and begin to have leisure. This can be interpreted as the decontextualization of the classical concept of theory. In this context it is interesting to notice a contrast, i.e., Aristotle's "leisure thesis" vs. Heidegger's "deficiency thesis." One might say that on the issue of the genesis of theory Heidegger substitutes his "deficiency thesis" for Aristotle's "leisure thesis."

Then, how does the recontextualization of classical theory, or the classical theoretical projection, proceed? In "Science and Reflection," after a retrospective discussion of the concept of theory, Heidegger says: "The further characterization of *theorein*, i.e., that it brings the *archai* and *aitiai* of what presences before man's apprehension and powers of demonstration, cannot be given here; for this would require a reflection on what Greek experience understood in that which we for so long have represented as *principium* and *causa*, ground and cause."⁴⁵ Although Heidegger's exposition is extremely brief, it lays bare that the classical theoretical projection revolves around *arche* (origin/principle) and *aitia* (cause). This is vindicated by Aristotle's characterization of *Sophia*: "Wisdom is the knowledge about

43 Heidegger, "Science and Reflection," 164.

44 Aristotle, *Metaphysics*, 981b19-22, trans. W. D. Ross, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: Random House, 1941), 690.

45 Heidegger, "Science and Reflection," 164.

certain principles and causes.”⁴⁶ As we have seen, one of the causes that classical theory cherishes is the final cause. One can see a clear distinction between the recontextualization of the classical theory which centers around *arche* and *aitia* and that of modern science which, taking objectifying as its core, proceeds with the mathematical projection of nature.

Secondly, I would like to point out that it is an oversight of Dreyfus to attribute traditional ontology to curiosity in his interpretation of the change-over model. As mentioned above, with respect to the ocular metaphor, Heidegger distinguishes between “just looking” and circumspection. In this context, Dreyfus reminds us: “[T]here are, according to Heidegger, two distinct modes of ‘just looking’: gazing with curiosity for the sake of distraction, and observing with the wonder that leads to theory.”⁴⁷ There is a subdivision of “just looking”, namely, curiosity vs. wonder. Often people tend to confuse curiosity with wonder, but Heidegger makes a strict distinction between the two. Curiosity is a form of falling of Dasein. It has three characteristics: 1) as a form of “just looking,” curiosity captures the situation in which Dasein moves away from what is closely ready-to-hand, turns towards something far and strange, and sees it as it merely looks; 2) with curiosity, Dasein is always surrounded by new possibilities and is attracted by one novelty after another; 3) in this mode of being-in-the-world, Dasein is uprooted. According to Heidegger, curiosity is distinct from wonder, it “does not seek the leisure of tarrying observantly,” and it “has nothing to do with observing entities and marveling at them – *thaumazein* (wonder).”⁴⁸ From Heidegger’s account, it is not difficult to discern the Greek origin of the concept of wonder. Aristotle points out at the beginning of *Metaphysics* that leisure is the condition for theoretical activity, and philosophy originates from *thaumazein*/wonder.⁴⁹ In a word, given two distinct modes of “just looking,” theory stems from looking with wonder, not with curiosity.

Dreyfus goes astray when he attempts to characterize traditional ontology in the light of the distinction between curiosity and wonder. By traditional ontology Dreyfus means the “constantly renewed and unsuccessful attempt to account for everything in terms of some type of ultimate substances on the side of both subject and object,” the defining feature of which is that it views subject and object as isolated, self-contained entities confronting with each other.⁵⁰ According to Dreyfus, “Given the distinction between theoretical projection and mere

46 Aristotle, *Metaphysics*, 981b25-982a, 691.

47 Dreyfus, *Being-in-the-World*, 80.

48 Heidegger, *Being and Time*, 216.

49 Cf. Aristotle, *Metaphysics*, 981b20-24, 982b11-17, 690-691, 692.

50 Dreyfus, *Being-in-the-World*, 84.

contemplation Heidegger can distinguish the wonder, which motivates theoretical reflection to try to understand by finding new abstract relationships, from the curiosity that just stares at things.⁵¹ It is reasonable to correlate theoretical projection with wonder, but it is problematic to correlate contemplation with curiosity. Contemplation is the defining feature of the classical concept of theory, which is based on wonder rather than curiosity. This mismatch makes Dreyfus lose sight of the true source of traditional ontology: “Dasein can just stare without recontextualizing. Such disinterested attention and the isolated entities it reveals gives rise to traditional ontology.”⁵² It is impossible to achieve traditional ontology by simply staring at something without recontextualization. As a form of *episteme* (theoretical knowledge), traditional ontology is the result of the recontextualization of classical theory.

In conclusion, on the one hand Dreyfus has made great contribution to the exposition of the change-over model, and on the other his interpretation leaves room for improvement. Once its shortcomings are overcome, a revised version of the change-over model is in view. This is the conclusion we have come to in getting involved in the debate.⁵³

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51 Dreyfus, *Being-in-the-World*, 83.

52 Dreyfus, *Being-in-the-World*, 84.

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Part 2
Knowing how/
routines and habits



4. Acting automatically: Ryle on habits and knowing how

Lars Hertzberg

Abstract In discussing knowing how, Ryle presents a dichotomy between skills and habits. It is argued that this dichotomy is problematic. Ryle runs together two senses of acting automatically: the expression may be used to explain an ability to perform successfully without paying heed to what one is doing or to explain why a performance misfires. Ryle's skill-habit dichotomy is dependent on these senses not being kept apart; once the distinction is noted, Ryle's dichotomy dissolves.

Keywords knowing how | skill | habit | automatic | Gilbert Ryle

1. THE INTELLECTUALIST FALLACY

The chapter on knowing how is the most widely read and discussed part of Gilbert Ryle's classical work *The Concept of Mind*.¹ There appear to be two important strands of argument in the chapter. One is the critique of the so-called intellectualist account of human skills, and the other is the dichotomy between skills and habits. The first of these strands of argument I believe to be deep and important, while the second seems to me to be somewhat problematic. In any case, I do not believe the second strand is essential to the first, the way Ryle apparently takes it to be.

Ryle summarizes the target of his critique of intellectualism as follows: "it is important to correct from the start the intellectualist doctrine which tries to define intelligence in terms of the apprehension of truths, instead of the apprehension of truths in terms of intelligence."²

Ryle's point is quite straightforward. Consider, for instance, putting together a piece of furniture from IKEA. How are we able to do it? In putting together an IKEA bed for the first time, I will probably be guided by a set of instructions which was enclosed in the package I brought home from the store. If I am very handy, I may figure out how to do it on my own. In the latter case, it is natural to suppose

1 Gilbert Ryle, *The Concept of Mind* (London: Hutchinson's University Library, 1949), 25–61.

2 Ryle, *The Concept of Mind*, 27.

that I will draw up a set of instructions before my mind's eye. More generally, it may be thought, our ability to perform demanding tasks, such as putting forward an argument, finding our way around town or preparing a spaghetti bolognese can only be explained by assuming the presence in my mind of a set of instructions, a map or a drawing which informs me of the steps I have to go through. What is involved in performing a complex task, then, could be taken to be modelled on how we might convey the requisite steps to another person. Acting intelligently, we think, is made possible through our conveying the steps to ourselves.

This seems like a common sense account of skilful performance. However, it should not be hard to see that this account is problematic. For me to be guided by the instructions, I have to know how to apply *them*. This in itself is a skill – or rather a number of skills. For instance, I need to know what a screw and a screwdriver are, how a screwdriver is used, etc. Normally, we apply such instructions as a matter of course without thinking about it as the exercise of a skill (though I think we are all familiar with cases in which interpreting an instruction manual may be a highly demanding task). However, if we assume that all skilled performances are guided by sets of instructions, knowing how to apply the instructions seems to require a higher order set of instructions, and so on *ad infinitum*. But clearly, the idea of an infinite series of instructions makes no sense.

This is the infinite regress argument, which has been advanced by Ryle and many others (it is also to be found in Schopenhauer, for instance). The upshot of this is that we are forced to assume that some skills, at least, can be employed without guidance. Some doings may be based on inner representations, but ultimately acting on an inner representation requires an ability simply to do things.

What are the attractions of intellectualism? There seem to be two paths leading to this impasse. (Ryle construes the intellectual temptations underlying this dilemma slightly differently from the way I present them here.) One is connected with the common experience that certain tasks are too complex for us to carry them out without rehearsing the steps in our mind. As we all know, in some cases we need to follow a conscious procedure in order to complete a difficult task. Thus to carry out a complex calculation without the aid of pen and paper, we may need to say the numbers out loud or to ourselves. With simpler calculations, on the other hand, we may be able to see the answer right away. Here no conscious procedure is required. The need to lean on a procedure (what might be called a mental “crutch”) varies from one person to the next. When I play chess I have to do surreptitious moves with my fingers when planning a move. I attribute that to my poor grasp of spatial relations; I'm sure most players don't need to move their fingers either physically or mentally. In fact, there are people who can do amazing arithmetical feats without employing any method.

Now, there may be a temptation to think that we always go through a procedure when we solve an intellectual task. It is just that if the task is simple enough or if we are proficient enough, we may do so surreptitiously: we do the calculation so fast that we do not even notice, or maybe it all takes place in the unconscious. This view of skilled performance is consistent with the common experience that in acquiring various skills, we may at first need to concentrate on the way to proceed, but gradually less and less attention is required for applying the skill. Hence it may be natural to suppose that after a while, the thought processes have receded to the background or have become so smooth we are not even aware of them, but they still play a role.

This picture of things gets support from the fact that in very many cases in which we carry out some task more or less automatically, we may nevertheless afterwards give an account of the way we did it, or we may, for instance, explain why we chose this rather than that way of proceeding. In doing so, it may be thought, we are actually recalling the swift thought processes that supposedly were present at the time of acting. (However, if the thought processes are taken to have occurred unconsciously, we cannot, of course, be taken to be recalling them.)

The problem with this view, however, is that the postulation of surreptitious thought processes is arbitrary. Since, by definition, they are not experienced, there is no empirical evidence of their existence, nor is it logically necessary to assume that the solving of such and such tasks would only be possible with the aid of actual intellectual processes.

A second path to intellectualism goes through our inclination to draw conclusions about what phenomena are like on the basis of the form of words we use in talking about them. Thus, when we describe someone either as thinking what she is doing or as acting without thinking, it is natural to suppose that the verb “thinking” indicates a process or activity – something taking place, or failing to take place, in the agent’s mind alongside the action. More generally, we are inclined to assume that to every noun there must correspond an object, to every adjective a state, to every verb a process or activity. We do recognize, however, that in a great many cases this presumption does not hold: we do not imagine that taxation is an object, that being expensive is a state, that owing somebody money is a process or an activity. But when it comes to psychological words, the presumption is easier to hold on to. We can imagine all kinds of things going on in the obscure recesses of the mind. Of course, “thinking” is sometimes used to refer to a mental activity consciously carried out concomitantly with our performing some task. So it is easy to suppose that what goes on when we engage in an activity of thinking is also going on when we perform some task with thought, even if we are not conscious of any thinking going on. The activity is, perhaps, relegated to some mental-neurological limbo.

Now resisting this temptation is a central concern of Ryle's *Concept of Mind*. As he puts it:

It is being maintained throughout this book that when we characterize people by mental predicates, we are not making untestable inferences to any ghostly processes occurring in streams of consciousness which we are debarred from visiting; we are describing the ways in which those people conduct parts of their predominantly public behaviour.³

And later:

The sense in which a person is thinking what he is doing, when his action is to be classed not as automatic but as done from a motive, is that he is acting more or less carefully, critically, consistently, and purposefully, adverbs which do not signify the prior or concomitant occurrence of extra operations of resolving, planning or cogitating, but only that the action taken is itself done not absent-mindedly but in a certain positive frame of mind.⁴

Ryle's attack on intellectualism, then, is important on two levels. On the one hand, it is a critique of a conception of humanity which is deeply entrenched in our culture. This conception tends to locate the foundation of what is distinctively human in "cognition", in "the thinking part" – in an ability to represent reality to ourselves, to handle abstract symbols and to assess the truth-value of sentences. As Ryle puts it:

... both philosophers and laymen tend to treat intellectual operations as the core of mental conduct; that is to say, they tend to define all other mental-conduct concepts in terms of concepts of cognition. They suppose that the primary exercise of minds consists in finding the answers to questions and that their other occupations are merely applications of considered truths...⁵

This aspect of Ryle's discussion is well brought out by Rupert Read in his essay "A Wittgensteinian/Austinian Qualified Defense of Ryle on Know-How", where he argues that the topic "matters beyond the dusty, abstract confines of philosophy". He then goes on to say:

3 Ryle, *The Concept of Mind*, 51.

4 Ryle, *The Concept of Mind*, 111.

5 Ryle, *The Concept of Mind*, 26.

The so-called tacit and implicit, the phenomena of life that enable any activities at all and that are crucially responsible for our well-being, are easy to neglect when we are in the grip of a certain mode of philosophical reflection. We are influenced by a prejudice to want to understand in terms of neat pictures, according to the kind of concrete and easily transferrable expression characteristic of propositions. Know-how is less tangible and (at least when reflecting and not practicing) more multifaceted.⁶

I should point out that the intellectualist conception can be understood in two closely related ways. On one understanding, the representations on which our actions are based must somehow be *lodged* in our mind and steer our ways of proceeding without having to be brought to consciousness; on the other understanding, we must *rehearse* them to ourselves before we carry out those actions or while we act. (On the first view, it is not always made clear whether those representations are to be thought of as mental or neurological states.)

Ryle's critique shows a fruitful route for philosophical clarification. He is exhorting us to resist a form of apriorism that holds us captive, one that concerns the ways in which words have meaning. He might have said, though this was not a way he would express himself: rather than assume that the meaning of words (in this case the word "thinking") is constituted by their referring to some object, state or activity (their referent being identifiable independently of the use of the word in question), start your inquiry by looking at the actual use made of them in contexts of human conversation.

2. A NOTE ON VOCABULARY

So far, so good. What I wish to argue, however, is that in place of the *a priori* assumptions he has got rid of, Ryle has constructed a new dichotomy which gives rise to some of the same kinds of problems as those he meant to set aside. By this I mean the distinction between, on the one hand, *knowing how*, or, as he also labels it, skills, intelligent capacities or exercises of intelligence, and, on the other hand, habits, that is, things we, as he also puts it, do automatically.

First I wish to make an observation about vocabulary. Someone who wishes to translate Ryle's chapter on knowing how into German, Swedish or Finnish, for instance, will run into nearly unsurmountable difficulties. It is an accident of English – and I believe of French and maybe many other languages – that there

6 Rupert Read, "A Wittgensteinian/Austinian Qualified Defense of Ryle on Know-How," *Graduate Faculty Philosophy Journal* 39, no. 2 (2018): 405–429. The quotation is from p. 406.

exists a locution, “knowing how”, which can be used to refer both to cases in which a person has the ability to actually carry out some task and to cases in which she knows how it is to be done (for instance, is able to instruct others), whether or not she is able to do it herself. In those other languages, however, there is no form of expression which brings these two notions together.⁷

Now, I do not wish to argue that the fact that Ryle’s concept pair does not directly translate into some other language means that it has no philosophical interest. (Is there any philosophical problem that could survive translation into all human languages?) Regardless of this, Ryle’s critique of the idea that our intelligent performances are grounded in our knowing things to be true still holds. His point is not dependent on the existence of the “knowing how” idiom – the temptation to consider cognitions to be the basic function of the mind is shared by speakers of those other languages as well.

Yet this difference between languages should make us more alert to the fact that the use of these concepts may not be so unified as we may suppose. It also means that certain arguments in defence of the intellectualist position turn out to be spurious. Thus it has been argued (by Jason Stanley and Timothy Williamson) that a pianist who lost her arms in a car accident may have lost her ability to play but may still retain her knowledge how to play the piano; hence, knowing how does not

7 Ryle’s German translator, Kurt Baier, puts this problem as follows in a footnote in his translation:

Für das im englischen Titel dieses Kapitels verwendete Ausdruckspaar “Knowing how – knowing that” konnte der Übersetzer kein gleichbedeutendes deutsches Gegenstück finden. Ryle will hier sagen, “being able to do something” bedeute dasselbe wie “knowing how to do it”. Im Deutschen kann man das aber durch keinen der beiden dem englischen “knowing how” ähnlichen Ausdrücke widerergeben. Der erste dieser Ausdrücke, “wissen, wie man etwas macht”, heißt nicht dasselbe wie “etwas machen können”. Denn es kann einer wohl wissen, wie man einen Autoreifen wechselt (so dass er es einem anderen sogar beschreiben oder zeigen kann), ohne es jedoch selber zu können, vielleicht weil er nicht stark oder geschickt genug ist oder weil er schlechte Augen hat. Wissen wie ... ist eine Form des theoretischen Wissens, also nicht dasselbe wie das englische “Knowing how to ...”. Der zweite ähnliche deutsche Ausdruck, “Er weiß zu...” ist auch unpassend, weil er nicht allgemein an Stelle von “können” anwendbar ist. Man kann zwar unter Umständen von jemandem sagen: “Er weiß zu schmeicheln”, aber man wird kaum die Frage, ob einer chauffieren kann, mit den Worten: “Weiß er zu chauffieren?” stellen wollen. Der Übersetzer musste sich daher damit begnügen, das englische Paar “Knowing how – knowing that” mit dem deutschen Paar “Können – Wissen” widerzugeben, das nicht wie das englische Paar sprachliche Bestätigung für Ryles These liefert, das Können sei eine Art des praktischen Wissens. (Ryle, *Der Begriff des Geistes*. Ditzingen: Reclam 1969, 26.)

“Wissen zu schmeicheln” could perhaps be rendered as “Knowing *when* to flatter” – it’s a question of being able to put flattery to good use, rather than simply being good at flattering. Analogous points could, I believe, be made about Swedish or Finnish.

entail ability.⁸ This challenge could not even be formulated in German or Swedish: she might of course very well retain her knowing how in the sense of knowing *how one plays the piano*, though she would lack it in the sense of being able to play.

3. SKILL VS. HABIT

Now, an essential part of Ryle's account of knowing how – of intelligent performance – is the attempt to contrast it with acting from *habit*. Ryle does not have very much to say about the meaning of the word “habit”, apparently assuming that we are all clear about its use. In fact, the uses of the word “habit” is a theme that seems to be largely neglected within contemporary analytic philosophy.

The word “habit”, of course, has a variety of uses; it is, we might say, a family concept. First, let me sketch some of its uses, and then I'll go on to look at the role the word plays in Ryle's account.

Ryle often qualifies the word “habit” with the word “automatic”. But, of course, there are many habits that are not, or need not be, automatic. Thus, the word “habit” will sometimes carry a favourable sense, as when we speak of someone having good work or study habits or of a person habitually being polite or generous.

Again, it may be someone's habit to take a walk in the afternoon or to have a drink before dinner, to go to Madeira in the spring, or to watch the World Cup in football every fourth year. When someone acts in one of these ways, we may say she acts “in accordance with habit”. This is a kind of habit that one may take up (though it may also be formed spontaneously). Someone may invoke such a habit as a justification for doing or not doing this or that; others may be willing to respect his habit, to try to accommodate it, or they may try to make him abandon his habit or make an exception from it, etc. Habits, here, are similar to motives.

Most people will have habits of this kind. In itself, attributing some such habit to a person is a neutral description, though we may on occasion accuse someone of giving such habits too prominent or fixed a role in governing his life. In other cases, the recurrence may be considered reprehensible, as when we speak of habitual drinking or (nowadays) smoking or using cocaine. The expression “true to habit” tends to carry a negative ring, as when it said of someone “True to habit, he left her for another woman”. All of these cases involve a recurrence of behaviour or

8 Jason Stanley and Timothy Williamson, “Knowing How,” *Journal of Philosophy* 98 (2001): 411–444. The relevant passage is on p. 416. Cited in Stina Bäckström and Martin Gustafsson, “Skill, Drill, and Intelligent Performance: Ryle and Intellectualism,” *Journal for the History of Analytical Philosophy* 5 (2017): 40–55. See p. 46, n. 7.

response, though the nature of the recurrence may vary: “often”, “at regular intervals”, “at given occasions”, etc.

These, it appears, are not the sorts of habit Ryle has in mind (though on one occasion he mentions smoking as an example of a habit). Ryle writes:

When we say that someone acts in a certain way *from sheer force of habit*, part of what we have in mind is this, that in similar circumstances he always acts in just this way; that he acts in this way whether or not he is attending to what he is doing; that he is not exercising care or trying to correct or improve his performance; and that he may, after the act is over, be quite unaware that he has done it. Such actions are often given the metaphorical label “automatic”.⁹

On other occasions Ryle talks about “mere”, “pure” or “blind” habit. In fact, the locution “she did it automatically” is frequently used in two quite different senses.¹⁰ In some cases, it is used to account for a misstep – to explain, that is, why someone acted contrary to his intentions. William James has the example of someone retiring to dress for dinner but absent-mindedly undresses and goes to bed instead. There is also the classical case of dumping one’s briefcase in the rubbish bin and continuing to work carrying the rubbish bag. Here we may speak about acting “from blind habit” or “from (sheer) force of habit.” These descriptions may function as an excuse or anyway as an explanation. What happens here is that an ability grounded in repeated performances misfires: one is able to act without attending to what one is doing and accordingly does *almost* the right thing: dumps one object in the right place and correctly holds on to another object, only the object one dumps and the object one holds on to have been switched. Although the automatism comes from doing something repeatedly, in the present case one does not repeat exactly what one did correctly on those former occasions, but something crucially different.

Acting automatically may also have almost the opposite sense. I may marvel that Joe, unlike me, always remembers to turn off the light and switch on the burglar alarm when he leaves the office. His explanation might be that he turns off the light and turns on the alarm automatically. Here, his action being automatic would account for his being reliable in this matter. Or I might be impressed that he is able to negotiate the London traffic while carrying on a deep conversation about Kant’s categories or a lively discussion about the recent crisis in Gaza. He tells me that he finds his way through the traffic automatically. Here its being automatic explains

9 Ryle, *The Concept of Mind*, 110; my italics.

10 A third use of “automatic” is in talking about tics: the kinds of senseless repetitive movements or sounds that people may produce half-voluntarily or involuntarily.

why his performance is effortless. In such cases, it could hardly be said that he acts out of blind habit or from the force of habit (though perhaps it could be said that he acts from pure or sheer habit). The word “automatically” is here used to characterize a degree of mastery. In fact, in practically all skilful performances, there are elements which do not require attention. Not to mention speaking.

On the whole, it does not seem fruitful to divide the things we do into those done attentively and those done automatically, but rather with most of the things we do there is an automatic aspect.

To say of someone that she was acting automatically, then, may be either to indicate a deficiency or a degree of mastery. Ryle seems unaware of this difference between uses. He writes:

When we describe someone as doing something by pure or blind habit, we mean that he does it automatically and *without having to mind* what he is doing. He *does not exercise care, vigilance or criticism*. After the toddling age we walk on pavements without minding our steps.¹¹

It would, of course, be nonsense to say that someone did not exercise care if her performance was spotless; saying so is a form of criticism. Ryle apparently overlooks the distinction between saying that someone does not exercise care and that she *does not need to exercise care* (which is a form of praise). It should be clear that it is only when it indicates a degree of mastery that habitual action should be of interest to Ryle. He wishes to contrast intelligent performance with a performance which is successful though not involving intelligence. Yet what marks off the thoughtful from the automatic performance on his account is *the ways on which the latter is deficient* through the lack of care or vigilance, through the degree to which it is “blind”. In fact, switching between the two senses of automatic action is evidently crucial to Ryle’s argument. If he were to concentrate on deficient performances, there would be no contrast to be made, and if he were to limit his consideration to successful performances, there would be no way of making the contrast. It is against the background of masterly performances stained by deficiencies that Ryle’s notion of intelligent action stands out. Now, of course there will be such cases, just as there will be cases of what for Ryle would pass as intelligent performances that are marked by oversights, missteps, etc. – *as well as* habitual performances that leave nothing to be wished. Clearly, the intelligent–habitual distinction, as conceived by Ryle, is problematic.

11 Ryle, *The Concept of Mind*, 42; my italics.

At this point, someone might wish to counter our argument as follows: habit is habit. It is one and the same thing whether or not it is manifested in an unexpected success or in a failure to carry out one's intentions. It is a practical matter that we speak of acting habitually only when a certain type of explanation is called for, as when someone happens to make a mistake or when someone succeeds without effort. According to this line of thought, regardless of how the word "habit" is used, something being habitual is a fact which either holds or does not hold of any specific piece of behaviour. We might call this type of argument an "ontological" move.

Now, such a move owes us an account of how cases of habit are to be identified without regard to the way the word "habit" is actually used. What might a "habit-in-itself" be apart from what we mean when we call something a habit?

Debates of this form tend to recur in philosophy, and I do not wish to go more deeply into the issue at present. However, it seems clear to me that this kind of move is not available to someone wishing to defend Ryle's distinction. The whole bent of his thinking is "anti-ontological". Someone wishing to single out habits as a distinct set of behaviours probably has something like the following in mind: when habits are formed, a causal link is set up in which certain (internal or external) clues trigger a form of behaviour, a link which bypasses the mediation of higher cognitive functions. What creates a habit is repeated doings. This causal history is what explains why one comes to act as one does without the aid of thinking. Thus, what looks like a smart performance may really be the product of complex machinery. The performing seal (to take one of Ryle's examples) is not really smart; its skilful handling of the ball is just the outcome of an extended drill. (How such a drill is achieved is usually left unsaid. It is simply assumed that we have to do with a machine-like performance, the precise nature of which does not matter).

Of course, we would not normally say that the seal is acting from habit, yet the seal's performance is taken to serve as a model of human habitual action.

Now there certainly are intimations of a causal-history conception of habit in Ryle's book. But this can hardly have been his well-considered position. Interestingly, in talking about habitual performances he on one occasion says that we give them "the *metaphorical* title 'automatic.'"¹² In characterizing this use of the word "automatic" as metaphorical, he is clearly distancing himself from the causal-history conception. (But, in fact, if we do not hold on to the idea of a causal history, there is no reason to lump the seal's performance with human habits.)

Rejecting the causal-history conception would be in keeping with Ryle's whole approach to the issue. This becomes evident if we focus on the knowing-how side

12 Ryle, *The Concept of Mind*, 111; my italics.

of the divide. His point about thoughtful action is precisely that the thinking going into it is not to be understood as a “clockable” episode preceding or accompanying the action – acting with thought or unthinkingly is a matter of *how* one acts.

Now it would of course be utterly confusing to suggest that in the intelligent–habitual distinction one side is defined by the manner of acting and the other by the causal history of the behaviour. The basis for the distinction would have to be unified.

Stina Bäckström and Martin Gustafsson, in their paper “Skill, Drill, and Intelligent Performance: Ryle and Intellectualism”, argue that Ryle is to be understood as making what they call a *formal* distinction between skilful performances and automatic behaviour. He is not arguing that skills are characterized by their causal history, but rather

what Ryle wants to bring out is that something is a skill only insofar as it is situated in a logical space where questions about learning are *applicable*—where such questions *make sense*. For example, with regard to the clown we can ask questions such as: “When did you learn to trip like that?”, “How did you learn it?”, “Who taught you?”, “Was it difficult to learn?”, and so forth. That these questions are applicable does not exclude that they may occasionally receive answers such as “I didn’t have to learn it, I just knew how to do it the first time I tried”, “Nobody had to teach me”, and so on. Rather, the central contrast is with merely automatic behavior in relation to which these questions make no sense at all (insofar as learning is conceived along Rylean lines, as involving not just mere drill but also stimulation of the pupil’s own judgment through criticism and example). If a piece of behavior is purely automatic, we can instead ask things such as “When did this become a habit with you?”, “Do you have any idea why you tend to respond like this?”, and so on.¹³

The point is well taken. It serves to clarify the distinction between skilled actions and behaviour that is automatic in a more literal sense. However, I wonder whether it is helpful in illuminating the contrast between skilled and habitual actions – which according to Ryle are automatic in a metaphorical sense. In terms of the two forms of habitual behaviour we contrasted, habitual action in the sense of effortless performance would obviously seem to belong in the logical space where questions about learning apply. Habitual actions in the form of missteps, on the other hand, as was suggested, can also be accounted for in terms of things the agent has learnt, though in this case the relation between learning and performance is of a different

13 Stina Bäckström and Martin Gustafsson, “Skill, Drill, and Intelligent Performance,” 47.

kind: the learning was misapplied. We would not ask, “Where did you learn to get your briefcase mixed up with the rubbish bag?” or “Was that a hard trick to pick up?”¹⁴

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14 Versions of this chapter have been presented at the zoom workshop “Doing, Saying, and Showing” organized by the NTNU, 1 June, 2021, as well as at the philosophy seminar in Trondheim, 24 November 2021, and the philosophy seminar in Åbo, 21 February, 2021. I am grateful to the participants in those seminars for helpful comments.



5. Is *knowing how* a natural kind?

Jonathan Knowles

Abstract Many philosophers think *propositional attitudes* like beliefs, desires, and states of *knowledge that* can only be properly attributed to language-using creatures and that explaining behaviour in terms of them is answerable to rational norms that have no echo in nature. Many philosophers also think this view is consistent with thinking that what Ryle called *knowing how* can be attributed to animals and hence is a natural psychological kind. This chapter argues this combination of views is less easy to sustain than is commonly thought.

Keywords knowing how | knowing that | natural kind | logical space of reasons | skilful coping

1. INTRODUCTION

This chapter is about whether we should view knowing how as an explanatory category of scientific psychology. My suggestion will be that, at least when understood as something beyond mere ability, there are reasons to answer “no”.

To appreciate what I think these reasons are, we need first to “zoom out” and look at a broader issue in the philosophy of mind. In everyday life we often explain people’s behaviour by attributing them mental states like beliefs, desires, hopes, fears, and so on. These are standardly understood by philosophers as *propositional attitudes*: a belief *that the war will end soon*, a hope that it will do so, and so on. One central issue here concerns the scope of such explanations: do they also apply to non-human, non-language-using animals? Can we make sense of, say, a dog having a *propositional attitude*? One might think only a being possessed of concepts and (ergo) language might be in a position to do that, since these things are arguably necessary to grasp propositions.¹ Another central issue, distinct but not unrelated, is whether such explanations are or could be *scientific*. Are explanations that involve everyday or *folk* psychological notions like belief and desire a

1 For a classic argument to this effect, see Donald Davidson, “Thought and Talk,” in his *Inquiries into Truth and Interpretation* (Oxford: Oxford University Press, 1984).

(putative) kind of scientific explanation? Or do they involve a quite different kind of understanding from that we find in science? Though different combinations of views on these questions are possible, a common opposition exists between two broad camps. In the first, folk psychological notions are viewed as at least the basis for a kind of (natural) scientific psychology, one that is also applicable to animals; this is the view of Jerry Fodor and most supporters of the computational-cum-representational view of the mind in cognitive science,² though some who call themselves “non-representationalists” also hold this combination of positions.³ The other camp, represented perhaps most famously in the contemporary debate by Donald Davidson and John McDowell, rejects both these ideas and sees in so-called folk psychological explanations a distinctive kind of rational normativity that is quite different from anything we find in the purely physical or biological realm.⁴ This normativity implicates the states attributed (belief, desire, etc.) in a web of conceptual understanding and, thereby, language. To invoke the terminology of Wilfred Sellars (as particularly McDowell has done): such states are standings in *the logical space of reasons* rather than *the logical space of causes*.⁵

What has all this got to do with knowing how? Following Gilbert Ryle’s seminal discussion,⁶ knowing how is often contrasted with propositional knowledge, or *knowledge that*. I know (or can come to know) *that* $25+167=192$, for example, while I know *how* to add in a way that seems to involve no specific knowledge that. Now it is standardly taken that knowing that *p* consists in part in believing that *p*. Insofar, attributing such knowledge to someone also seems like a part of our folk psychology. If that is the case, it seems one might also think, in line with the second camp above, that it does not figure in scientific explanations and that it does not apply to animals, at least in a literal sense. The question thus arises: what about *knowing how*?

Many seem to think, regardless of one’s stand on propositional knowledge, that knowing how is clearly applicable in the animal realm and thus also, presumably, that of natural science. Thus Hans Johan Glock writes:

2 See, e.g., Jerry Fodor, *Psychosemantics* (Cambridge, MA: MIT Press, 1987).

3 An example is Hans Johan Glock, “Animal Minds – A Non-Representationalist Approach,” *American Philosophical Quarterly* 50, 3 (2013).

4 Donald Davidson, *Essays on Actions and Events* (Oxford: Oxford University Press, 1980); John McDowell, “Functionalism and Anomalous Monism,” in *Actions and Events: Perspectives on the Philosophy of Donald Davidson*, ed. Ernie LePore and Brian McLaughlin (Oxford: Blackwell, 1985).

5 Wilfrid Sellars, “Empiricism and the Philosophy of Mind,” reprinted in his *Science, Perception and Reality* (London: Routledge, 1963); John McDowell, *Mind and World* (Cambridge, MA: Harvard University Press, 1994).

6 Gilbert Ryle, *The Concept of Mind* (London: Hutchinson, 1949), esp. ch. 2.

Few contemporaries would doubt that animals possess knowledge how, in Ryle's phrase. Intelligent animals know how to do certain things, not just because they are genetically pre-programmed or have been behavioristically conditioned, but also because they can learn how to do them off their own bats, whether by trial and error or through foresight and planning. The moot point is whether animals possess what Ryle called knowing that.⁷

The idea that animals possess knowledge how indeed seems to be widely assumed. For many this rests just on the idea that know-how is a matter of abilities or capacities to do certain things,⁸ and animals clearly have these. But more elaborated philosophical views of this kind have also been given. Thus, Hubert Dreyfus thinks that we and animals both exhibit what he calls *skilful* or *absorbed coping*, something that he understands as a form non-conceptual, non-propositional, and non-rational know-how. Alva Noë also sees both humans and animals as possessed of skilful know-how in virtue of their being perceivers. I will be discussing Dreyfus's and Noë's views in the sequel.

Notwithstanding this consensus (or apparent consensus) on the status of knowing how, I want to argue in this chapter that it is not something we should think of animals as possessing or as a category of scientific psychology – as a *natural kind*, as I shall put it.⁹ What I first and foremost want to argue here is that this applies insofar as one assumes that animals do not have propositional attitudes like belief, desire, and (propositional) knowledge – because they do not operate in the logical space of reasons that language makes possible – though my argumentation will also to an extent bear on this assumption. My view, I should stress, is not that animals are mere *automata* (or automata along with something like phenomenal qualia): we must, as Dreyfus and Noë claim, understand their activity in terms of embodied, skilful coping, which is a distinctive phenomenological-cum-biological category (I will be arguing). We could of course *call* this kind of activity “knowing how” if we wanted to, but my view is that this is not overall the best theoretical option.

Nor does it, it would seem, map onto what Ryle meant by the term. Much of what Ryle writes about knowing how strongly suggests he think that states of knowledge *generally* have to be understood as part of something like Sellars's logical space of reasons, even if they are essentially practical in nature and not reducible

7 Glock, “Animal Minds,” 226–227.

8 Cf., e.g., Michael Devitt, “Methodology and the Nature of Knowing How,” *Journal of Philosophy* 108, 4 (2011).

9 By “natural kind” here I mean merely a unified category that science might use for explanatory purposes, without being committed to this having an underlying unity or essence.

to ordinary propositional knowledge. Though the kind of skilful coping animals manifest is something recognizable in us too, nevertheless, given one accepts the autonomy of the folk psychological realm *à la* McDowell and Davidson, it is reasonable to withhold attributions of knowledge of any kind to animals. It is only our language and our rational way of being in the world that makes our skilful coping into genuinely cognitive, i.e., knowledge-involving activity.

I will be laying out this argument more fully in the following, which is divided into three further sections. In Section 2 I review the recent “knowledge how” versus “knowledge that” debate and try to unravel the significance of the recent “neo-intellectualist” position on this propounded by Jason Stanley and Timothy Williamson. Drawing on this and recent work by other authors, I will suggest that at least when it comes to the notion of knowing how that Ryle was concerned with, though this is distinct from ordinary propositional knowledge, it is also quite distinct from mere ability. Moreover, given the McDowell-Davidson view on the autonomy of folk psychology, I will argue that Rylean knowing how should also be seen as proprietary to the same logical space of reasons as other folk psychological notions.

In contrast to this are the views of people like Glock, Dreyfus, and Noë, who see talk of knowledge how as also applicable to animals. In Section 3 I take up the views of Dreyfus and Noë and what I see as attractive and indeed correct about them, relating them to the so-called *enactivist* movement in cognitive science more generally. But I will also argue that their appropriation of the idea of knowledge to characterize the phenomenon they rightly point up is suspect. In the fourth and final section I briefly address how we might understand the relationship between the notions of folk psychology understood in the autonomous way I am presupposing and the insights provided by enactivism.

2. THE RECENT “KNOWING HOW” VERSUS “KNOWING THAT” DEBATE

Most textbooks in epistemology begin by drawing a three-way distinction between types of knowledge – knowledge *that*, knowledge by *acquaintance* (with reference to Bertrand Russell), and knowledge *how* (with reference to Ryle) – only to focus exclusively on the first of these.¹⁰ This neglect was always problematic, but the

10 A further possibly distinct kind of knowledge is Elizabeth Anscombe’s non-observational *practical* knowledge: knowing *what one is doing* when one acts; cf. Anscombe, *Intention*, 2nd ed. (Oxford: Blackwell, 1963). A number of authors have discussed Ryle’s knowing how in connection with this – see, e.g., Will Small, “Ryle on the Explanatory Role of Knowledge How,” *Journal for the History of Analytical Philosophy* 5, 5 (2017), fn 19 – but I will not be commenting on this issue in this piece.

last two or three decades have seen a more explicit resurgence of interest in both knowledge by acquaintance¹¹ and not least knowledge how. The latter is plausibly the upshot in significant part of an article by Stanley and Williamson in which they argue – *contra* Ryle, they claim – that knowledge how is in fact fundamentally just a variety of knowledge that.¹² Talk of knowing how to do something can for them be analogised to talk of knowing where something is or when something starts. Someone who knows where the key is knows *that* the key is in some particular location, *L*, and similarly someone who knows how to ski knows *that* a certain way, *W*, is a way to ski. An obvious objection to this is that someone who can point at someone skiing and say, “That is a way to ski!”, though propositionally knowing something, does not really *themselves* know how to ski, at least in some central, “full” sense of the phrase. To answer this, Stanley and Williamson introduce the idea of a *practical mode of presentation* under which certain people will apprehend the relevant way and others not; only the former will be seen as knowing how in this full, “personal” sense. This does not, apparently, render the knowledge any less a form of knowledge that, though it does mean that one cannot fully understand it in exactly the same way one would understand non- (or at least less)¹³ practical forms of knowledge that.

This line has provoked a large debate as to whether personal knowing how is interestingly distinct from knowledge that, and, if so, how. For many, this kind of knowing how is not a form of knowledge that at all, but more like an ability to do something.¹⁴ To say I know how to ski just means I can ski, more or less, and will do so given I have the requisite desire, opportunity, etc. Indeed, in many languages,

11 See, e.g., Jonathan Knowles and Thomas Raleigh, ed., *Acquaintance: New Essays* (Oxford: Oxford University Press, 2019).

12 Jason Stanley and Timothy Williamson, “Knowing How,” *Journal of Philosophy* 98, 8 (2001). As we shall see below, their assumption that they are strongly in disagreement with Ryle is questionable.

13 Thus a further relevant issue is whether standard examples of *knowledge that* are themselves as divorced from action and performance as is often assumed in the contemporary debate. If propositional attitudes are partly to be understood in terms of such things in any case (as Ryle himself thought), this would be another reason to think that what he was (rightly) concerned with about the *intellectualist legend* (see below) does not automatically lead to a view on which knowing how is more basic than knowing that. For further discussion of this point and its implications, see Natalia Waights Hickman, “Knowing in the ‘Executive Way’: Knowing How, Rules, Methods, Principles and Criteria,” *Philosophy and Phenomenological Research* 99, 2 (2019), 324 ff., building on John Hyman, *Action, Knowledge and Will* (Oxford: Oxford University Press, 2015).

14 See, e.g., Devitt, “Methodology”; many also assume this was Ryle’s view, such as Stanley and Williamson; cf. also Paul Snowdon, “Knowing How and Knowing That: A Distinction Reconsidered,” *Proceedings of The Aristotelian Society*, 104, 1 (2004).

the very syntactic form “know how to X” has no equivalent and is often rendered most naturally as a translation of “can X” (thus in Norwegian it would be natural in most contexts to translate “I know how to ski” as “Jeg [I] kan [can] gå på ski [‘walk on skis’, i.e., ski]”). At the very least, the phrase “knowing how” in English seems to harbour a kind of ambiguity such that though on one reading it might be understood as a kind of knowing that, perhaps along the lines Stanley and Williamson suggest, on another it refers to abilities.

However, this kind of line is now generally rejected as a fully satisfactory account of knowing how, for it seems someone can have even personal know-how without the corresponding ability. To use an example of Stanley and Williamson’s: an expert concert pianist who has lost their arms in an accident cannot play – has lost the ability to play – but plausibly not the skill or know-how they have, even though this is not just a superficial knowledge of the kind I might express by pointing to someone playing the piano and saying, “*That* is how (or: one way) to play the piano!” It also seems there are some things I can do that one wouldn’t usually describe as involving any knowledge how to do, like wiggling one’s ears or even just raising one’s arm.¹⁵ It thus seems there is something distinctively cognitive or intellectual about certain kinds of skills as much as there is something practical about (at least) certain kinds of knowledge. Given this, the question naturally arises whether one should think of *mere* abilities, such as being able to raise one’s arm or the kinds of thing all are in agreement animals and small children can possess, as cognitive at all; as worth distinguishing with the label “knowledge” – at least, in a serious theoretical sense of the word. If one doesn’t need to do this, then presumably by general considerations of parsimony one should not. In other words, what seems philosophically or theoretically interesting about the idea of knowing how is precisely the idea of something that is both cognitive *and* practical.

Stanley and Williamson try to capture this two-sidedness of knowing how in the idea of propositional knowledge of ways grasped under a practical mode of presentation, but one needn’t buy into precisely their view to respect this feature. For example, Natalia Waights Hickman offers a slightly different account that is nevertheless inspired by Stanley and Williamson’s, allowing know-how to involve knowledge of rules and methods as well as propositions and otherwise arguing for a view of it as knowing “in the executive way” (what knowing “in the executive way” involves will be touched on below).¹⁶ But whatever exactly the more demanding account involves, as long as some such account can coherently be

15 Cf. Waights Hickman, “Knowing,” 315.

16 Waights Hickman, “Knowing.”

given,¹⁷ it seems we have a theoretical reason to preserve the epithet “knowledge” for things this account refers to and to regard mere abilities as “knowledge” in at best a secondary or non-literal sense.

There is also reason to believe that it was precisely such a richer notion that Ryle, in introducing the idea of knowing how to the philosophical discourse in the first place, was interested in, under a charitable interpretation.¹⁸ Ryle’s primary focus of interest in *The Concept of Mind* as a whole was intelligent action: action which can be performed more or less well or badly by the person carrying it out in such a way that they might be held accountable for it. His target thesis – *the intellectualist legend* – was the idea that such action might spring exclusively from considering a body of purely factual information or propositions, and the problem with this was that applying such information is itself an action that can be done more or less well, or intelligently, hence leading to a regress. “Knowledge how”, in one sense, was simply the label Ryle used to denote whatever was needed in addition.¹⁹

At the same time, he clearly also saw such knowledge as exemplified in skilful action of many different kinds, be that intellectual, musical, sporting, artistic, or other kinds of performances. A central distinction for Ryle is between such intelligent *skills* and what he called *habits*. Skills, in Ryle’s sense, involve several identifiable features in contradistinction to habits: one is *aware* of what one is doing; they are *robust* in being applicable in many different kinds of situation; they are acquired through *learning* from others and not merely through drill; and they are *multi-track* dispositions insofar as they are manifestable in activities other than the skilful performance itself, such as appreciating and understanding the activities of others or in instruction.²⁰ A sea lion that is trained to juggle balls on the end of its nose has a certain kind of skill or ability, as does the human clown. But the sea lion has a *mere* ability, or (in Ryle’s phrase) habit; it does not have know-how insofar as it is merely trained or drilled to do this trick on demand. The clown, by contrast, in having learned what they do from others, being able to reflect on what they are doing, aim to improve, and so on, does. In light of this it would be

17 Another slightly different line that can also be seen as seeking to respect the cognitive and practical nature of knowing can be found in Jennifer Hornsby, “Ryle’s Knowing-How, and Knowing How to Act,” in *Knowing How: Essays on Knowledge, Mind, and Action*, ed. John Bengson and Marc A. Moffett (Oxford: Oxford University Press, 2012).

18 Cf., e.g., Waights Hickman, “Knowing”; Hornsby, “Ryle’s Knowing-How”; Small, “Ryle”. Ryle himself was not always totally clear on this, sometimes seeming to offer a mere ability view (see Snowdon, “Knowing How”), but there is enough in his discussion more generally to suggest this would not be his most considered view (see also below in relation to his skills-habits distinction).

19 Hornsby, “Ryle’s Knowing-How,” 81–83.

20 Ryle, *The Concept*, 41 ff.; cf. Small, “Ryle”, 69–70.

at best premature to see Ryle's rejection of the intellectualist legend as involving an embrace of any kind of *anti-intellectualism* about knowing how (as Will Small puts it)²¹ – of a view on which skilful performance is divorced from the kind of conceptual, language-based rationality that (I am assuming here anyway) is necessarily involved in having more purely propositional knowledge.

In light of Ryle's distinction between skills and habits, some might be tempted to regard the sea lion, its impressive performance notwithstanding, as ultimately just a complicated machine or at least a locus of machine-like dispositions (possibly infused with some kind of purely phenomenal consciousness). However, one needn't see the sea lion as being a mere machine to uphold the Rylean distinction. Rather, what is arguably crucial is that knowing how proper, though practical, is in the *logical space of reasons*. Though inextricably interwoven with their body, the clown's antics can be seen as reason-governed: as meaningful and pointful, for them as well as others, in a way that it is difficult to see what any animal does as being. This doesn't mean that they would be able to articulate these reasons in context-independent ways, let alone during a show; only that they could, possibly in advance or in retrospect, with some effort and in context-dependent ways, be articulated.²² That is what makes the clown's performance a genuine form of knowledge or as manifesting such knowledge: knowledge how to clown.

There is of course scope for push-back here. Though it seems that Ryle's writings on knowing how, at last when combined with the McDowell-Davidson view on knowledge more generally, do suggest we should not see it as a category of a psychological natural science, this does not in and of itself show that other views of knowing how are not possible; that it is not a wider natural phenomenon, genuinely predicable of animals and essential to understanding their experiential lives, regardless of whether they possess propositional knowledge or not. In the next section I will consider two lines which seek to motivate this idea.

3. KNOWLEDGE HOW AS SKILFUL COPING AND AS PERCEPTUAL UNDERSTANDING

Hubert Dreyfus, unlike Ryle, does defend what one might (in Small's terminology) call an anti-intellectualist view of knowing how; at the same time he does not see it as a bare ability or, at least, as a pure disposition that might be understood mechanistically. Inspired by the phenomenological works of Martin Heidegger

21 Small, "Ryle".

22 Again see Waights Hickman, "Knowing"; cf. also Neil Gascoigne and Tim Thornton, *Tacit Knowledge* (London: Acumen, 2013), e.g. 76 ff.

and Maurice Merleau-Ponty, for Dreyfus, knowing how is most basically a distinctive kind of non-rational, non-propositional, non-conceptual kind of activity that constitutively involves both the body and the world in its exercise but, importantly, not the kind of reflective, conscious kind of thought characteristic of human reasoning²³ – a kind of reasoning that nevertheless for many years provided the model in cognitive science and AI for what cognition quite generally is, something he also famously criticizes.²⁴ Dreyfus calls this kind of interaction “absorbed coping” or “skilful coping.” Absorbed coping is what constitutes our most basic intentional contact with the world and is something we find in animals and young children as well as adult humans. Importantly for Dreyfus, human experts – musicians, sportspeople, and so on – also exhibit this mode of operation in their performances; indeed, such performances can even be disrupted by concurrent explicit, “rational” thought (he uses as an example the baseball player Chuck Knoblauch’s “yips”).²⁵ For Dreyfus, absorbed coping is knowing how in its most primordial form, and insofar as this is ubiquitous in the animal world it seems reasonable to see his view as one in which know-how is to be seen as both a distinctively psychological and a natural kind.

Though his concerns and terminology differ significantly from Dreyfus’s, Alva Noë can also be seen as cleaving to the idea that knowledge how is a natural kind. For Noë, knowing how is intimately involved in sensory perception. Again inspired by phenomenological philosophy, Noë defends a so-called *sensorimotor* theory of perception according to which perceiving involves not an apprehension of sense data or material objects in the world, nor the entertaining of a thought or representational content about such things, but rather an active understanding of sensorimotor regularities or laws.²⁶ The cup you see in plain view in front of you (as we ordinarily say) is not in fact *fully* in view: think of the side facing away from you or the bottom of it resting on the table. You do see it, the cup, but this is in virtue of a kind of tacit, active awareness of what you would see (or what sensations would obtain) if you or your eyes or it moved in various specifiable ways. Importantly, this applies however circumscribed one attempts to make one’s

23 Cf. Hubert Dreyfus, “Overcoming the Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise,” *Proceedings and Addresses of the American Philosophical Association* 79, 2 (2005).

24 Cf. Hubert Dreyfus and Stephen Dreyfus, *Mind Over Machine: The Power of Human Intuition and Expertise in the Era of the Computer* (New York: Free Press, 1986).

25 Cf. Wikipedia, s.v. “Yips”, 31.10.22. <https://en.wikipedia.org/wiki/Yips>.

26 Cf. Alva Noë, *Action in Perception* (Cambridge, MA: MIT Press); Kevin O’Regan and Alva Noë, “A Sensorimotor Account of Vision and Visual Consciousness,” *Behavioral and Brain Sciences* 24, 5 (2001): 883–917.

awareness. Perceiving the colour of the cup essentially involves understanding how that varies in relation to the cup's curvature and shadowing, likewise its shape. Nor can we resort to restricted regions of uniform colour or form at the cup's surface: perception is, as Noë puts it, "virtual all the way in";²⁷ in that whatever we can be said to perceive *always* involves a background of movement, sensation and tacit awareness of how these relate, even if this is only at the level of the saccadic movements of the eyes. This does not imply that there can't be better and worse conditions under (or perspectives from) which to ascertain what something is, what shape and colour things have and so on. Nevertheless, no experience just *reveals* anything to us, independently of how we are disposed to act, to move and, as it might be, to manipulate the object in question. For Noë, then, perception presupposes understanding, and this in turn is a kind of know-how.²⁸

Unlike Dreyfus, Noë also holds that such knowledge is conceptual, because he thinks concepts can be realized in non-linguistic episodes of understanding, as well as linguistically mediated ones.²⁹ In light of this, his view is not perhaps appropriately classed as an "anti-intellectualist" account of knowing how, as Dreyfus's is. I suspect this difference may be more a matter of how one understands the notion of a "concept" than a substantive one, but in any case I will not investigate its consequences further here. Whatever one makes of it, the two views have something important in common, not least with respect to our question.

Now as accounts of what experience of the world in its most basic form involves I have a great deal of sympathy with these lines of thought. They can be seen as part of a more general *enactivist* approach to cognition, in the sense first put forward by Francisco Varela, Eleanor Rosch, and Evan Thompson, ideas that have been extended, clarified, and refined in the subsequent decades.³⁰ For enactivism, this experiential contact has to be seen not representationalistically in terms of internal symbol manipulation, but rather as dynamically structured cycles of activity embracing brain, body, and world. A crucial further aspect of enactivism, at least of the Varela et al. variety, is the idea of an autonomous agent seeking actively to create meaning – indeed, in a certain sense, simultaneously to create both itself

27 Noë, *Action*, 193.

28 See, e.g., O'Regan and Noë, "A Sensorimotor Account," 946, for an explicit statement to this effect.

29 See Noë, *Action*, ch. 5, also Noë, "Concept Pluralism, Direct Perception, and the Fragility of Presence," in *Open MIND: 27 (T)*, ed. Thomas Metzinger and Jennifer Windt (Frankfurt am Main: MIND Group).

30 Cf. Francisco Varela, Eleanor Rosch, and Evan Thompson, *The Embodied Mind: Cognitive Science and Human Experience* (Cambridge, MA: MIT Press, 1991); Evan Thompson, *Mind in Life* (Cambridge, MA: Harvard University Press, 2007); Ezequiel Di Paulo, "Autopoiesis, Adaptivity, Teleology, Agency," *Phenomenology and the Cognitive Sciences* 4, 4 (2005).

and its meaningful environment. This idea of autonomy is in turn linked to a non-Darwinistic understanding of living organisms through the theory of *autopoiesis*, as well as a *developmental systems* theoretic approaches to evolution.³¹ Enactivism has also more recently been connected to a highly influential conception of brain functioning known as *predictive coding* which stresses the centrality of endogenous activity of the brain aimed at maintaining internal organismic homeostasis in the face of a hostile world in determining the contents of experience.³² This is not the place to go into detail about enactivism and these and other connections (such as to Gibson's ecological psychology).³³ But that the paradigm at least today commands respect as an alternative to classical representationalist cognitive science seems beyond doubt, and many would see it as inherently more promising than the latter in taking seriously the subjective, lived dimension of cognition, both through its stress on biological autonomy and its acknowledgement of phenomenological philosophy as an integral part of its empirical research programme.

However, one thing is being a cogent or at least promising form of cognitive science; another question is whether, as Dreyfus and Noë in effect maintain (and indeed many other enactivists), these ideas in themselves home in on a phenomenon worthy of the epithet of knowledge, specifically knowledge how.

Some enactivists have answered this question negatively. According to Dan Hutto and Eric Myin, enactivism should leave behind *all* "mentalist" notions in explaining basic cognition, including all notions of content and knowledge.³⁴ Only when it comes to human, linguistically mediated cognition are these needed to account for the phenomena. My overall view is in fact similar to Hutto and Myin's, but my reasons for scepticism towards seeing know-how as a natural kind of enactivism are different from theirs.

Before presenting these, I do want to emphasize again my fundamental sympathy with the broad ideas behind Dreyfus's notion of absorbed, skilful coping and the similar ideas in Noë. With their origin in phenomenological analysis, and

31 The theory of autopoiesis is central to the original enactivist movement. On developmental systems theory, see Richard Levins and Richard Lewontin, *The Dialectical Biologist* (Cambridge, MA: Harvard University Press, 1985), and Thompson, *Mind in Life*, ch. 7.

32 Jelle Bruineberg, Julian Kiverstein, and Erik Rietveld, "The Anticipating Brain Is not a Scientist: The Free-energy Principle from an Ecological-Enactive Perspective," *Synthese* 195, 6 (2018).

33 For a more detailed if opinionated overview of the terrain here, see Jonathan Knowles, *Representationalism, Experience, and Metaphysics: Towards an Integrated Anti-Representationalist Philosophy* (Cham, Switzerland: Springer, 2023), ch. 2–3.

34 Cf. Dan Hutto and Eric Myin, Erik, *Radicalizing Enactivism: Basic Minds Without Content* (Cambridge, MA: MIT Press, 2013); also Hutto, "Knowing What? Radical Versus Conservative Enactivism," *Phenomenology and the Cognitive Sciences* 4, 4 (2005), which critiques Noë's view in particular.

in fitting with the central tenets of enactivism, I see these as providing important insights into the nature of cognition and to constitute a distinct advancement on classical representationalism. But the way these ideas are played out by these authors, especially Dreyfus, are problematic.

Along with several other authors,³⁵ I think Dreyfus errs in thinking that skilful coping constitutes a primordial intentional contact with the world exhibited by all sentient beings that constitutes a *basis* for our distinct capacity to think truth evaluable thoughts and that human conceptual activity is in turn a peculiarly intellectual or “mental” mode of operation, one that can even often disturb absorbed coping. To start with, this seems phenomenologically false. As James McGuirk has urged, though in some cases one can certainly overthink what one is doing and thereby perform sub-optimally (as in the case of Chuck Knoblauch, allegedly) it is not *in general* true that thought and absorbed coping with the world stand in opposition to one another. He gives the example of teaching as a case of expert skilful coping where, though one is not necessarily reflecting on what one is doing, one is very clearly still thinking – indeed thinking very hard! As he writes about this case:

[F]ar from being mindless, such coping seems to involve a heightened sense of oneself as minded inasmuch as the situation calls for an intensely minded attention to what is going on. In other words, absorbed coping in situations such as this should better be understood as a sense of mindful self-presence that transcends programmatic reflective thinking by better integrating the agent as a unitary whole in action.³⁶

In other words, what we think of as higher-level cognition is implicated in much that at the same time would qualify as absorbed coping in its performance. Anyone who has played a sport or a musical instrument or created something with some reasonable level of proficiency will surely testify to the same.

This point bears in turn on our question. What it fundamentally brings out is that it is wrong to see skilful coping as in any way opposed to our distinctively human intellectual activity: to see these as two radically different varieties of intentionality. Rather, in us humans, certain kinds of absorbed coping are *also* precisely rational and/or intellectual. McDowell also presses this point against Dreyfus.³⁷

35 E.g., Gascoigne and Thornton, *Tacit Knowledge*, ch. 5; James McGuirk “Dreyfus, Merleau-Ponty and the Phenomenology of Practical Intelligence,” *Norsk filosofisk tidsskrift* 48, 3–4 (2013); John McDowell, “What Myth?,” *Inquiry* 50, 4 (2007).

36 McGuirk, “Dreyfus,” 299.

37 “What Myth?”

He too does not deny the phenomenon of absorbed coping – that much of our rationality is manifested in skilled performance and sensorimotor interaction with external objects. However, though this means we will not be able discursively to express all our thoughts in context-independent terms, often having to resort to irreducibly demonstrative concepts to articulate what we are doing and how (viz. “I am doing *this*...in *this* way...”), it does not follow that there is something with a content of a distinctively different type from that involved in more abstract thought in these sorts of cases.

For me the view on our question that emerges from this consideration is that outlined in the previous section: that on which genuine knowing how, along with the more standard propositional attitudes like knowledge that and belief, should be seen as belonging to the logical space of reasons and of language-using creatures. This doesn't of course follow from the phenomenological objection to Dreyfus alone. However, given we accept this, my view does seem to me to provide a better overall explanation of the situation than the anti-intellectualist alternative, i.e., that on which animals also possess genuine know-how (in the literal sense). Animals do exhibit what Dreyfus calls skilful, absorbed coping. Moreover, this may involve quite sophisticated capacities and employment of neural resources, as well as being in a biological sense meaningful. Hyenas bringing down a straggling antelope, for example, are without doubt intensely engaged in what they are doing in ways that presuppose high levels of bodily and brain functioning as well as fine-tuned coordination between them. The world “for them”, of their experience, is not the world of the scientific observer charting their activity, but is charged with its own idiosyncratic significance and meaning. But should we see them as *knowing how* to do what they are doing – as we would be doing in a somewhat analogous situation?

If we do say this, we would need to see the kind of phenomenon they are exhibiting as a kind of basis upon which our distinctively linguistically mediated kind of mentality is somehow built. But this strikes me (and many others) as problematic. To start with, it seems to require that we can understand the normativity of our thought and talk in terms of the biological normativity that is involved in something like hyenas hunting an antelope straggler. And here it seems the famous Sellarsian problematic of “givenness” raises its head – that or (or possibly in addition) the more general problem of how to naturalize full intentionality of the kind all agree humans instantiate. Are we, in engaging in the intellectual activities we do, somehow epistemically in contact with a kind of non-conceptual content at the level of our *purely* embodied interactions? Here is not the place to go into that issue in depth, but reflecting on it has led many to doubt that we can so much as make sense of a meeting between the conceptual and non-conceptual such that the

former can be somehow rationally based on the latter.³⁸ Alternatively, one might think that our intentionality simply *reduces* to complex patterns of pure embodied interactions – a form of what McDowell calls “bald naturalism.”³⁹ From the perspective of the current chapter, however, such a line is not dialectically germane; for I am assuming that propositional attitudes have their home in the logical space of reasons and that only linguistic creatures can operate in this and then asking about the status of knowing how. I would go further and argue that there are positive reasons for thinking that the realm of propositional thought *is* normatively *sui generis* in this way, but the conditional claim is all I am strictly speaking concerned with here.

The upshot seems to be, at least given the assumptions we are operating with, that the idea that knowing how should be extended to beings that lack the capacity for propositional thought looks unmotivated. Dreyfus’s idea of a strict divide between absorbed coping and intellectual activity is a fiction. Moreover, it seems we cannot explain *our* kind of rational capacities, either knowing how or knowing that, in terms of something else purely non-rational or non-intellectual. Rather than see what animals have as a form of knowing how, then, I suggest a more streamlined view is one on which this notion is reserved for us. This leaves us admittedly with a kind of puzzle about how we relate to the animal world of pure embodied coping, insofar as we are (I would want to maintain anyway) clearly a *kind* of animal; and relatedly how we should conceptualize such “worlds”. But I also believe we can at least start to give answers to those questions (see Section 4).

Although Noë’s view is different from Dreyfus’s and does not involve the kind of commitment to the “mindlessness” of human expert performance, it should hopefully be clear how the argumentation above also applies to Noë’s view construed as an account of the idea of know-how as a natural kind. Briefly, his allegedly “conceptualist” picture notwithstanding, there seems no way he, any more than Dreyfus, can deny the problems of givenness or bald naturalism; and so, assuming that propositional attitude normativity is *sui generis* and restricted to language using creatures, my claim again is that the more streamlined view – in light of the phenomenological facts – is one which restricts literal attribution of know-how to this realm.

38 For classic elaborations of the problem, see Sellars, “Empiricism,” and McDowell, *Mind and World*.

39 Cf. *Mind and World*.

4. MEDIATING BETWEEN THE LOGICAL SPACE OF REASONS AND ENACTIVIST COGNITIVE SCIENCE

I have been arguing that if one holds a view on which propositional attitudes like beliefs and desires are the preserve of humans and the logical space of reasons, then the idea that knowing how by contrast is not in fact seems, at best, unmotivated and theoretically profligate. Knowing how is not plausibly just ability, nor is it simply “mindless” coping; moreover, insofar as one might seek to ground our kind of knowing how in a kind of distinct animal form of this, one runs straight up against the problems of mythical givenness and bald naturalism.

Establishing that is the main aim of the current chapter. Nevertheless, the view might seem somewhat unstable as an overall positive package. If we alone possess knowledge how, how should we think of animals that merely exhibit “absorbed coping”? What exactly *is* absorbed, skilful coping, if it is not a form of knowing? And how does it relate to what *we* are doing in performing skilfully, i.e., in genuinely knowing how? We don’t want to slide from a view in which we are a rather special kind of animal to one in which we are not an animal at all. But how is this slide to be avoided?

I believe a proper understanding of enactivism and of the relationship between this and the “logical space of reasons” in which knowledge, of all kinds, has its home can give answers to these, admittedly good, questions. Enactivism’s central ideas as I see them are not dependent on the idea of a knowledgeable subject; what these rather concern is an autonomous, *biological* subject that through its bodily interaction with the physical world brings forth both itself and a meaningful environment. In this way, the idea of a *perspective on a world* is made sense of in a naturalistic way, and this is something that we will want to relate to our own mentality in order to illuminate it and anchor it in the natural world. But illuminate and anchor, not reduce. We are not doing something *ontologically* different from animals in behaving in the skilful way we do (they can be just as *competent* in their own distinctive ways), but we are doing so in a different way: in a way that opens for a distinctive kind of normative assessment. In virtue of this it is appropriate to talk of belief, knowledge, and the rest – which thus take their place in a logical space of reasons that has “no echo” in the physical or even a biologically meaningful world.⁴⁰

There is more one could say here to fill out and further embellish these thoughts; though I don’t have space to go into much detail here I would like to add a little more in conclusion. As I see things, this non-reductive naturalistic picture depends

40 The quoted phrase is from Davidson, *Essays*, 231.

on a kind of relation of mutual illumination between the two levels in question, the naturalistic and (as we might call it) logico-linguistic level. Not only do we have to appeal to enactivist ideas to vindicate our place in nature, but it is also necessary to invoke our peculiarly linguistic form of mentality to underwrite this vindication. An important insight here is Hans Georg Gadamer's idea that what we humans relate to is precisely a *world* and not a mere environment or *Umwelt*, as non-linguistic animals do.⁴¹ Like other animals, we do relate to an *Umwelt*, one that is peculiarly human in being relative to our sensory and somatic capabilities, but also one that is understood in terms of categories like *object* (tables and chairs) and *property* (brownness, made of wood) and *fact* or *truth*. It is thus a world about which one can have knowledge and act intelligently, i.e., for reasons. For the postulation of a mere animal's *Umwelt* – something not in itself conceptually articulated in this way – to shed explanatory light on our world, it must be brought into connection with a living perspective on a world in Gadamer's sense. Hans Jonas's words "life can be known only by life"⁴² can also be instructive here. Though these are often taken to point out something negative – that a disembodied, analytic perspective is insufficient to understand living phenomena – they can and should in my view also be seen as emphasizing the positive thought that living things like us humans, that exhibit understanding, or knowledge, *can* understand (or at least seek to understand) other living things in a way that builds on precisely this commonality between us: the lived perspective. In doing this, we appreciate that we are natural beings: without the connection to the idea of the perspectival *Umwelt* we would be without an anchoring in the natural world. But at the same time, without our *understanding*, our *knowledge*, manifested primarily in the world we inhabit but something we can also apply to understanding other species' *Umwelts*, the explanatory value of the latter would be nugatory.

These are admittedly difficult issues, and more could be said about them (something I try to do elsewhere).⁴³ My main remit here has in any case been to argue that if one accepts that belief and propositional knowledge is the preserve of human beings, and is not scientifically explicable, then there is a lot less reason to think – *pace* it would seem what very many do think, and think is relatively uncontroversial – that knowing how nevertheless can and should be seen as a psychological natural kind.⁴⁴

41 Cf. McDowell, *Mind and World*, 115.

42 Jonas, *The Phenomenon of Life: Toward a Philosophical Biology* (Illinois: Northwestern University Press, 2001), 91 (the phrase is discussed by Thompson in *Mind in Life*, 163 ff.).

43 Knowles, *Representationalism*, ch. 2–3.

44 An ancestor of this chapter was presented at the *Doing, Saying, and Showing* conference in June 2021, and I would like to thank the participants on that occasion for their questions and

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6. Paying attention alone and together: The role of attention in the formation and cultivation of habits

James McGuirk

Abstract Against the idea that habit involves thoughtless responses to external stimuli, phenomenologists have argued that habits are flexible and dynamic. I develop this idea by clarifying the role of attention in the development of habitual knowing. I argue that habits should be understood as capacities to attend to parts of the world in sharply focused or high-resolution ways. In the final part of the chapter, I provide some hints as to how the genesis of habit as high-resolution attending is cultivated in interpersonal and social educational settings.

Keywords attention | habit | embodied knowing | agency | imitation

1. INTRODUCTION

The purpose of this chapter is to offer some reflections on the role of attention and attending in the formation, cultivation, and maintenance of habits. Section 2 makes the case for habit, against its detractors, as central to a dynamic form of world knowing. Against the idea that habit involves thoughtless, automatic responses to external stimuli, I follow the lead of phenomenologists such as Maurice Merleau-Ponty, Paul Ricoeur, and Gaston Bachelard in arguing that habits are flexible, dynamic, and innovative. In Section 3, I deepen this analysis by clarifying the role of attention in the development of habitual knowing. In this sense, I argue that habits should be understood not only as incorporated patterns of behaviour, but as capacities to attend to parts of the world in high-resolution ways. In the fourth section of the chapter, I draw on the developmental psychology of Michael Tomasello and the educational philosophy of Hannah Arendt in order to provide some hints as to how the genesis of habit as high-resolution attending is cultivated in interpersonal and social educational settings.

2. HABIT AS EMBODIED AGENCY

The relationship between habit, knowledge, and rational agency has been a subject for philosophical reflection for as long as such reflection has existed. Aristotle famously makes habit and habituation central to the formation of the mind and the formation of character. To develop habits is to cultivate a second nature through which man becomes conformed to the social and political environments which are home to him. In this sense, habits are considered irreducible in developing moral virtue and practical knowledge more generally. Modern philosophy, by contrast, has tended to take a bleaker view of habit, not in spite of Aristotle's characterization of it as second nature but for precisely this reason. Kant is especially brutal in his assessment of habit, which he states,

...deprives even good actions of their moral worth because it impairs the freedom of the mind and, moreover, leads to thoughtless repetition of the very same act (monotony), and so becomes ridiculous...As a rule, all habits are reprehensible.¹

Even a philosopher like Gilbert Ryle, who otherwise rejects the assimilation of intelligence with propositional thinking, dismisses habit as the erasure of rational agency and its replacement by a naturalistic stimulus/response logic. To act from habit, for Ryle, is “to act automatically and without a mind to what one is doing.”² It dispenses with intelligence rather than developing it. The point for Kant and Ryle has little to do with whether habits are good or bad. They both acknowledge that habits may be either. The problem is rather that habit entails reflexive, automatic action which has lost any connection it may once have had with reflection of either a theoretical or practical stripe.

This conception of habit is not limited to philosophy. It is mirrored in the long-held orthodoxies of psychology, which tends to understand habits as any “fixed way of thinking, willing, or feeling acquired through previous repetition of a mental experience.”³ Habits, thus construed, are conditioned responses that are formed through persistent exposure to environmental stimuli, which are then mindlessly triggered by these same stimuli in our day-to-day lives.⁴ For both the philosophers

1 Immanuel Kant, *Anthropology from a Pragmatic Point of View* (Cambridge: Cambridge University Press, 2006), 40.

2 Gilbert Ryle, *The Concept of Mind* (Middlesex: Penguin Books, 2000), 42.

3 B. R. Andrews, “Habit,” *American Journal of Psychology* 14, no. 2 (1903): 121.

4 A. Graybiel and K. Smith, “Good Habits and Bad Habits,” *Scientific American* 310, no. 6 (2014): 38–43.

and the psychologists, knowing and rational agency are diminished or destroyed through the kind of naturalization that is involved in habit acquisition and habitual performance, inasmuch as these allow our agency to succumb to the draw of an external environment rather than to centre ourselves through reflection and thoughtful judgement.

Such conceptions of habit are perfectly recognizable in our ordinary ways of understanding the matter, to the point that we will often explain our mistakes by saying that we were “acting from habit”. Take as an example the act of switching on a light when one enters a dark room. I once did this upon entering a room where my wife was developing photographs, much to her annoyance. What is worse, I knew that the room was presently being used as a dark room. I didn’t switch on the light to deliberately ruin the photographs, of course, but it was as if the impulse to switch on the light took over to the point that my underlying awareness of the conditions needed to develop photographs was overridden. This kind of performative compulsion is similar to what psychologists call utilization behaviour or the compulsion to use objects even when such use is inappropriate.⁵ I have developed the habit of switching on lights when entering dark rooms, a behaviour that, for the most part, serves me well. But while this habit obviates the need to reflect on the particularities of apparently comparable situations, it does so at the cost of numbing my awareness of the kinds of subtle change that might render the performance inappropriate in a specific situation.

This simple example highlights several of the intuitions that underlie Kant’s and Ryle’s understanding of habits, namely that they are thoughtless responses to external triggers that fail to discern, or discern only very slowly, relevant contextual changes. In characterizing habits in this way, they draw a strong line of demarcation between rational agency on the one hand and nature on the other. The former is the domain of intelligence and freedom, and the latter of deterministic cause and effect. The second nature of habit can, as such, only be conceived as the loss of part of our human nature to the natural world.

This conception of habit contrasts strongly with analyses of habit found in several phenomenological thinkers, such as Maurice Merleau-Ponty,⁶ Paul Ricoeur,⁷ and Gaston Bachelard.⁸ It is not so much that phenomenologists reject the idea of an integration of agency and nature as that they reject the negative implications Kant and Ryle draw from this assimilation. For the phenomenologists, habit is a

5 L. Iaccarino, S. Chiefi, and A. Iavarone, “Utilization Behavior: What Is Known and What Has to Be Known?” *Behavioural Neurology* 2 (2014): 297128. <https://doi.org/10.1155/2014/297128>

6 Maurice Merleau-Ponty, *The Phenomenology of Perception* (Oxford: Routledge, 2012).

7 Paul Ricoeur, *Freedom & Nature* (Evanston: Northwestern University Press, 2007).

8 Gaston Bachelard, *The Intuition of the Instant* (Evanston: Northwestern University Press, 2013).

central way in which agency, broadly construed, is cultivated and through which it comes to expression. This claim is itself anchored in their sense of the irreducible role of embodiment for the constitution of subjectivity. To be a subject is to be an embodied perspective on a world that manifests itself to the subject and with which the subject participates in the creation of meaning through purposive movement and engagement. Through such purposive movement, we conform ourselves to the world such that over time, these processes of formation produce patterns of acquaintance and resonance between subjects and the world that are better known as habits. Now, it is important to note that when the phenomenologists (especially Merleau-Ponty) speak of habits, they have in mind motor skills, for the most part. These can encompass both basic skills, such as navigating a crowded street without bumping into others, and more complex ones such as dancing or playing the piano. In the case of Merleau-Ponty, these examples are employed with the explicit goal of supporting his phenomenological analysis of consciousness as ineradicably embodied. But the analysis can easily be extended to encompass habits more broadly construed both because habits are behaviours that are produced in specific circumstances or environments and because they are, as such, expressions of the meaningful encounter between the subject and the world. According to this argument, habits involve the mutual transformation of mind by nature and of nature by mind, a relation of mutuality that makes it unhelpful to reduce habit to either mind or nature. Rather, habits are enacted in the space of encounter between the two. This means, in turn, that knowing and rationality are not disembodied accomplishments, but come to expression in the interface between mind and nature. Roughly 100 years before the publication of Merleau-Ponty's *Phenomenology of Perception*, the French philosopher Felix Ravaisson (1813–1900)⁹ had made a similar point when he noted:

In descending gradually from the clearest regions of consciousness, habit carries with it light from those regions into the depths and dark night of nature. Habit is an acquired nature, a second nature that has its ultimate ground in primitive nature, but which alone explains the latter to the understanding.¹⁰

Ravaisson acknowledges here an opacity in habit but insists that this should not be understood as a withdrawal “from the intelligent activity from which they [habits]

9 While perhaps an obscure figure for many contemporary audiences, Ravaisson's seminal work *De l'habitude (On Habit)* from 1838 was enormously influential on several later philosophers' work on the theme including Henri Bergson and Maurice Merleau-Ponty.

10 Felix Ravaisson, *On Habit* (London: Continuum Press, 2008), 59.

were born”,¹¹ but rather as the transformation of the natural by the rational rather than the loss of the rational to the natural.¹² Habituation involves a naturalization of the mind, but it is also a spiritualization of nature and should be considered a way in which knowing and rational agency becomes materialized in the world.

This point is developed by the phenomenologists when Merleau-Ponty claims that habit involves a “reworking and renewal of the corporeal schema”,¹³ or when Ricoeur tells us that it involves “a new structuring in which the meaning of elements changes radically”.¹⁴ In their respective emphases, Merleau-Ponty and Ricoeur tell us that the mutual transformation of each other of mind and world conform the body to the world at the same time that this adaptation facilitates a new *gestalt*ing of the environment for the subject. Through this process, the subject comes to know the world and to know itself as a point of view on the world that can bring the world to presence in novel and unique ways.

Thus construed, the phenomenological understanding of habit challenges Kantian and Rylean assumptions about the implications of the naturalization of mind in habit. Since rational agency is understood as an embodied phenomenon, it is no longer the case that naturalization poses a threat to such agency. Rather, agency is expressed *as* bodily. As Merleau-Ponty puts it,

The body has understood and the habit has been acquired when the body allows itself to be penetrated by a new signification, when it has assimilated a new meaningful core.¹⁵

In a similar fashion, Ricoeur rejects the idea that habits are unthinking patterns of automatic behaviour that are simply drawn forth by external stimuli in a behaviouristic fashion. He acknowledges that habitual behaviour can become unthinking or automatic, but insists that this is “an ossification inscribed in habit, not its normal destiny”.¹⁶ To acquire a habit is to acquire a way of navigating a sector of the world. It is to enable the agent to focus on the salient features of a

11 Ravaisson, *On Habit*, 57.

12 James McGuirk, “Phenomenological Considerations of Habit: Reason, Knowing, and Self-Presence in Habitual Action,” *Phenomenology & Mind* 6 (2014): 112–121. See also James McGuirk, “Metaphysical and Phenomenological Perspectives on Habituality and the Naturalization of Mind,” in *Analytic & Continental Philosophy: Methods and Perspectives*, ed. Sonja Rinofner-Kreidl and Harald Wiltsche (Berlin: DeGruyer, 2016), 207. <https://doi.org/10.1515/9783110450651-014>

13 Merleau-Ponty, *Phenomenology of Perception*, 143.

14 Ricoeur, *Freedom & Nature*, 287–288.

15 Merleau-Ponty, *Phenomenology of Perception*, 148.

16 Ricoeur, *Freedom & Nature*, 300.

situation and to adapt their behaviour in response to what the situation calls for. In this sense, the dialectic between naturalization and spiritualization argued for by Ravaisson is developed as a dynamism that is also a temporal unfolding. Habit is closely tied to memory as the recollection of past experience and of the patterns of meaning and of response that lies therein, to be sure. But any given situation will always be a variation of what was previously encountered and so habit, if it is to be useful at all, must be as awake to the unfolding present as it is retentive of the sedimented past. Another way of putting this point is to say that habit entails a productive tension between past and present or between attention to the familiar and unfamiliar aspects of the lived situation. When this does not occur, either because of inattention on the part of the agent or as the result of a corrupted environment,¹⁷ habit will take the form of “mere” automaticity and will simply slot into a pattern that repeats unthinkingly. In this sense, inertia triumphs over life and the agent becomes “buried under habits,”¹⁸ which is to say that the unity of habitual action, which is a unity of subject and world, becomes atomized and fragmented. Action is still stimulated by an external source, but in a way that is inattentive to the nuances of the situation. But this is not the normal trajectory of habit, which, at its best, operates according to Gaston Bachelard as a “synthesis of novelty and routine,”¹⁹ so that even when it involves repetition, habitual action repeats not for its own sake but to progress and invent.²⁰ Bachelard tells us that the piano player who does not strive to play better today than they did yesterday will play worse tomorrow,²¹ which is to say that habit maintains itself only in dynamic interplay with the agent’s environment. The subject must remain awake to the specific nuances of the situation in which they find themselves because the environment is encountered, like the pitch for Merleau-Ponty’s footballer,²² as a field of possible engagements that invites the subject to draw on the patterns of the past in an encounter with the present. This is what Ricoeur calls the “probing” gesture of habit that neither submits entirely to the environmental conditions nor imposes a prefabricated template of action onto the situation.

17 As in the previous example. But as I have argued elsewhere, the use of such examples and of examples involving non-dynamic environmental settings in work on habit and habit formation are prejudicial to the discussion. See James McGuirk, “Metaphysical and Phenomenological Perspectives on Habituality and the Naturalization of Mind,” 206.

18 Ricoeur, *Freedom & Nature*, 290.

19 Bachelard, *The Intuition of the Instant*, 38.

20 Ricoeur, *Freedom & Nature*, 289.

21 Bachelard, *The Intuition of the Instant*, 38.

22 Maurice Merleau-Ponty, *The Structure of Behaviour* (Pittsburgh: Duquesne University Press, 1983), 168.

Understood in this way, the phenomenological account obviously rejects the conception of habit as unthinking automaticity, but it also moves beyond Ravaisson's understanding of habit as knowledge of the world accrued through past experience. Habit can rightly be considered the accomplishment of world knowledge, but for the phenomenologists it is also something more. It is the capacity to discover aspects of the world in new and innovative ways, such that it needs to be conceived of not only as a kind of knowledge, but as a capacity for knowing.

3. HABIT AS TARGETED ATTENDING

In this third section of the chapter, I want to draw out an aspect of the phenomenological understanding of habit that has so far been implicit, namely, the role of attention in habit and habituality.

According to the phenomenological view, habits are formed through repetition and certainly involve the identification and recognition of patterns of significance, but this is not to say that the recognition of situational features merely triggers behavioural response. Rather, habit involves a "routine assimilation of novelty"²³ or the capacity to bring ways of acting into meaningful engagement with complex environments. This is why Ricoeur, Merleau-Ponty, and Bachelard all emphasize the creative nature of acting from habit.

This claim is crucially tied with their conception of subjectivity as embodied, as we have seen, but it is equally grounded in their sense of the meaning of the world or the environment of the subject. As Komarine Romdenh-Romluc tells us,

Merleau-Ponty holds that agents do not perceive the world "neutrally" as possessing merely "objective" properties such as size and shape. Instead, an agent perceives the world as having a value for her in terms of her capacities for action.²⁴

This is to say that the world first reveals itself to us in terms of its value and meaning. Things matter to us and so our very perception is structured in terms of this relationship of significance. The world is not a projection of subjectivity, but neither is it a simple presence that we passively receive. Rather, it requires the cooperation of subjectivity to bring its significance to presence. As the psychologist James Gibson famously noted, our very perceptual field is structured in terms of

23 Bachelard, *The Intuition of the Instant*, 37.

24 Komarine Romdenh-Romluc, "Habit & Attention," in *Phenomenology of Embodied Subjectivity*, ed. Dermot Moran and Rasmus Thybo Jensen (Dordrecht: Springer, 2014), 10.

affordances and attentional hierarchies that sort the salient from the non-salient.²⁵ Once again, significance, we might say, is revealed in the encounter between subject and object.

This has important implications for the account of habit, because it means that the cultivation of habit is both the development of capacities to sort environment and a way of being open to the manifestation of what is given in all of its complexity. Habit acquires ways of structuring experience and incorporates ways of responding to what is given. But, for the phenomenologists, this process is simultaneously the development of a capacity to perceive and respond to nuance and variation. It is a matter of attention. That is to say that to acquire a habit is to acquire the capacity to attend closely to a part of the world and to perceive aspects of situations that might otherwise go unnoticed.

Let us take an example. To acquire the habit of picking mushrooms involves developing the ability to perceive the environment in terms of the placement of mushrooms and to discern between those that are edible and those that are not. To the one who is not so habituated, the presence of mushrooms is irrelevant and so they barely show up for them, even though the environment in which both agents move (the mushroom picker and the non-mushroom picker) is, from a certain objective point of view, the same. Now, whereas the mushroom picker's perception of their environment is related to their interests, it is not explained by the interest. Rather, the habit they have acquired through this interest makes possible a fine-grained attunement to the environment under these auspices.

As such, the habit entails passive and active moments held in tension. On the one hand, the habit involves mastery over the agent's attentional orientation to her environment. She is focusing on the environment inasmuch as it is a space in which mushrooms grow and in which the difference between the edible and the poisonous is salient. This involves further a sorting that allows other stimuli in the environment to be "muted" so as not to disturb the activity of mushroom detection. The space in question may also be full of blueberries, or it may be the site of some historically significant event. But the agent brackets out these features and thereby resists their pull on their attention. In this sense, the capacity to detect mushrooms involves a certain thinning out of the perceptual space. At the same time, their interest in mushrooms allows the space to speak to them in a highly specific way and thereby allows some specific detail of the environment to stand out in sharp focus, or "high resolution" as it were. In looking for and sorting mushrooms, the agent invites the environment to come to presence in a way that

25 James J. Gibson, "A Theory of Direct Visual Perception," in *Vision & Mind*, ed. Alva Noë and Evan Thompson (Boston: MIT Press, 2002), 77–90.

could easily be overlooked or not seen. The attention that is cultivated in habitual action thereby both restricts the environment in the light of the agent's interests and at the same time allows that environment to fully appear from itself. It entails a form of selective attention that both occludes as well as reveals (aspects of) the perceptual field.²⁶

A number of points follow from this analysis. Firstly, it makes no sense to think of the environment as drawing habitual responses from the agent in any straightforward way, because the saliency of the environment can be apprehended in a near infinity of different manners. It shows up differently for the blueberry picker than it does for the mushroom picker, which is different again from the way the historian apprehends it. Indeed, this tells us that it is misleading to speak of "the environment" as though we were speaking of an univocal context of significance. The environment, as we have noted, discloses itself always to a point of view which is an embodied presence and also a position of interest. This is to say that the very question of what the environment *is*, is a function of its encounter with a specific agent or agents with specific interests. Secondly, the habituated capacity is more a pattern of orientation than a pattern of behaviour. Of course, we could say that the mushroom picker behaves in a "mushroom interested way" in the field, but this is not properly speaking a kind of acting only. It is a kind of attending. It is a way of being present to the environment and of allowing the environment to be present to me as a space in which mushrooms can be discerned. This confirms, thirdly, our

26 Of course, it is important to remember that such forms of habituated attending are themselves nested within the multivalence of our world relations, so that while the cultivation of targeted attention in habit allows us to perceive the environment in a specific high-resolution way, it remains in dynamic tension with other ways of coming to presence. Attention, according to Aron Gurwitsch's tripartite analysis, is always structured in terms of a thematic focus area, a field or context and a margin. Thus, in our example, the theme of my activity is finding mushrooms. But, I also attend to the context or field of attention, which in this case is actually a field, against which the theme is thematized. I pay attention to the slopes and crevices, which may be hiding places for recalcitrant mushrooms. And this structure is itself surrounded by what gives itself in the margins of attention. I am peripherally aware that blueberries grow in this area and that the space is of local historical significance, but as these are not moments of focal concern, they recede into the background of my awareness. But, I may suddenly remember that my in-laws are visiting tomorrow and that a blueberry pie would make an excellent dessert. Or standing in the field may bring to mind a recent documentary I saw on the historical importance of the area. My attention in either case may become suddenly transformed such that what was focal becomes marginal and vice versa. Or the focus of my attention may expand to include attentiveness to the presence of both mushrooms and blueberries, albeit this kind of juggling of attention will likely be experienced as more demanding and less efficient. See Aron Gurwitsch, *Studies in Phenomenology & Psychology* (Evanston: Northwestern University Press, 1966), 267–268; see also Sven Arvidson, "A Lexicon of Attention: From Cognitive Science to Phenomenology," *Phenomenology & the Cognitive Sciences* 2 (2003): 108.

earlier point that acting from habit will always involve a dynamic interplay with its environment. Different mushrooms will grow in different patterns in different spaces (and even in the same space over different timeframes), so to orient myself in the space on the basis of the salience of mushrooms will involve a fine-tuned attentiveness that is the very opposite of thoughtless, automatic behaviour. Quite the contrary. It is to be especially awake to the affordances of the space in which I find myself.

The habit enables a certain kind of encounter with the environment because it is finely attuned to some aspect of the environment, which the agent, through the acquisition of the habit, has become particularly adept at perceiving. While perception first awakens attention, as Merleau-Ponty says, attention, in turn, “develops and enriches this perception.”²⁷ And this is also a progressive rather than a fixed capacity, as Ricoeur reminds us. Over time, I become better at finding the mushrooms and discerning chantarelles from jack-o-lanterns, and I may even become more sensitive to the kinds of area in which mushrooms are likely to grow, so that the habit can be exercised spontaneously in response to opportunities that present themselves unexpectedly. As such, we can say that the habit is not only held in a tension between active – deliberately organizing my perceptual landscape – and passive – allowing the space to manifest itself in a specific way – elements, but also in a tension between regularity and unpredictable dynamism. Inasmuch as I am mushroom picking, my action is predictable and structured, but, as we have seen, this action is attentive to the specific affordances of specific places and requires navigation of the space in order to be exercised successfully.

In this sense, habits entail a dynamic relationship between the subject and their environment, a dynamism that is itself explicated as a cultivation of fine-grained attention to the nuances and variability of the environment.

4. THE EMERGENCE OF HABITUAL ATTENDING

In the final part of this chapter, I want to offer some remarks on the question of how habits, as described in Sections 2 and 3, are generated. It is certainly not controversial to suggest that habits are emergent phenomena. Whether as second natures (Aristotle, Ravaisson) or as motor skills (Merleau-Ponty, Ricoeur), habits are capacities acquired over time through repeated exposure to some part of the world and through repeated practice. If the foregoing analysis is correct, it is through such repetition that we learn to attend to the world in high-resolution ways and to act in ways that are responsive to this high-resolution perception. But,

27 Merleau-Ponty, *Phenomenology of Perception*, 29.

since habits are acquired, they must have a genetic history. It is often assumed that habits are voluntaristic in origin, and surely there is something to this. Whether good or bad, habits appear to be cultivated through will, performance, or a combination of both.

But even if there is a voluntaristic dimension in habit formation, we still need to explain how we come to the point where we can direct our behaviour and orchestrate or cultivate habits in the first place. This question is all the more pressing if we are right in considering habits as ways of paying targeted attention to our environment or our environment under a specific auspice. How do we learn to do this? After all, the world provides an overwhelming array of possible data to which we could attend at any given time, so learning to sort these in meaningful ways is something that needs to be accomplished. What is more, it is not a given that this sorting capacity will be accomplished in the first place. Developmental problems such as ADHD involve precisely the incapacity of the child to attend.²⁸ Or rather, the child's attention is constantly drawn this way and that by the various attentional pulls to which we are all exposed all the time. In other words, the problem is not that we need to learn how to attend to objects and features of the world, but that we need to learn to do this in ways that are structured and focused.

A lot of recent work in the areas such as philosophy of mind, philosophy of action, and empirical psychology has suggested that this capacity for targeted attention, which is crucial to our cognitive, moral, and social development, does not just happen by itself, but is scaffolded within structured intersubjective contexts.²⁹ The work of developmental psychologist Michael Tomasello is a case in point.³⁰ A major focus of Tomasello's work is the role played by attention and

28 American Psychiatric Association, "Attention-Deficit/Hyperactivity Disorder," in *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. (2013), 59–65.

29 Margaret Gilbert, "Walking Together: A Paradigmatic Social Phenomenon," *Midwest Studies in Philosophy* 15 (1990). <https://doi.org/10.1111/j.1475-4975.1990.tb00202.x>; John Searle, *The Construction of Social Reality* (New York: Free Press, 1995); Michael Bratman, *Shared Agency. A Planning Theory of Acting Together* (Oxford: Oxford University Press, 2014); Kim Sterelny, *The Evolved Apprentice* (Boston: MIT Press, 2014); G. Csibra & G. Gergely, "Natural Pedagogy," *Trends in Cognitive Science* 13, 4 (2009):148–153. <https://doi.org/10.1016/j.tics.2009.01.005>

30 While Tomasello tends to draw on philosophers from the analytic tradition such as Searle, Bratman, and Gilbert, he might have been as well or better served by drawing on phenomenological analyses of joint and collective intentionality in philosophers such as Max Scheler, Edith Stein, Dietrich von Hildebrand, or Gerda Walther. On this, see also Dan Zahavi & Glenda Satne, "Varieties of Shared Intentionality: Tomasello and Classical Phenomenology," in *Beyond the Continental-Analytic Divide* (Dordrecht: Springer, 2015), 305–326; Glenda Satne & Glenda & Salice, "Shared Intentionality and the Cooperative Evolutionary Hypothesis," in *Minimal Cooperation and Shared Agency*, ed. Annika Friebech (Dordrecht: Springer, 2020). https://doi.org/10.1007/978-3-030-29783-1_5

joint attention in the development of the human beings at both the species and the individual level.³¹ On the basis of experimental work with human infants and great apes, Tomasello's work reveals the crucial importance of the human capacity for attending to others as one of the major drivers of our cognitive capacities. He insists that we are not able to attune ourselves to others because we are highly developed cognitively, but are highly cognitively developed because we are so finely attuned to others.³² From early infancy, human children display a remarkable capacity for and interest in joint attention, an interest that is unmatched in even our closest evolutionary relatives.³³

The capacity for joint attention is fascinatingly multi-layered. To be able to attend to another human being involves a triple focus or reveals three different moments in social reality. Firstly, the other is disclosed to me as a point of view on the world,³⁴ who I perceive as a stream of experience directed towards the world. Secondly, the world or some aspect of it is disclosed as commonly held between us. It is a space of common interest as the thing or region attended to. And thirdly, I am disclosed to myself as an other for the other or a point of view to which they can attend. The situation is triadic rather than dyadic. I see the other as a point of view on the world and I know that they also see me as such, but I am also intensely interested in the common world that we share with each other. Tomasello provides ample clinical evidence for his claims, but it might be helpful to mention just one such experiment in order to make the point clear. He cites an experiment in which an infant and an adult play with three toys for a period of time. When the adult leaves the room, an experimenter engages the child in play with a fourth toy. When the first adult returns to the room, they express surprise at one of the toys. The child's gaze is immediately drawn to the fourth toy, which, while not new for them, is new for the adult who had not previously played with it. Not only does the child know to which toy the adult is attending, but also shows a clear interest in engaging the adult in play with the said toy,³⁵ not for the sake of the toy itself, but for the sake of social interaction. The point is that the child is both intently attuned

31 See Michael Tomasello, *A Natural History of Human Thinking* (Cambridge, MA: Harvard University Press, 2014); *A Natural History of Human Morality* (Cambridge, MA: Harvard University Press, 2016); *Becoming Human* (Cambridge, MA: Belknap Press, 2019).

32 He notes that the capacity for joint action alone does not explain cognitive development. Many species such as ants are capable of fairly sophisticated joint action without it necessarily resulting in heightened cognitive capacities. According to Tomasello, it is the combination of this capacity with its role in competition that is crucial to explaining the evolution of human cognitive capacities. See Tomasello, *A Natural History of Human Thinking*, 33–34.

33 Tomasello, *A Natural History of Human Thinking*, 44.

34 Tomasello, *A Natural History of Human Thinking*, 44.

35 Tomasello, *A Natural History of Human Thinking*, 45.

to the perspective of the adult (they see what the other sees) and, equally, intently interested in jointly attending to the object of interest with the adult. We discover the world along with others and discover others through our common pursuit of world discovery.

According to Tomasello, our orientation towards joint attending is evolutionarily hardwired into us. We are intently attentive to others from our earliest infancy. But this orientation still requires cultivation if it is to develop properly. Such cultivation occurs in interpersonal engagements like the one described above. But it is also facilitated at the collective level through the development of cultural norms, institutions, practices, rituals, and other forms of large-scale collective practice. While human beings are not unique in being able to learn and acquire new skills, our culture is unique in its capacity to seed the environment with structures and practices that allow knowledge to be passed across generations.³⁶ In this sense, the child grows into a space in which all sorts of decisions are made manifest as to what is important, what is worth attending to, and how.³⁷ In other words, while the child is by nature disposed to seek collaboration with others, the nature of this collaboration will need to be facilitated both by individual adults and through social structures in order to allow the orientation of the child to come to fruition. I want to suggest that the school, as described in Hannah Arendt's phenomenology of education, provides a useful example of how such collective structures and individual practices are held together and enacted. Tomasello himself has little to say about the school as such, though he does note that instructed learning is unique among humans and that such instruction takes place through a variety of ways of scaffolding the child's environment, not the least of which is attention direction.³⁸ This is interestingly resonant with the educational philosophy of Arendt and other theorists inspired by her approach.³⁹

According to Arendt, the practice of teaching is characterized by a double responsibility. On the one hand, the teacher's authority is grounded in a responsibility to the world as the totality of all that is understood and all that has been

36 Sterelny, *The Evolved Apprentice*, 35.

37 Tailer Ransom and Shaun Gallagher, "Institutions and Other Things: Critical Hermeneutics, Postphenomenology and Material Engagement Theory," *AI & Society* (2020). <https://doi.org/10.1007/s00146-020-00987-z>

38 Tomasello, *Becoming Human*, 147.

39 Jan Masschelein & Maarten Simons, *In Defence of the School: A Public Issue* (Leuven: Education, Culture & Society, 2013); Jan Bengtsson, *Educational Dimensions of School Buildings* (Frankfurt Am Main: Peter Lang, 2011); James McGuirk, "Improvisation in the Classroom: Towards an Aspectual Account of Improvisatory Practice," in *Philosophy of Improvisation*, ed. S. Ravn, S. Høffding, and J. McGuirk (Oxford: Routledge, 2021), 183–199.

accomplished through the truth-seeking activity of past generations.⁴⁰ While the energy and enthusiasm of the new generation is essential for the future development of the world, it is also an energy that is potentially destructive and which must, therefore, be held in check by an educational conservatism.⁴¹ By conservatism here, Arendt does not mean that education should seek to preserve the political *status quo*. Indeed, for Arendt, education must be decidedly apolitical. Her point is rather that the teacher, in their encounter with the child, must be an advocate and guardian of the world, understood as the totality of past achievements. In so doing, the teacher resists but also forms and moulds the energy of youth by channelling it into specific kinds of attentional encounter. The second movement of responsibility is towards the child, whose unique individuality and capacities the teacher is charged with cultivating. For Arendt, though, these two responsibilities are distinct but not separable. Indeed, taking responsibility for the child can only be achieved by taking responsibility for the world and vice versa. Without a capable next generation of knowers, citizens, and moral actors, the teacher's mission to preserve the world will be in vain. Without a robust defence of the world of the past, the child will never learn what it means to be a knower, citizen, or moral actor, or how these roles can be realized in the contexts of their own lives. Arendt was, in this sense, highly critical of any educational philosophy that takes its point of departure in an unnuanced understanding of the child's authority over their own life,⁴² since this abandons the child to the tyranny of their own untrained emotions and to that of peer groups.⁴³ In the educational setting, the teacher's responsibility to the child is enacted through their commitment to the world and their commitment to the world is materialized through their responsibility to the child.

It would be reasonable to ask at this point what exactly this double responsibility in educational practice looks like in practice. Arendt develops this point in several ways. On the one hand, responsibility is achieved structurally and institutionally by the school which, on Arendt's terms, creates a space that is neither home nor

40 Hannah Arendt, "The Crisis in Education," in *Between Past & Future* (Middlesex: Penguin Books, 2006), 190.

41 Arendt, "The Crisis in Education," 188.

42 Arendt, "The Crisis in Education," 188.

43 Arendt, "The Crisis in Education," 178. It would, however, be a mistake to think of Arendt's opposition to what has come to be known as child-centred learning in terms of an advocacy of teacher-centred learning. In truth, she moves beyond the purported exclusivity of this dichotomy and proposes something that would better be described as world-centred learning. What is more, her approach is not one that must be developed at the expense of a genuine recognition of either the child or the teacher but is one that recognizes the value of both in the re-orientation towards the primacy of the world.

world, but something in between.⁴⁴ As institutions generally do, the school is the setting aside of a space for the realization and pursuit of a value,⁴⁵ in this case the continuance of the world and the development of the child. What is more, the very structure and shape of school buildings (Bengtsson) and of classroom designs (Masschelein & Simons) are moments in the realization of this goal, not least because they facilitate an encounter between an older and a younger generation over a theme, where the authority of the former and the energy of the latter hold each other in a productive tension.

This is important, because it is through these embodied structures that the micro-practice of the school is enacted. The teacher and pupils cannot obviously attend to the world as a whole in the classroom, but they can attend to parts of it at a time. This can take place within the four walls of the school, as when French grammar is being investigated or outside these walls, as when a class walk has as its theme the observation and cataloguing of the flora and fauna of the school's surrounding area. In either case, the point is to facilitate a process of attention through which the world under some auspice comes into view for the pupils. It is at this point that the connection with the overall theme of our discussion becomes explicit, for it is the teacher's task to draw this kind of attentiveness out of the pupils in order to instil in them habits of attentiveness which enable the world to speak to them.⁴⁶ It is to enable a new form of perceiving of the world in which what might otherwise be marginally heard or seen is now listened to and looked at.⁴⁷ Or, as Merleau-Ponty says, attention involves "the active constitution of a new object that develops and thematizes what was until then only offered as an indeterminate horizon".⁴⁸ Such habits of attending are not reducible to the specific themes the teachers and pupils meet, whether French grammar or floral varieties, although neither can they be inculcated without them. It is through the specific themes investigated that the child learns habits of attentive investigation as such.

Now, while human beings at all stages of development are keenly attuned to others in joint attention and ostensive communication, the educational process will not just happen of its own accord.⁴⁹ The teacher must scaffold the attention of the pupils by encouraging them to feel the attentional pull of the object under

44 Arendt, "The Crisis in Education," 185.

45 James McGuirk, "Embedded Rationality and the Contextualisation of Critical Thinking," *Journal of Philosophy of Education* 55, 4/5 (2021): 606–620.

46 Masschelein & Simons, *In Defence of the School*, 47.

47 Ricoeur, *Freedom & Nature*, 153.

48 Merleau-Ponty, *Phenomenology of Perception*, 33.

49 John Haldane, "Understanding Education," in *Practical Philosophy: Ethics, Society, and Culture* (Exeter: Imprint Academic, 2009), 331.

investigation, in such a way that the world appears to them in greater depth and that they come to experience themselves as an irreducible perspective on the world.⁵⁰ The kind of attentional disposition this enables hearkens to the paradoxes we discussed earlier. In drawing out the pupil's capacity to attend to some part or feature of the world, the teacher both instructs the pupil by telling them what to look at as well as what not to look at. What is attended to here is willed rather than captured, and there is something almost coercive about the filtering that brings some thing or theme to focal attention at the expense of all that is pushed to the margins of attention. This is a restriction of the child's freedom, but simultaneously a condition for the possibility of freedom's emergence. In the absence of such filtering, the pupil or child will simply be carried along by a stream of external stimuli which will grab their attention and pull them first this way and then that. By contrast, the act of filtering initiated by the teacher has the goal of structuring attention so that what is first willed into view will gradually come to full presence for the child. As Sven Arvidson observes, the process of willed attention is one of allowing the object under consideration to capture our attention so, in the end, willed attention yields again to receptive attention, only now in a way that has brought the subject or pupil into a position in which the object can really speak to them.⁵¹ As such, there is a necessary freedom in deciding which object is to be taken up and attended to, which involves cordoning off all that is not to be attended to. At the same time, it is this very process of attention scaffolding that facilitates the capacity to properly see what there is to see. Furthermore, the realization of these processes in the classroom is intended to facilitate the future self-regulation of the attention of the child, through which they will learn to filter their own attentional orientation without explicit instruction from without.⁵² That is to say, they will develop habits of attending along with the capacity to cultivate targeted attention and to generate interest in new aspects of the world, something which itself must be considered a form of habituality.

The child, from the earliest stages of development, is intensely attuned to others, especially caregivers, but it is up to the caregivers to draw forth the possibilities that lie nested in that attunement, and they do so by taking responsibility for and providing structure to this triadic world orientation. The child becomes all that they can be through the fostering of their capacity to attend to the world. While Tomasello has identified the foundational structures that make education possible, Arendt has helped us explicate how these structures can be nourished in educational settings.

50 Masschelein & Simons, *In Defence of the School*, 45; see also Aron Gurwitsch, *Studies in Phenomenology & Psychology*, 219.

51 Sven Arvidson, "A Lexicon of Attention: From Cognitive Science to Phenomenology," 108.

52 Tomasello, *Becoming Human*, 152.

5. “PAY ATTENTION!”: DIRECTIONS FOR FUTURE RESEARCH

In the foregoing discussion, I have attempted to elucidate the central role of attention in the formation of habits in order to show that habits are not only ways of knowing the world, but capacities that allow us to maintain a relation of discovery. While habits involve the acquisition of embodied patterns of behaviour, they are also ways of seeing the world, understood here as high-resolution ways of attending to the world or specific aspects of it. Habits do not produce this kind of attending out of whole cloth, as it were, since to be a human being is to be profoundly oriented towards attending to the world with others. Nevertheless, this attentive proclivity will only flourish within settings that are purposively committed to its cultivation, and so it is my hope that connecting the discussion of habit and attention to educational settings can provide impulses toward further work in this area for both philosophers and educational researchers.⁵³

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53 The author wishes to thank the editors and reviewers for several suggestions that helped make the argument of the chapter clearer.

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Part 3
Musical practices



7. Jazz, real-time interaction, and aesthetic presence

Bjørn Alterhaug

Abstract Based on his experiences as a jazz musician (“live” and in a recording studio) and as a teacher, the author argues for a shift in educational philosophy from an emphasis on accumulating facts to experimental processes of discovery. Fundamental to the success of these processes is the creative “space” and mindset that he calls *aesthetic presence*. The author also addresses the challenges of explaining the non-verbal processes of improvisation and the lingering myth that they do not require preparation.

Keywords jazz | real-time interaction | improvising | aesthetic presence | knowing | generative practice

1. INTRODUCTION

Art was born in the act of improvising. Jazz, improvisation, and teaching are true sources of artistic experience. My experiences as a professional jazz musician and teacher in various educational institutions have convinced me that real-time interaction in both disciplines offers new ways to acquire knowledge. As a jazz bassist, I have had the privilege to play with international jazz artists like Ben Webster, Lee Konitz, Billy Hart, Joe Henderson, Chet Baker, Monica Zetterlund, Karin Krog, Egil Kapstad, Jan Garbarek, Jon Christensen, Terje Bjørklund, Knut Riisnæs, John Pål Inderberg, Erling Aksdal, and others. Interacting in real time with these artists – mainly in the African American jazz tradition – has given me insights that I feel are important not only for music but for all kinds of endeavours in society, including education. With respect to the latter, my experience suggests shifting the focus from the emphasis on factual knowledge (common in European theories of “learning and knowing”) to learning as a developmental and generative practice. That is, to experimental processes of discovery.

Studies of interaction in jazz and other genres in which art is produced collectively – in effect, contributing knowledge to their disciplines – are under-represented

in the general literature about music and art research. Bengt Molander, in the first chapter of this book, argues that instead of introducing additional types of knowledge we should “rather situate knowledge in the right place in the world.” I hope that my experience as a jazz musician with real-time “musicking”¹ – which includes any activity related to music performance such as performing, listening, rehearsing, or composing – can show new places and perspectives on where and how knowing is developed and generated.

To this day, much of the research on creative activity in music is based on Western composers and centred around the individual artist. It typically takes the form of biographies that highlight the creativity of classical composers and jazz musicians, such as Bach, Mozart, Beethoven, Charlie Parker, Miles Davis, and others. In the field of music, research seems to focus on the individual rather than collective practices of composition.

Molander’s introductory chapter also considers examples of individual “knowing,” like Ryle’s marksman. One of his central propositions is that “knowing how” is “knowing how to go on.” In my understanding, “how to go on” presupposes that you know the way to go on. However, this does not address the fundamental conditions of real-time collective interaction. Prior to jazz performances, musicians do not prepare detailed plans or decisions for themselves or others. Improvisation comprises an unpredictable mixture of habit and creativity: norm and freedom. During the performance, the relations between musicians direct the way forward. “Knowing,” in this sense, is open-ended and collective and is shared by all members of the group. The performance’s creations cannot be anticipated or evaluated until the action is over.

As a phenomenon and musical craft, the discipline of jazz is not widely understood in musical research and teaching. My experience with the education system generally is that the music is more tolerated than appreciated – and commonly neglected. One of the reasons is that Western philosophy has long been the province of white men. Their ethnocentric perspectives and teachings dominate the political fabric of our society. In this regard, society’s lack of familiarity with the learning methods and practices of African American musical traditions contributes to the problem. So do pernicious attitudes toward race and racism that philosopher Charles W. Mills sums up as “white ignorance.”²

1 Christopher Small, *Musicking: The Meanings of Performing and Listening* (Middletown, CT: Wesley University Press, 1998), 11.

2 C. W. Mills, “White Ignorance.” In *Race and Epistemologies of Ignorance*, ed. S. Sullivan and N. Tuana (Albany: State University of New York Press, 2007), 13–38.

The lingua-centric basis of formal education is a related issue that contributes to misunderstandings about jazz. To understand something, humans depend on having a concept for it. It is difficult for us to acknowledge what we cannot put into words. This is problematical for conveying the importance of non-verbal arts like jazz improvisation, to say the least. I think that the best way to get around the problem is through direct participation in the music's creative processes. That is, by experiencing how musicians, utilizing all their senses, jointly and flexibly produce music with respect to the guidelines of a general plan or structure. I call the musicians' special state of mind and heightened awareness in these situations *aesthetic presence*. Further below, I elaborate on this and the discipline it requires of performers. I will also discuss cultural differences in the use of the word improvisation that, to cite George Lewis, reflect *Afrological* and *Eurological* perspectives – and carry societal and political significance for education.³

Let me begin by introducing you the basic operations of jazz: in particular, how the situational openness of improvisation and musicians' embrace of unpredictability form the basis for composing "in motion."

2. REPORT FROM A STUDIO RECORDING

Early in May 2022, I was in a recording studio⁴ with my colleague, saxophone player John Pål Inderberg, intent on recording part of our repertoire, acquired over 50 years. There was a lot to choose from. We had no specific plan in mind for a commercial release of the session, whether vinyl, CD, or digital. By recording our baritone-saxophone and double-bass duo, we sought only to document years of friendship and musical interaction. Having performed with musicians from many parts of the world (Europe, Africa, Asia, and America), we'd had experience with different genres and performance contexts. We'd played in dance bands, big bands, combos, classical orchestras, folk music ensembles, and so on. For the most part, we learned different musics by ear, as was crucial for our interplay with international musicians. We also had experience teaching at high schools and universities.

On this occasion – because of our prior experiences playing the repertoire in many contexts (our long "sailing time") – we did not rehearse the tunes in advance of the recording session. We felt relatively well prepared: open to the unpredictable, challenging, and exciting course that performances can take under such circumstances. One reason we could relax with this approach was that our sound

3 G. E. Lewis, "Improvised Music after 1950: Afrological and Eurological Perspectives," *Black Music Research Journal* 16, no. 1 (Spring 1996): 93.

4 Recorded and mixed by Celio Barros at Klarlyd Studio. Recorded May 5 and 6, 2022.

engineer, Celio Barros, was an experienced musician, a colleague, and a good friend. This freed us from the anxieties that musicians commonly experience when preparing for studio recording. In some instances, adjusting to a studio's sound setting takes a disproportionate amount of time and energy, negatively affecting a person's musical concentration when they are finally ready to record. Especially when recordings that take place in famous studios with well-known sound technicians, it can create external mental pressure on musicians.

In this case, because we were three close colleagues and friends who felt comfortable with the situation, the recording could start after a brief sound-check. From the first moment, the atmosphere in the studio was relaxed and cheerful. Both of us had the freedom to choose the tunes we wanted to record, and we recorded them immediately. Mostly, we made recordings of our "first takes" (that is, using our initial performance of each tune). In our experience, the first take is usually fresh and full of energy and best captures the moment in real-time interplay – realizing artists' expectations. It can be difficult to retain these qualities in repeated takes, especially if you try to copy the best part of your improvising from the first take. That approach can reduce your musical concentration and leave you sounding like a carbon copy of yourself. Moreover, when an individual opts for that problematic course, it can adversely affect the interaction between the musicians.

That day, John Pål and I felt that we'd maintained a sufficient professional standard in our playing. Afterward, when we listened to what we had recorded, we knew that we could make minor musical and technical changes during the studio's mixing process. From past experiences, we were expected to find unexpected twists and turns in our improvised musical episodes. Indeed, we discovered that at times we'd spontaneously created on-the-spot "solutions" to musical problems that had arisen, played things we'd never heard before. For performers, reviewing a recording is like reflecting on a conversation with friends you've had about everyday matters: evaluating some things critically, but taking pleasure in having found the most fitting and meaningful words there and then or new turns of phrase.

During our performance, we'd aimed our improvising at untested possibilities and openings for innovations ("never before heard and felt" happenings). A quote from the Swedish sociologist Johan Asplund aptly describes the immediacy and intimacy of such interplay: "I don't know what I have said until you have answered, and you don't know what you have said until I have answered."⁵ If we replace "said" with "played", it's close to the musical dialogue in which both musicians are prepared for the unpredictable. In this sense, a fundamental condition of collective

5 Johan Asplund, *Om hälsningsceremonier, mikromakt och asocial pratsamhet* (Göteborg: Korpen, 1987), 45. My translation.

jazz interaction is that musicians do not know in advance “where and how to go on” and, in the face of challenges, must create the best musical way forward. For John Pål and me, the most important prerequisite for managing these situations was our extensive training and ability to improvise in real time – mainly rooted in the ear-based African American jazz tradition.

3. TRUBBEL

A specific example of how John Pål and I searched for untried possibilities in our studio performance was our treatment of a well-known song by the Swedish songwriter Olle Adolphsson, *Trubbel* (Eng. “Trouble”).⁶ We had played *Trubbel*’s melody together many times before as a duo and in other group configurations. Consequently, we were well acquainted with the musical possibilities that the song contains, especially what lies latent in its underlying chord sequences.

Our saxophone-bass duo allowed greater possibilities for musical invention than larger ensembles. With only one musician to communicate with, the bassist has more textural space than in other arrangements. That gives them the freedom to create bass lines that connect the harmonic, melodic, rhythmic, and sonorous elements in a seamless way. In turn, the saxophonist can choose to improvise in relation to the fundamental bass tones, rather than responding to a piano accompaniment’s complex chord structures. Alternatively, given a duo’s rhythmic flexibility and openness, the saxophonist can play something related to the bass line’s emphasis on semi and quarter tones. From the outset of a performance, both musicians express themselves interactionally in a musical landscape where different “force fields”⁷ are unfolding and in which they are “forced” to respond instinctively. This is a kind of “transcendent exercise” or “encounter” in which sensibility leads creative invention.

In this instance, John Pål began with a freely improvised solo before playing the melody in tempo. The instant that he began the melody, and I joined him with a bass accompaniment, I found myself by playing a bass line that – as far as I can remember – I had never played before! The back story is that right before recording, John and I had decided to give the song’s arrangement a new twist: experimenting with ending the rendition in **Bb minor**, instead of remaining in

6 The whole session is available on vinyl and Spotify: Bjørn Alterhaug and John Pål Inderberg, *Stripped Down – Leisurely-Thoughtful*. AMP Music & Records 2023.

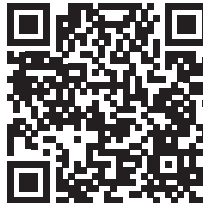
7 Daniel Smith, John Protevi, and Daniela Voss, “Gilles Deleuze,” *The Stanford Encyclopedia of Philosophy* (Summer 2022 Edition), ed. Edward N. Zalta: Section 3.1, *Difference and Repetition, with reference to G. Deleuze, Difference and Repetition* (London: Athlone Press, 2004).

the predominant key of **G minor**. When that point in the performance arrived, however, and I tried to transpose the bass line I had been playing into the new key, the change made it difficult to execute the line as I had intended to.

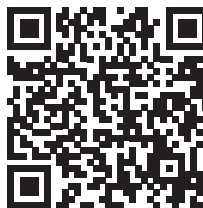
Ideally, as a professional musician, my mastery of all keys should have prevented my technical problems when the keys changed. However, we had not tried out *Trubbel* in different keys in this context before, and the transition to Bb minor came up so unexpectedly that I instinctively resorted to an “emergency solution” and in the process conceived a variant bass line. In that moment, my experience, “knowing” – and, importantly, my interplay with the saxophonist – guided me to a tolerable alternative. Even if it didn’t meet the standards of my trained ears – my envisaged “ideal” – the new and simple bass line worked well in its musical context, holding together the piece’s melodic and harmonic features.

Below, I have noted in sheet music the piece’s key in G minor, 4/4: G-A-Bb-B-C-D-Eb-E-F-F#-G-G#-A-Bb (rhythmic deviations and intonation nuances are not noted):

This musical excerpt (7 bars) can be heard here:



Subsequently, because the Bb minor version of the bass line was unsatisfying to my ears, we decided to correct it in the studio’s mixing room where we could escape some of the liabilities of real-time creation. Facilitated by technology, we had the opportunity to work out – through slow thinking, calculated and logical – the way we wanted the bass line to sound. The final recording included the version we’d repaired in the mixing room. Listen to the whole track of “Blodskriket/Trubbel” here:



Whether it is better “aesthetically” than the original line is hard for me to evaluate. However, the chosen one sounded better as a musical whole and, as such, was satisfying to my ears. The combination of these methods – real-time interaction and post-performance editing – characterizes most of recorded music today. Both methods have much to offer pedagogical situations and invite further research.

Reflecting on the session, I’m reminded of how difficult it is to explain these complex multifaceted processes, variously implicating the conscious and unconscious, thought and intuition, intention and realization, and so on. Conceiving and articulating musical ideas – this real-time way of knowing – depends not only on psychological but also on numerous other circumstantial factors: environmental, physical, and social. At times, musicians must not only rely on memory, but have the discipline to “forget” what they have practiced (the “knowing” they possess) and create new ideas. They must free themselves from expectations of predetermined performance outcomes, devoting themselves unconditionally to the moment. “The improvising and competent jazz musician knows her technique and craft. However, she shows her true character when she transcends her technique and craft, and along with the others, is able to ‘stand in the open.’”⁸ In other words, knowing proceeds through wonder and presence. To stay in the open shows a way to a deeper understanding of the existential and pedagogical dimension in guidance and teaching.

It is an open opportunity in which, from collectively created starting points, musicians develop their performances with the intention of making mutually influential contributions that seamlessly slide into, shape, and complement those of their associates. Where and when problems arise, musicians resolve them together. The process involves intense listening, experimentation, sharing immediate experiences, and trust. The full range of circumstances and operations above and the predominant mental state that actors must bring to them for successful outcomes is what I have come to think of as “the aesthetics of presence.” In my experience, it has as much relevance in the classroom and in artistic disciplines as in the recording studio or concert hall.

4. AESTHETIC PRESENCE

Having been inspired in the late 1960s by my interactions with international musicians, I subsequently formed numerous improvisation groups at NTNU in 1975,

8 F. T. Hansen, *At stå i det åbne: dannelse gennem filosofisk undren og nærvær* (Copenhagen: Hans Reitzels Forlag, 2010), 259. My translation.

as a member of the Department of Musicology at the University of Trondheim.⁹ Most participants were classically trained students. Because I had been self-taught and learned by playing in jazz bands, my teaching was initially based on the premise that all students – whatever their musical backgrounds – had to have experience of improvising. I did not understand that, for most of them, it had never been part of their musical training. For their perspective, the challenges of improvising were akin to learning a new language.

For all my good intentions, my lack of sensitivity to their anxieties led many to drop out of my “fear-based” improvisation classes. Their exodus was caused by an inexperienced and eager teacher bent on strengthening their abilities and confidence and on helping them find their own way of expressing themselves. Obviously, I was wrong and had to change my approach. Adopting a new method, I considered the students’ backgrounds and used music with which they were familiar as the basis for training their ears and imaginations. In part, I emphasized simple ear-based vocal and rhythmical exercises, combined with bodily movements. I also stressed the importance of copying parts (here, meaning transcription initially or by ear) of renowned musicians’ recordings and learning to play them with their instruments. Ultimately, I worked with the students to help them find their own personal voices. This was based on the fact that music has been a fundamental aspect of identity construction before the invention of written music and language and includes all kind of musics worldwide. Fundamental to my teaching were African American pedagogical approaches based on the aural/oral tradition and geared to developing the ear and musical personality in the context of collective interplay.

To help students make sense of these matters, I introduced them to my concept of the *aesthetic presence*. It was a “space,” I explained, in which they could open up during improvised performances and, over-riding any feelings of insecurity and vulnerability, become receptive to the contributions of the others in their groups. I hoped that beyond participating in my exercises, students would reflect on how the exercises’ approaches to learning contributed to their musical and personal development. After a period of adjustment, they seemed to be content with my teaching, even inspired. This has been confirmed by comments I received from students 40–45 years after I initiated my program.

9 The Trondheim Conservatory of Music was established as a private music school in 1911. This school was divided into the Trondheim School of Music and the Trondheim Conservatory of Music in 1973. In 1979 the Department of jazz (“Jazzlinja”) was established by Terje Bjørklund, as part of the conservatory. The Department of Musicology was founded in 1962 as a section of the Norwegian Teachers Academy. The Trondheim Conservatory of Music and the Department of Musicology were merged into a single Department of Music in 2002.

At the same time, I acknowledged that one of the challenges introducing students to the creative practices of jazz is that they exist in a realm of artistic sensibility that exceeds the possibilities of linguistic description. To me, linguistic and aesthetic expressions are separate domains, akin to the distinction between the cognitive and emotional. Although the impulses/auditory messages transmitted through real-time musical interaction are based on preparation, they depend on a reflective state of mind and spontaneous thinking in the language of music. In part, the processes involved are analogous to Csikszentmihalyi's "flow".¹⁰

Notwithstanding the limitation of linguistic explanations, the commentaries of artists working in different disciplines can be helpful, since each in their own way touches on different characteristics of what I call the *aesthetic presence*. In an interview, Norwegian artist and painter Håkon Bleken quotes Picasso: "I don't seek, I find." Bleken adds: "Almost all significant art exists between passion and reflection ... A number of coincidences occur when you work with art, and you have an inner voice that you are not aware of even once, but which others can point out in your pictures."¹¹ His reference to the inner voice points to the space where intuition and the subconscious reign. In painting or music, even if the artist is not aware of her inner voice, it can arouse the passion of other people for the aesthetic object.

In another interview, Finnish classical conductor Klaus Mäkelä notes:

Music can touch spontaneously. There and then. No matter what prior knowledge you have. There is almost nothing in the world that can do it in the same way. Music hits you immediately. I also notice as a listener, that it must be alive. Which makes you discover something you had no idea was there ... I hate listening to music where you know what you're getting. Predictability in music is cancer. Neutrality too. Every single note must live. That's what Sibelius said.¹²

Such testimonies from a classical conductor and composer indicate that music – whatever style and historical period – has the power to release people's sensitivity and "knowing" in a domain apart from linguistic formulation.

10 Intense and focused concentration on the present moment, according to M. Csikszentmihalyi, *Flow: The Psychology of Optimal experience* (London: Ebury Press, 2008).

11 Håkon Bleken, "Bleken mener denne mannen har utmerket seg," interview by Børge Sved, *Adresseavisen*, October 20, 2022. My translation.

12 Klaus Mäkelä, "Dirigent for det hele," interview by Sverre Gunnar Haga, *Klassekampen*, October 24, 2022. My translation.

The statements of two of Norway's foremost jazz musicians, Jan Garbarek and Jon Christensen, speak to some of the challenging questions surrounding real-time jazz interaction and the difficulty of explaining its transcendental musical events.

In a Norwegian magazine, Garbarek discusses Jon Christensen's significance in his life:

Jon is probably the musician I have learned the most from. But I can't put it into words. It has to do with the fact that he does not force things to happen, he waits for things to come naturally. When the groove comes, he is a master at keeping it up, and not letting go! He has a bottom in himself, an enormous resource.¹³

To me, Garbarek's words above implicate Polanyi's concept of *tacit knowledge*.¹⁴

In 1967, Jon Christensen touched on the inter-related themes of learning, imitation, and copying, about which he developed a clear understanding at an early stage. When asked about his career, he replied:

I have always tried to keep up with the development of the modern drumming. I have listened a lot to the leading musicians, but have always set out *to learn from them – not to copy or plagiarize them*. This is probably the main reason why I have not stagnated.¹⁵ (my italics)

Jon's emphasis on learning from other musicians – rather than copying them exactly – suggests that copying is not his main approach to learning. He has kept up with the leading drummers, which is the reason he hasn't stagnated. He has focused on listening to find his own personal drum voice and soul, which no other could imitate, to be an original musician with his own personality and identity. In my own experience, one of the ways in which a personal inner voice is best developed is by copying the masters during mutually affective exchanges in real-time interaction. In this regard, playing with Jon has always been an adventure, filled with excitement, tension, deep concentration, surprises, musical solutions, and joy – combined qualities that for me belong to the *aesthetic presence*. The latter might be an existential state that is part of every human being, as the Roman rhetorician

13 Jan Garbarek, "Det essensielle er det du ikke kan si noe om," interview by Bjørn Stendahl, *Jazznytt*, no. 3. 1984. My translation.

14 Michael Polanyi, *The Tacit Dimension* (New York: Anchor Books, 1967).

15 Jon Christensen, "'Buddy'-vinner Jon Christensen," ed. Hallvard Kvåle, the interview was not signed, *Jazznytt*, no. 5 (1967). My translation.

Quintilian hinted in antiquity: "... a speaker's most important ability cannot be imitated: talent, ingenuity, expressiveness, eloquence – all what the rules of art cannot convey."¹⁶

5. THOROUGH PREPARATION

Paradoxically, preparation lays the ground for the "free" and "spontaneous" in improvisation. In music and art, it does not require detailed plans or prescriptions, but a multitude of other things. In the jazz tradition, for instance, it begins with knowing the various instruments thoroughly. Ultimately, musicians' command of their instruments, their openness to the possibilities of invention, and their constant awareness of what their associates are playing enable successful musical exchanges. Underlying these operations is the cultivation of the aural skills to instantly comprehend and imitate one another's rapidly unfolding ideas, as well as the cumulative experience working under the pressures of real-time invention.

In these real-time learning processes, you always have to "keep an ear" to your own personal voice as a personality and musician: developing and playing with your own original "voice." A short story from my personal musical experience might illustrate this point. In 1970, the world-renowned saxophonist Ben Webster came to Trondheim. Two locals and I were invited to play three concerts with him. I was rather tense and nervous about accompanying such a famous musician. To handle this, I tried as best I could to imitate and learn from his earlier LPs. During the first concert I carefully and intensely tried to follow his playing and to satisfy and please the star in the best manner. The others in the group were out of my thoughts. Ben sensed the situation and commented:

"Yeah, Bjørn, you're doing fine. – But – you shouldn't listen that much to me, then you lose yourself. You know, I need your initiative to play my best and then our best!"

As I've indicated, improvisations are always "underway" in this unpredictable performance zone. Ideally, musicians – present, alert, and well trained – can resolve problems that arise on the spot through cooperative interaction. Everyone must do their part of the job, hopefully making their associates better. The demands of such situations – whether in performance or when teaching in the classroom – require individuals to have the courage, integrity, and personal strength to express themselves honestly and civilly. The sad fact is that improvisations always run the risk of being qualitatively unstable. At the extremes, they may be *excellent* or *really bad*. Proper preparation helps individuals stay on the former side of the dichotomy, as

16 Øivind Andersen, *I retorikkens hage* (Oslo: Universitetsforlaget, 1995), 222. My translation.

we see in performances by great players like Miles Davis, John Coltrane, Keith Jarrett, and others.¹⁷

Jazz remains strongly connected with the word improvisation, but to this day in the popular imagination, the word is used in ways that are incomplete and or otherwise misleading. In a newly released Norwegian book for children, for instance, improvising is defined as “making up the music there and then; *without having prepared* it in advance.”¹⁸ (my italics) Since the 1970s, I have advocated for more adequate definitions of “improvisation” than generally found in popular sources and encyclopaedia. In fact, as every serious artist in music knows, preparation is the very foundation that frees them to create and interact with other musicians. Therefore, I proposed a new definition in the *Store Norske Leksikon* (Great Norwegian Lexicon) to set the record straight: “In art and music ... improvisation is the result of *thorough preparation*.”¹⁹ (my italics)

To put the concept of improvisation in historical perspective, the Latin word – *improvisus*: *im* [not] –*pro* [before] –*visus* [seen] – was used in antiquity to signify unforeseen or unpredictable actions.²⁰ In the rhetorical tradition where the concept had a prominent place, teachers developed guidelines for the art of speech and for the preparation of rhetoricians. *Mimesis* [Latin; imitatio] – the imitation of exemplary rhetoricians and model speeches – played a crucial role pedagogically and methodically.

As implied earlier, improvisation and imitation are interdependent processes in the training of jazz musicians and in the production of music. In fact, to become a skilled musician, craftsperson, or competent practitioner in any field, you must carefully imitate your role models. This is not an end-in-itself, but a way of developing a base of knowledge and garnering inspiration for one’s own creative power. In a local TV news program, John Pål Inderberg describes an aspect of this succinctly and with an ironic twist: “We are practicing for hours every single day – practicing and practicing – so as not to play what we do practice on.”²¹

17 Paul Berliner, *Thinking in Jazz* (Chicago: University of Chicago Press, 1994).

18 Anne Balsnes Haugland, Cecilie Halvorsen, and Tiril Valeur, *Historier om den klassiske musikk – Musikkhistorie for barn og unge* (Oslo: Musikk-husets forlag, 2021), 207.

19 The definition of improvisation changed 2021. The new text is in Bjørn Alterhaug, “*improvisasjon*,” in *Store norske leksikon på snl.no*. Accessed January 24, 2023, at <http://snl.no/improvisasjon>. My translation.

20 Gunhild Vidén, professor, Department of History and Classical Studies, Norwegian University of Science and Technology, conversation with author, 2004.

21 John Pål Inderberg, interview by District TV-news NRK, Møre and Romsdal, November 16, 2022 at 19:55.

6. ART WAS BORN IN THE ACT OF IMPROVISING

As I've indicated above, it's a challenging and risky endeavour to describe in words how real-time jazz interaction happens. For me, linguistic and artistic expressions both belong to complex ways of knowing: the one, privileging concepts; the other, sensations and sensibility. They represent distinctive but complementary spaces for interpreting the world. To consider either without the other is inevitably reductive and incomplete.

Other discourses have broadened my perspective on these processes, illuminating improvisation's varied applications in different expressive domains. In my introduction, for instance, I cited George Lewis's distinction between *Afrological* and *Eurological* approaches to real-time composition. In his view, they were typified by the music of Charlie Parker and John Cage, respectively. The way that John Cage composed real-time music has been called aleatoric. That is, in performances of the "same" composition, particular elements are rearranged, based on chance. Like the roll of the dice, each performance's configuration is unpredictable. This is quite different to the jazz tradition's way, in which improvised invention is based on the physicality of performance, deep musical experiences, and collective exchanges in the moment. As discussed, in the literature, some approaches to real-time composition implicate not only aesthetic considerations but also those once considered "extra-musical," such as race, ethnicity, and class. Lewis contends: "My constructions make no attempt to delineate ethnicity or race, although they are designed to ensure that the reality of the ethnic or racial component of a historically emergent sociomusical group must be faced squarely and honestly."²²

As a jazz musician and teacher for nearly 60 years, I have become aware that around the world, artists in different disciplines have developed different practices of improvisation, and I've been inspired by the latter's potential for learning and creative work. Bill Evans, one of the foremost musicians in jazz history, writes insightfully about the subject from a cross-cultural perspective in his liner notes (entitled "Improvisation in jazz") on the famous LP "Kind of Blue." Indeed, he manages to explain what he describes below as "something captured [by the artist] that escapes explanation":

There is a Japanese visual art in which the artist is forced to be spontaneous. He must paint on a thinly stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible.

22 Lewis, "Improvised Music after 1950," 93.

These artists must practice a special discipline, that of allowing the idea to express itself in communication with the hands in such a direct manner that deliberation cannot interfere.

The resulting images lack the complex composition and textures of ordinary painting, but those who look closely are said to find something captured that escapes explanation.

This conviction that direct deed (“doing”) is the most meaningful reflection has, I believe, prompted the evolution of the extremely serious and unique disciplines of the jazz or improvising musician.

Group improvisation is a further challenge. Aside from the weighty technical problem of collective coherent thinking, there is the very human, even social need for sympathy from all members to bend for the common result.²³

In my introduction, I proudly named a selection of international jazz artists who were part of my personal history of knowing, learning, and education from the late 1960s. In hindsight, I realize how important and decisive my real-time interaction with these artists – and the environment in Trondheim – has been for me personally both in art and in teaching over my career. Thanks to my colleagues, our students, and the institution’s supportive social and political environment for more than 40 years. NTNU now has a jazz department²⁴ that is regarded as one of the most successful ones in Europe. In my view, the basis for our program’s success mainly lies its implementation of *Afrological* perspectives and ear-based methods in real-time interaction, teaching, and learning. Charlie Parker’s words hit the core of this life-musical philosophy: “Music is your own experience, your own thoughts, your wisdom. If you don’t live it, it won’t come out your horn.”²⁵ In this context, the research project at NTNU (1999–2004): “Interdisciplinary Perspectives on Improvisation,” which Professor Paul F. Berliner²⁶ was part of, is worth mentioning. Through his lectures, books, and studies on African and

23 Bill Evans, “Improvisation in jazz.” Liner notes on the LP “KIND OF BLUE”, Miles Davis (Columbia Records, 1959). My parentheses.

24 Founded 1979, by Terje Bjørklund (jazz pianist). John Pål Inderberg and Erling Aksdal (musicians and colleagues) have through the years been important co-workers for a consistent methodology at the Department of Jazz (“Jazzlinja.”) at NTNU.

25 *Oxford Essential Quotations*, ed. Susan Ratcliffe, 5th ed. (Oxford: Oxford University Press online, 2017).

26 Paul Berliner, *Thinking in Jazz, The Art of Mbira* (Chicago: University of Chicago Press, 2020), and *Mbira’s Restless Dance: An Archive of Improvisation* (Chicago: University of Chicago Press, 2020).

African American musics, he has contributed to a deeper understanding of improvisation as an important human trait in all cultures of the world.

Today, our former NTNU students perform all over the world and express themselves musically in a plurality of musical styles and forms. Very few are playing in a conventional African American style. However, all of them have a pedagogic ballast and musical perspective rooted in jazz that emphasize the aural African American tradition of real-time interaction – and, as importantly, draw inspiration from folk music from different parts of the world.²⁷

To return to my premise: Art was born in the act of improvising. Over my career, I have observed how learning and discovery in jazz have provided musicians with lifelong incentives and a basis for inspiration and motivation. In my experience with the everyday, when collaborations, interactions, and learning situations fall short of the mark, improvisation has the potential to help people out of their dilemmas: recovering their inborn capacities for curiosity and adventure. I continue to discover new disciplines in which improvisation underlies creative competence and to appreciate its crucial place in human activities.

Today, I believe it is more important than ever that our society and its educational system use multicultural resources and the power of the arts to stimulate students' potential. The key to this – a starting point for creative, personal, and social development – is providing students with opportunities in which they can learn music and art through real-time interaction. Practiced in open discursive philosophical, sociological, psychological, and ontological settings, such activities strengthen students' aesthetic presence and cultivate their capacities for vigilance, empathy, and joy. Grounded solid preparation, the activities give students the courage and strength to act creatively and spontaneously. This experimental attitude – changing, shaking up, multiplying, and creating – contributes to a more complex and holistic view of the world of which we are part. Tomas Tranströmer, winner of the Nobel Prize for Literature in 2011, expresses this intention in a poetic and unifying way: “Deep in the forest there’s an unexpected clearing that can be reached only by someone who has lost his way.”²⁸

27 An article (in two parts) dealing with how this kind of learning works methodically in the Jazz Department, NTNU, is Mattias Solli, Erling Aksdal, and John-Pål Inderberg, “Learning the Jazz Language by Aural Imitation: A Usage-Based Communicative Jazz Theory (Part 1).” *Journal of Aesthetic Education* 55, no. 4 (2021): 485–505, and Part 2, *The Journal of Aesthetic Education* 56, no. 1 (2022): 94–123.

28 Tomas Tranströmer, *The Great Enigma. New Collected Poems*, trans. Robin Fulton (New York: New Directions, 2006), 144.

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8. Reflection in communicative jazz action

Mattias Solli and Thomas Netland

Abstract This chapter aims to deepen Donald Schön’s insight about jazz playing as an example of what he calls “reflection-in-action” (RiA) by situating this notion within the enactive view of humans as linguistic bodies. Our main claim is that the knowledge or skills displayed by expert jazz musicians must be understood as aural and communicative in nature. After presenting the notions of RiA and linguistic bodies, we develop our view through a critical discussion of four statements from Schön’s passage on jazz musicianship, before wrapping up and clarifying the position we are advocating. This way, we suggest a revised version of Schön’s concept, which we call “reflection in communicative jazz action.”

Keywords jazz improvisation | reflection-in-action | enactivism | linguistic bodies | aural-musical communication

1. JAZZ IS EAR MUSIC

What does it imply to know something in jazz music? While contemporary jazz is a largely heterogeneous phenomenon, too diverse to be captured in a single definition, jazz musicians all over the globe seem to agree at least on one thing: Aural capacities are crucial.¹ Brilliant technical skills or extraordinary sound matter little unless the player knows how to improvise fluently by ear, that is, by *hearing* how the music unfolds in delicate communicative negotiations – alone or in bands.

With aural jazz knowledge as a point of reference, this chapter will suggest a concept of reflection in music that we hope can do justice to the musicians’ practice. We call it *reflection in communicative jazz action*. Our framework is the enactive and embodied view that is popular within contemporary studies on musical

1 Paul Franklin Berliner, *Thinking in Jazz* (Chicago: University of Chicago Press, 1994); Ingrid Monson, *Saying Something: Jazz Improvisation and Interaction* (Chicago: University of Chicago Press, 1996); Mattias Solli, Erling Aksdal, and John-Pål Inderberg, “Learning the Jazz Language by Aural Imitation: A Usage-Based Communicative Jazz Theory (Part 1),” *Journal of Aesthetic Education* 55, no. 4 (2021); Derek Bailey, *Improvisation: Its Nature and Practice in Music* (Ashbourne: Da Capo Press, 1993).

behavior.² However, *unlike* many enactivists,³ we will focus on enaction understood as *communicative aural behavior*. In pursuing this aim, we use resources offered by the recent “linguistic turn” in enactive theory, represented mainly by the publication of Di Paolo and co-writers’ *Linguistic Bodies*.⁴ Providing a view of language as a genuinely *embodied* phenomenon defined by open-ended norms for communicative and participatory practices, we see the idea of linguistic bodies as well-suited for illuminating the aural orientation of jazz musicians.

We will begin with a detailed reading of one particular passage in Donald Schön’s much-cited book, *The Reflective Practitioner*.⁵ Schön is one of the pioneers in the epistemology of practical knowledge. While jazz musicianship is not his primary target, what he has to say about the subject matter has far-reaching implications. As pioneers sometimes do, Schön has uncovered a phenomenon rife with ambiguity. This ambiguity is a key driving force for this chapter.

Schön offers insightful perspectives on jazz musicians’ aural knowledge. Musicians do not have to put into words what they know. “[W]e need not suppose that they reflect-in-action in the medium of words.”⁶ The musicians can just *play*, mutually fulfilling their ideas in collective improvisation. Schön coined the phrase *reflection-in-action* (RiA), highlighting the intersubjective and aural-communicative aspect of the musicians’ reflective competence: “Listening to one another and to themselves, they feel where the music is going and adjust their playing accordingly.”⁷ This observation taps right into the enactive framework. And in that regard, Schön gives us the spark to develop our version of the reflection-in-action concept, emphasizing the enactive and communicative aspects of the jazz

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- 2 Mattias Solli and Thomas Netland, “Enacting a Jazz Beat: Temporality in Sonic Environment and Symbolic Communication,” *British Journal of Aesthetics* 61, no. 4 (2021), <https://doi.org/10.1093/aesthj/ayab048>; Mattias Solli, “Musical Affordances and the Transformation Into Structure: How Gadamer can Complement Enactivist Perspectives on Music,” *British Journal of Aesthetics* 62, no. 3 (2022), <https://doi.org/10.1093/aesthj/ayac002>; Steve Torrance and Frank Schuman, “The Spur of the Moment: What Jazz Improvisation Tells Cognitive Science,” *AI & Society* 34, no. 2 (2019), <https://doi.org/10.1007/s00146-018-0838-4>; Simon Höffding, *A Phenomenology of Musical Absorption* (Cham: Palgrave, 2018); Micheline Lesaffre et al., “Participatory Sense-Making in Joint Musical Practice,” in *The Routledge Companion to Embodied Music Interaction*, ed. Micheline Lesaffre, Pieter-Jan Maes, and Marc Leman (New York: Routledge, 2019).
 - 3 Torrance and Schuman, “The Spur of the Moment: What Jazz Improvisation Tells Cognitive Science”; M. Reybrouck, *Musical Sense-Making: Enaction, Experience, and Computation* (London: Routledge, 2020).
 - 4 Ezequiel A Di Paolo, Elena Clare Cuffari, and Hanne De Jaegher, *Linguistic Bodies: The Continuity between Life and Language* (Cambridge, Massachusetts: MIT Press, 2018).
 - 5 Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Taylor & Francis, 2017).
 - 6 Schön, *The Reflective Practitioner: How Professionals Think in Action*, 56.
 - 7 Schön, *The Reflective Practitioner: How Professionals Think in Action*, 55.

musicians' competence. However, when Schön tries to elaborate on what this intersubjective and aural-communicative reflection implies, he invokes a series of ambiguous terms and perspectives that, if interpreted in the wrong way, can stand in the way of a proper understanding of his idea, at least from the vantage point of the enactive-communicative ear. In other words, while Schön's text evokes intriguing perspectives, it simultaneously invites potentially problematic interpretations that threaten to undermine them. As we will see, some of the problems are up front, while others are more subtle and are revealed by connecting them to tendencies in contemporary literature.

The goal of exploring the ambiguities of Schön's text is to unpack the potential of his pioneer observations, thus propelling the epistemology of jazz musicianship further. But why does it matter? Why bother with one particular passage in a book? Indeed, oral and aural jazz musicianship is a fully fledged knowledge system in its own right, unfolding perfectly and independently of theoreticians' approaches and conceptual models. However, apart from the no small fact that the aural practice field feeds perplexing perspectives into philosophy that are worth pursuing for their own sake, theoretical modeling of practices *does* play a role in music pedagogy. It matters whether or not the oral and aural-communicative ethos of professional jazz musicianship is allowed to form the basis of learning and teaching practice. And to the extent that pedagogical practice is informed by theory, not only is Schön's book rendered a classic within the educational literature, but his brief passage on jazz musicianship also inadvertently lends itself to a frequently repeated set of common (mis)construals about jazz musicianship. We comment on a much broader theoretical field by working through the ambiguities in Schön's statements, aiming to give them a philosophical clarification that can indirectly impact on actual music-making.⁸

Section 2 pursues general suggestions in Schön's description of jazz improvisation by situating his conception of reflection-in-action in recent enactivists' perspectives on the linguistic body. Section 3 turns to the aforementioned passage in Schön's book and tries to unpack its many positive and negative implications. By unpacking and discussing these statements one by one, rejecting the problematic readings to which they lend themselves, and clarifying the extent to which they are accurate, we hope to contribute towards the development of a richer and more solid understanding of jazz playing as reflection-in-action. Section 4 finally

8 We believe this justifies our focusing on one particular passage from Schön rather than evoking his broader theoretical framework. For a close reading of Schön's theory, see B. Molander, *The Practice of Knowing and Knowing in Practices*, ed. Bengt Molander (Frankfurt am Main: Peter Lang Edition, 2015), Chapter 6: The reflective practitioner.

suggests a conception of the reflection in communicative jazz action as participatory, open-ended, and aural sense-making. Throughout the reading and reviewing process, we hope to gradually transform Schön's observations and statements into an adequate conception of reflection in communicative jazz action.

2. REFLECTION-IN-ACTION AS AN ACT OF THE LINGUISTIC BODY

Before we dig into the potentially problematic aspects of Schön's passage, let's begin by outlining the main agreement between Schön's position and the view we are advocating. Above all, Schön's emphasis on *listening* as the key to jazz musicians' reflection sits well with contemporary jazz musicians and the legacy unfolding in the music. Jazz emerged in an oral and aural tradition, the African American.⁹ Centuries before American slavery and the diaspora, African musicians from multiple distinct cultures developed fine-grained systems for aural communication and transmission of knowledge. Without reliance on scripts or other visual tokens for preservation, they developed and handed down vastly complex rhythmic and tonal forms from one generation to the next. The music was incorporated into everyday life including births and funerals, dealings with friends and foes, and rituals and celebrations.

When, on the American continent, African musical knowledge took up the Western tonal system and developed what eventually became known as jazz, it incorporated the musical syntax of major and minor tonality into the aural knowledge. And when the gramophone eventually was invented, and the record industry started to sell records to the African American people, this new technology fitted right into the aural community. People gathered in living rooms for collective listening, singing, and clapping along.¹⁰ Aspiring jazz musicians, such as the young Louis Armstrong and Charlie Parker, started learning music directly from their heroes by imitating records, gradually developing their own styles within the aural-musical languages. Finally, when jazz grew into an art form and became a global phenomenon exploring rhythm and tonality on various axes, something in this profound aural knowledge remained. Something in the ethos of "jazz is

9 Ben Sidran, *Black Talk; How the Music of Black America Created a Radical Alternative to the Values of Western Literary Tradition* (New York: Payback Press, 1981); LeRoi Jones, *Blues People: Negro Music in White America* (New York: Harper Perennial, 2002).

10 Mellonee V. Burnim and Portia K. Maultsby, eds., *African American Music: An Introduction* (New York: Routledge, 2014).

ear music”¹¹ has survived, although jazz education also has grown into a massive industry of books and other written material.¹²

Against this background, Schön’s observation of jazz musicianship as a capacity for intersubjective and aural-communicative reflection-in-action makes perfect sense: the musicians *listen* to each other and unfold the music together. Moreover, when Schön speaks of RiA, he anticipates the movement in contemporary cognitive science that explores the enactive *linguistic* body.¹³ To understand what this idea entails, a bit of background is needed.

Launched with the publication of *The Embodied Mind*,¹⁴ the enactive approach to cognitive science is – as the title makes clear – defined by the thesis that the mind is essentially *embodied*. With this thesis, enactivists aim to reject the still popular model of the human mind as an abstract intellect locked inside the skull and operating on representations of the external world. As enactivists see it, the mind is instead a whole-body phenomenon, realized in and through our practical bodily engagements with our surroundings.

This “embodied turn” yielded valuable new insights in a wide range of fields, including work on musical perception and performance. There has, however, been a worry that the validity of the enactive theory is limited in scope to only the more “basic” aspects of the mind, such as the practice-oriented “ground-level” of perception, and that it will struggle to account for more “sophisticated” aspects like language and symbolic thought, which seem to lend themselves more easily to the traditional intellectualist model. *Linguistic Bodies*, which construes the human body as – precisely – a *living body*, is enactivists’ attempt to ease this worry. Their notion of linguistic bodies is rooted in the already established enactivist view of the mind as a process of self-individuation, exemplified in its most basic form in the *autopoietic* organization by which living organisms maintain their own existence through metabolic exchanges with the environment and generalizable – under the heading of “adaptive autonomy” – to forms of identity-generation beyond the mere organic

11 Berliner, *Thinking in Jazz*.

12 Eitan Wilf, *School for Cool: The Academic Jazz Program and the Paradox of Institutionalized Creativity* (Chicago: University of Chicago Press, 2014); Kenneth E. Prouty, “The History of Jazz Education: A Critical Reassessment,” *Journal of Historical Research in Music Education* 26, no. 2 (2005).

13 Di Paolo, Cuffari, and De Jaegher, *Linguistic Bodies: The Continuity between Life and Language*; Maurice Merleau-Ponty, *The Structure of Behavior* (Pittsburgh: Duquesne University Press, 2011); Ståle Finke, Thomas Netland, and Mattias Solli, “Art and Linguistic Bodies: A Transformative View,” *Phenomenology and the Cognitive Sciences* (in press).

14 Francisco Varela, Evan Thompson, and Eleanor Rosch, *The Embodied Mind; Cognitive Science and Human Experience* (Cambridge, MA: MIT Press, 1991).

level.¹⁵ In short, the idea is that this form of self-individuation instantiates an activity of *sense-making* – the simultaneous, interdependent, and interactional constitution of an agent and its meaningful environment, defined as such by virtue of norms distinguishing factors that are significant for the agent’s viability and ongoing projects. As *linguistic* bodies, we are characterized by a special form of self-individuation, constituted by activities of *participatory sense-making*¹⁶ with others that give rise to intersubjectively shared domains of meaning and practices of communication. “With linguistic bodies,” as Di Paolo et al. say, “a new form of autonomy emerges at the community level, that of patterns of utterances, expressions, styles, and open-ended norms.”¹⁷ Language is a structure that both guides and is constituted – and continuously evolved – by the interactions of linguistic bodies (which, in turn, are defined as such through those interactions).

We propose that Schön’s RiA is best understood within this framework of linguistic bodies as a reflection in *communicative* action. Thus conceived, music-making is a form of linguistic sense-making, a communicative interaction of linguistic bodies that, through exchanges of meaningful musical utterances, explores and develops a shared musical *idea* that, in turn, guides the musicians’ ongoing interaction. As linguistic bodies, every aspect of our lives and behavior is either already or at least potentially imbued with an intersubjective sense that can be taken up, responded to, and expressed by other linguistic human subjects. Musical utterances are no exception: they are never mere sounds but are expressive of a *sense* that summons up a field of significances rooted in our shared human situation, laying the ground for further expression. On this view, to become an expert musician is to learn the language of music; it is to learn to *understand* musical utterances in the sense of learning how to orient oneself in landscapes of musical significance, responding appropriately to the utterances of co-players, and having a grasp of the overall direction of one’s participatory expressive achievement.

Three points should be underscored here. First, seeing language as an essentially interactional phenomenon in this way means that the sense of linguistic – and hence musical – utterances is primordially realized *in* the contextually embedded utterances themselves and not in some prior and privately enclosed intentions of individuals. In other words, one does not know exactly what one is saying (playing)

15 Di Paolo, Cuffari, and De Jaegher, *Linguistic Bodies: The Continuity between Life and Language*; Evan Thompson, *Mind in Life* (Cambridge, MA: Belknap Press of Harvard University, 2007).

16 Hanne De Jaegher and Ezequiel Di Paolo, “Participatory Sense-Making,” *Phenomenology and the Cognitive Sciences* 6, no. 4 (2007).

17 Di Paolo, Cuffari, and De Jaegher, *Linguistic Bodies: The Continuity between Life and Language*, 197.

before it is actually *said* (played) and responded to in the ongoing communicative interaction.¹⁸ In this way, linguistic interaction has the potential of being *reflection-in-action*, exploring ideas by letting them emerge and unfold through communicative practice. Second, when one is thus reflecting-in-action, the interaction itself takes on a form of normativity that both guides and is constituted by the participants' utterances. This normativity is *open-ended*: the goals of the interaction, and hence its criteria of success, are not entirely fixed and determined in advance but are continually modified and renewed through the flow of the communication. In exploring an idea through communication, interlocutors continually bring in novel points and perspectives and rephrase each other's utterances in ways that influence the future direction of their activity. Third, in such cases, participants relate to their own and each other's expressive behavior and the expressive whole they are co-creating, *as such* – i.e., the structure of their behavior becomes, as Merleau-Ponty puts it, “the proper theme of activity.”¹⁹ Thus, we can see these forms of participation as holistic, self-reflecting structures, relating and responding to their own patterns of activity through their participants' contributions.

With his notion of RIA, Schön identifies a mode of competent behavior where musicians, in feeling where the music is going and adjusting their playing accordingly, are allowing their own behavior to become the proper theme of activity, the expression of a musical idea. In the next section, we'll unpack and discuss the more profound implications of reflection-in-action as it is manifested in the context of jazz music.

3. SCHÖN'S FOUR STATEMENTS: ANALYSIS AND DISCUSSION

In the previous section, we began exploring the positive contributions latent in Schön's description of jazz musicianship as a form of RiA. Schön opens a theoretical path for appreciating musicians' aural-communicative knowledge as a fully fledged reflective competence. However, in this section, we will explore the other side of the ambiguity mentioned above, pursuing how his elaboration of what RiA in jazz involves is in danger of undermining critical aspects of his own idea. We will explore the ambiguities of Schön's proposal by reviewing the relevant passage step by step, gradually evoking the latent philosophical themes.

18 Similar points are developed by Johan Asplund; see Molander, *The Practice of Knowing and Knowing in Practices*, 142–145.

19 Merleau-Ponty, *The Structure of Behavior*, 103.

Let's begin by reading the passage in full:

When good jazz musicians improvise together, they [...] manifest a “feel for” their material and they make on-the-spot adjustments to the sounds they hear. Listening to one another and to themselves, they feel where the music is going and adjust their playing accordingly. They can do this, first of all, because their collective effort at musical invention makes use of a schema—a metric, melodic, and harmonic schema familiar to all the participants—which gives a predictable order of the piece. In addition, each of the musicians has at the ready a repertoire of musical figures which he can deliver at appropriate moments. Improvisation consists in varying, combining, and recombining a set of figures within a schema which bounds and gives coherence to the performance. As the musicians feel the direction of the music that is developing out of their interwoven contributions, they make new sense of it and adjust their performance to the new sense they have made. They are reflecting-in-action on the music they are collectively making and on their individual contributions to it, thinking what they are doing and, in the process, evolving their way of doing it.²⁰

Undoubtedly, many of these observations fit clearly into the picture of RiA that we presented in the previous section together with the notion of linguistic bodies. Upon closer inspection, however, some of the statements can be seen to lend themselves too easily to interpretations that are incompatible with this picture. We have identified four such statements: A) that jazz musicians make adjustments to *sounds*, B) that their efforts aim at musical *invention* based on a *schema*, C) that this schema organizes a *repertoire of figures*, and D) that their RiA is a reflection on the music. In the next pages, we review these statements one by one.

3.1. Statement A: Jazz improvisers make adjustments to *sounds*

Statement A states that musicians make “on-the-spot adjustments to the sounds they hear.” This might not seem like a very controversial statement. Music is a sonorous phenomenon. More precisely, it is a sound-time phenomenon, as Reybrouck puts it,²¹ a resounding and temporally organized art.²² Focusing on *sound* in this

20 Schön, *The Reflective Practitioner: How Professionals Think in Action*, 55–56.

21 Mark Reybrouck, “Musical Sense-Making and the Concept of Affordance: An Ecossemiotic and Experiential Approach,” *Biosemiotics* 5, no. 3 (2012): 399.

22 Mark Reybrouck, “Experience as Cognition: Musical Sense-Making and the ‘in-Time/Outside-of-Time’ dichotomy,” *Interdisciplinary Studies in Musicology* 19 (2019).

context can, however, easily conceal the fact that the music itself *has sense* – i.e., musicians *make (or enact) musical sense* through the ways they respond to and develop their ongoing participatory expression. Schön comes close to this idea when he says, in the same passage, that the musicians “feel the *direction* of the music” and that they “make new sense of it.” However, these claims are still vague enough to allow for an interpretation that sees sound as distinct from and more primary than sense in the musicians’ interactions. Such interpretations need to be excluded if we are to understand music as reflection-in-action in the form of participatory sense-making by linguistic bodies.

We can see one aspect of the problem by considering that rhythmic and tonal aspects of the resounding music are symbolic forms.²³ It is generally accepted that rhythm is the primary organizational force in jazz and other music of African American or African origin.²⁴ While the music can *swing* or *groove* in many ways according to idiomatic differences, the fact that it *does* swing or groove is vital. As drummer Ralph Peterson puts it, rhythm is *the* musical logic: “[I]f you miss a note and the rhythm is logical, then the idea comes across ... whether you hit the note dead center or not. But if you miss time—because music is organized sound in time ... if you blow the time you’re more likely to do irreparable damage to the music.”²⁵ Unfolding in time, tonal gestalts form and dissolve according to their own syntaxes, be it in the African tonal polyphony²⁶ or the Western equal-tempered twelve-tone system.²⁷ In the latter, the music is organized by certain normative forces that push, pull, and generate the music from within, according to the

23 Mattias Solli, Erling Aksdal, and John-Pål Inderberg, “Learning the Jazz Language by Aural Imitation: A Usage-Based Communicative Jazz Theory (Part 2),” *Journal of Aesthetic Education* 56, no. 1 (2022); Finke, Netland, and Solli, “Art and Linguistic Bodies: A Transformative View”; Solli and Netland, “Enacting a Jazz Beat: Temporality in Sonic Environment and Symbolic Communication”; Roger Scruton, *The Aesthetics of Music* (Oxford: Clarendon Press, 1997); Susanne K. Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (Cambridge, MA: Harvard University Press, 2009).

24 Tiger Roholt, *Groove: A Phenomenology of Rhythmic Nuance* (New York: Bloomsbury Publishing, 2014); Berliner, *Thinking in Jazz*; Monson, *Saying Something*; John Miller Chernoff, *African Rhythm and African Sensibility: Aesthetics and Social Action in African Musical Idioms* (Chicago: University of Chicago Press, 1979); “Interview with Dizzy Gillespie (1972),” 1972, <https://mikel-ongojazz.com/2019/07/23/interesting-interview-with-dizzy-gillespie/>; “Hal Galper Master Class – Rhythm and Syncopation,” 2010, <https://www.youtube.com/watch?v=a2XnB5G6oSc>.

25 Cited in Monson, *Saying Something*, 29.

26 Olly Wilson, “The Significance of the Relationship between Afro-American Music and West-African Music,” *The Black Perspective in Music* 2 (1974); Simha Arom, *African Polyphony and Polyrhythm: Musical Structure and Methodology* (Cambridge: Cambridge University Press, 1991).

27 Scruton, *The Aesthetics of Music*.

stringent and lawful perceptual norms set by the octave, the circle of fifths, and the diatonic and chromatic tone steps. The musician Erling Aksdal calls it *generative potentials*: The music unfolds and generates itself according to its own immanent and stringent order.²⁸

Unfortunately, Schön leaves out these considerations. But we see why it would be a misunderstanding to approach music as *just* sound. The intimate organization of rhythmic and tonal orders makes the music prone to thick symbolic organization into generative potentials or ideational structures with a semi-autonomous organizational force. Add to this the fact, as Schön himself embraces elsewhere in the same passage, that music is an intersubjective and communicative phenomenon targeting the ear of the other. Music is always played *for* someone, even if nobody else listens apart from the musician herself. Music addresses itself to the human ear. Even the *muzac* streaming out of the elevator in a mall is produced to affect other human beings.²⁹ And this relational and communicative dimension holds a fortiori for professional jazz musicians, who are experts in using their idioms' rhythmic and tonal languages directed towards the ears of peer musicians.

Thus, Schön's ambiguous formulation of musical *sound* threatens to undermine his otherwise promising description of RiA. Let's move on to statement B before we say more about this.

3.2. Statement B: Invention and schemas

Statement B speaks about *invention*. Why? A likely reading is that Schön evokes the much-celebrated etymological meaning of the word *improvisation*: *in provisus*, that is, *not [im] foreseen [providere]*.³⁰ Thus conceived, Schön has actualized one of the most repeated factors about jazz musicians: they can create something *new* in the spur of the moment. And in many contexts, this is more than an observation of something that happens every once in a while. It is a *value* ascribed to this branch of the musical business.

One should be careful in buying this perspective. As far as we can see, the focus on invention in art is a Western idea, emerging in the modernist and romantic

28 The current conception of generative potentials in music is developed by Erling Aksdal through decades of teaching. For elaborate theoretical perspectives, see Solli, Aksdal, and Inderberg, "Learning the Jazz Language (Part 2)," 99–101; Solli and Netland, "Enacting a Jazz Beat: Temporality in Sonic Environment and Symbolic Communication."

29 Solli, "Musical Affordances and the Transformation into Structure."

30 Online Etymology Dictionary, "Improvisation," (2022). <https://www.etymonline.com/search?q=Improvisation>.

aesthetic tradition in the wake of Kant.³¹ It is, however, not an idea dominating the West African music traditions that eventually transformed into jazz, where music tends to be considered a cyclic, e.g., non-linear and non-progressive, phenomenon.³² While a survey among jazz musicians probably would give a mixed answer on whether innovation is a value worth pursuing, we should be aware that it is an extra-musical value stemming from a tradition distinct from the oral tradition where jazz ultimately emerged. We return to this point below, when we describe the open aural horizon of the music.

Immediately after Schön speaks about musical invention, he holds that the players “make use of a schema—a metric, melodic, and harmonic schema familiar to all the participants—which gives a predictable order of the piece.” This statement can be seen as a micro-expression of the ambiguity of the whole passage. Let’s unpack it by considering three ways in which a reader can interpret statement B.

First, one can interpret Schön’s *schema* as hinting toward the capacities of the linguistic body. As musico-linguistic bodies, the players possess a range of expressive skills and abilities for meaningful musical communication that is realized in and contributes to the participatory structure. Listen, for instance, to saxophonist Chris Potter’s solo version of the standard “All the things you are.”³³ Potter expresses a superb knowledge of the rhythm, tonal language, and temporal form, which can be viewed as deeply internalized body schema knowledge. The intrinsic temporal structures of the tune seem profoundly embedded in the flow of music. The music flows without reference to any external criteria, only its own teleological sense *being on its way to continuous audible emergence*. However, while we support this enactivist interpretation of Schön’s statement, two things argue against it. First, if this were the idea Schön was aiming at, it would have required an analysis of musical-linguistic behavior, which would probably have made him rethink his statement about musical reflection as an adjustment to *sounds*. Moreover, as we’ll see shortly, this enactive interpretation of “schema” seems to conflict with the approach suggested by statement C – the idea that the competent musician handles a *repertoire of figures*.

31 Immanuel Kant, *Critique of the Power of Judgment* (Cambridge: Cambridge University Press, 2000).

32 Thomas Brothers, “Solo and Cycle in African-American Jazz,” *Musical Quarterly* 78, no. 3 (1994).; see also Paul Berliner, *The Soul of Mbira: Music and Traditions of the Shona People of Zimbabwe* (Chicago: University of Chicago Press, 1993) pp. 110–111, although this study is from Zimbabwe.

33 Chris Potter, “All the Things You Are,” in *Recorded solo session* (2010). <https://www.youtube.com/watch?v=QHYP18AJeZQ>; <https://www.youtube.com/watch?v=QHYP18AJeZQ>

The second way to interpret Schön's "schema" is to say that it evokes a subtle reference to literacy. That is, the "schema" *can* be interpreted as akin to a pre-written script varied almost endlessly during the performance. Whether or not Schön intended the reference, this interpretation would fit with a widespread conception of jazz improvisers as improvising *over* a tune, finding their pathways effortlessly through the harmonic progressions while keeping up with the beat set by the drummer. Thus conceived, Schön's musicians "make use of a schema" that exists outside them as they execute the potential pathways suggested by the script.³⁴ While this might be a good model for students who approach jazz through the so-called real books³⁵ or other written material, we should be cautious about accepting the figure. To the extent that jazz is kept alive as an oral and aural form of music, the reference to pre-written material twists the perspective away from the genuine openness of the musical play.³⁶

The third possible interpretation of the "schema" is compatible with yet distinct from the previous one. Here, one can understand Schön's "schema" as a bodily schema learned through Dreyfus-like skill acquisition. As Herbert and Stuart Dreyfus proposed, learning a skill as an adult human will tend to progress through five different stages, beginning with the novice stage and ending with complete mastery of the skill at the level of expertise.³⁷ In this model, the novice will typically rely on explicit rules and conscious attention to distinctions relevant to the activity. As one's mastery progresses, one's body will gradually become so habituated to the activity that one, finally, at the level of expertise, can be wholly *absorbed* in the activity, no longer relying on any explicit awareness of rules, etc., while displaying a context-specific sensitivity beyond what it is possible to state in any explicit instructions. This Dreyfusian model is explicitly employed in studies on jazz improvisation associated with enactivism.³⁸ It also seems to fit Schön's picture. The musicians in his analysis seem to have reached the highest level of expert knowledge: Having incorporated rhythmic and melodic-harmonic patterns through practice, their body schemas are now able to master the jazz-playing

34 Bruce Ellis Benson, *The Improvisation of Musical Dialogue: A Phenomenology of Music* (Cambridge: Cambridge University Press, 2003).

35 Real-books are written collections of popular tunes in jazz, often referred to as *standards*.

36 A more productive to speak of the music as text would be to apply Gadamer's hermeneutic text concept; see Mattias Solli, "Tradisjon, Individualitet og Spontanitet. Gadamer og Jazz," in *Opplysningen av det Estetiske: Kunstfilosofi og Estetisk Praksis*, ed. Ståle Finke and Mattias Solli (Oslo: Universitetsforlaget, 2021).

37 Hubert L. Dreyfus and Stuart E. Dreyfus, *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer* (New York: Free Press, 1986).

38 Torrance and Schuman, "The Spur of the Moment: What Jazz Improvisation Tells Cognitive Science."

activity, producing novel inventions in response to situations disclosed by a fine-grained musical sensitivity.

While there certainly is *something* to the Dreyfusian model, we seem again to be faced with a neglect of the *communicative* and *meaningful* aspect of music. Without dismissing the importance of habituating one's body to the execution of certain specialized movements required to master one's instrument, we want to resist the idea that the schema employed by expert jazz musicians is composed of a set of learned bodily behaviors that their playing consists in repeating and, occasionally, modifying ever so slightly to form musical "inventions." We'll look closer at why this is problematic in the next subsection.

3.3. Statement C: Repertoire of figures

The likelihood of the second and third interpretations of statement B can be enhanced by statement C, wherein Schön states that "each of the musicians has at the ready a repertoire of musical figures which he can deliver at appropriate moments" and that "[i]mprovisation consists in varying, combining, and recombining" these figures. On the one hand, the word *repertoire* is a Wittgenstein-inspired technical term. Schön explains it thus in another passage of *The Reflective Practitioner*:

A practitioner's repertoire includes the whole of his experience insofar as it is accessible for him for understanding and action. When a practitioner makes sense of a situation he perceives to be unique, he *sees* it *as* something already present in his repertoire. To see *this* site as *that* one is not to subsume the first under a familiar category or rule. It is, rather, to see the unfamiliar, unique as both similar to and different from the familiar one, without at first being able to say similar or different with respect to what.³⁹

Minus the ocular emphasis, this seems to sit well with our conception of the musico-linguistic body as one that possesses a range of expressive skills and abilities for meaningful musical communication. Due to their experience and auditory sensitivity, musicians can catch minute qualitative nuances in the music that *are* or *could* be played without necessarily acting everything out. Defining which nuance that should be performed in actual resounding music or not is unimportant. And the evaluations of the music are not about rule-following. What matters is *just* that the music continues to bounce off and unfold itself from moment to moment

39 Schön, *The Reflective Practitioner: How Professionals Think in Action*, 138.

as the whole of the musicians' experiences becomes accessible, individually and collectively.

On the other hand, if we again zoom more closely into Schön's wording, we see him leaning towards another assumption prevalent in the improvisation literature, namely what Solli, Aksdal, and Inderberg have called *the building block approach* (BBA).⁴⁰ Nettl stated that improvising musicians handle "building blocks which tradition accumulates, and which musicians within the tradition make use of, choosing from among them, combining, recombining, and rearranging them."⁴¹ Berliner shows that BBA has found its way into descriptions of the skill acquisition in question. "Many students begin acquiring an expansive collection of improvisational building blocks by extracting those shapes they perceive as discrete components from the larger solos they have already mastered and practicing them as independent figures."⁴² Wilf describes learning music by ear, stating that "improvisation involves imitation insofar as it is a recombination of previously available building blocks created by other improvisators."⁴³ The philosopher Benson sees no trouble in the approach: "For improvisation is a sense of 'putting together.' One takes the basic rhythmic and chord structures of the genre in which one works and puts them together in different ways."⁴⁴

As a way to comment on the BBA, we note how Schön's wording seems to go hand in hand with understanding the *schema* as an underlying script. The idea that an expressive form consists of building blocks likens the idea of language consisting of letters, words, or sentences that can be strung together into well-formed, meaningful utterances. The Dreyfusian model of expert skills as fully incorporated behavioral patterns can also be interpreted along the lines of the BBA. While we can imagine the novice standing in the practice room dealing with one musical figure at a time (be it a rhythmic, melodic, or harmonic pattern), we can also imagine how the expert, who has already extensively learnt the individual blocks, can be (or is) fluent in the combination and re-combination of the figures. Consequently, Schön states that musicians' "collective effort at musical invention makes use of a metric, melodic, and harmonic schema familiar to all the participants—which gives a predictable order of the piece." This predictability, Schön can be read as saying, is due to the repertoire of incorporated patterns. The schema, then, is created

40 Solli, Aksdal, and Inderberg, "Learning the Jazz Language (Part 2)," 118–20.

41 Bruno Nettl, "Thoughts on Improvisation: A Comparative Approach," *Musical Quarterly* 60 (1974): 13.

42 Berliner, *Thinking in Jazz*, 101.

43 Wilf, *School for Cool*, 134.

44 Benson, *The Improvisation of Musical Dialogue*, 136.

by incorporating a set of experiences of practicing “building block” behaviors. More precisely, the set of incorporated experiences *is* the schema.

But again, we should be cautious about accepting these approaches to jazz improvisation. Gadamer points out that the alphabet once represented a prodigious abstraction,⁴⁵ part of a cultural trend of concealing or “forgetting” language as a materialized, perceptual, and sense-making phenomenon.⁴⁶ And as far as we can see, one can say the same about the BBA: The idea that jazz music consists of building blocks is an abstraction that conceals the fact that musicians unfold musical sense together. It hides the fact that *perceptual sense cannot really be divided into parts*.⁴⁷ There are no *partes extra partes* in perceptual sense-making, only the unfolding of *wholes*. Perceptual sense unfolds as dialectic part-whole relationships.

The implicit association with written language that we find in both the BBA and the schema model is especially inapt the moment we also consider that jazz originated in and still preserves an oral and aural tradition. When children learn to speak their mother tongue, they do not do so by stringing together words or consciously focusing on their task. They do not usually learn words as separate muscular and sonorous figures to be practiced one at a time, fine-tuning the muscles in the mouth, lips, and lungs, gradually incorporating a repertoire of word behaviors that they can combine in various ways. Or at least, such a description of what happens is essentially incomplete and abstract since it neglects that what is primarily acquired is a power of *expression* and a capacity for navigating in a world of human significance. This is seen in the fact that children learn through *imitating* others and that, as Merleau-Ponty observes, what they primarily imitate is not the exact behavior of others but rather their *intentions* – i.e., the *sense* of their behavior. As he puts it, “To imitate is not to do what the other does, but to arrive at the same result.”⁴⁸

Similarly, we can imagine the young Louis Armstrong and Charlie Parker hour after hour by their record players, trying to map out as exactly as possible what they heard, aiming to incorporate the musical language as *their* language and thus expand their musical-expressive powers. We move beyond the BBA by following Merleau-Ponty’s pointer: Imitating the music is *not* about imitating what the masters do and thus assembling a repertoire of physical movements *but about arriving at the same results the musicians heard on the record*. Learning jazz by aural imitation is about hearing the direction of the music as a perceptual sense and being able

45 Hans-Georg Gadamer, *Beginning of Philosophy* (New York: Bloomsbury Publishing, 2000), 14.

46 Hans-Georg Gadamer, *Truth and Method* (London: Continuum, 2004).

47 Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge, 2012).

48 Maurice Merleau-Ponty, *Child Psychology and Pedagogy: The Sorbonne Lectures 1949–1952* (Evanston: Northwestern University Press, 2010), 22.

to accomplish this musical sense either by one-to-one mapping or (eventually) by *variation*.⁴⁹ Just as learning a language is to learn that the same point can be made in using different words, and the same words can be used in making different points, the young musician must discover how exact imitation enables personal utterances within the same language and (as with Armstrong and Parker) transformations *from within the language*.

In the background of such learning processes, the whole world of communicative interaction evolves, from the first mother-child interaction to playing with peers and developing a relatively autonomous self. In short, the entire horizon of what Trevarthen and Malloch call *communicative musicality*⁵⁰ forms a background onto which the music in the foreground makes sense – or *begins* to make sense – for the novice. Add to this the picture of oral communities, where people grow up with no clear distinctions between everyday speech, singing, and music. Thus, it becomes even more apparent that jazz expertise cannot be adequately captured by the BBA and schema models. Instead, jazz mastery should be seen as fluency in a specific form of musical sense-making enabled by the initiation into musical languages.

3.4. Statement D: Reflection *on* music

Lastly, let us look at statement D, where Schön states that the musicians “are reflecting-in-action on the music they are collectively making and on their individual contributions to it.” On the surface, this description seems to pin-point an intuitive and non-intellectual mode of reflection. The music-making process does not have to go through explicit cognitive evaluations but can be carried out in the flow.

At the same time, Schön’s wording can also lend itself to an interpretation according to which there is a difference – a cognitivist distance – between the reflective activity and the actual unfolding of the music. Reflecting-*in*-action is a reflection *on* the music. While Schön’s wording might simply be a consequence of the rules of the English language (the word *reflect* requires the preposition *on*), it is crucial for an adequate account of RiA that such cognitivist interpretations are unambiguously excluded. RiA, that is, should not be considered an activity

49 Solli, Aksdal, and Inderberg, “Learning the Jazz Language (Part 2).”

50 Stephen Malloch and Colwyn Trevarthen, eds., *Communicative Musicality: Exploring the Basis of Human Companionship* (Oxford: Oxford University Press, 2009); Colwyn Trevarthen and Stephen Malloch, “The Intrinsic Beauty of Communicative Musicality from Birth,” *Anthropology and Beauty: From Aesthetics to Creativity* (2018).

detached from the actual medium, an activity that does not evolve *in* the music but at a certain distance from it.

While it is improbable that Schön intended this kind of cognitivist position, the possibility of such an interpretation is strengthened when statement D is seen in the light of the ambiguities of the preceding statements A–C. If one takes reflection in jazz to be an application of musical building blocks, it makes sense to believe that there is a mind standing over these blocks deciding, in split seconds, how to combine and recombine them.⁵¹ And perhaps unsurprisingly, statement D, too, implicitly lends itself to the prejudice of the primacy of written language, here in the form of construing the mind as a detached, knowing, epistemological consciousness. According to Ong,⁵² there is an intimate association between an intellectualist conception of the mind as a mind's eye that "sees" the structure of the cognitive action and the fact that knowledge formulated on a paper has authority within Western culture. The seemingly banal fact that the text is *visible* makes it stable as a medium of transfer, just as a solid object can be seen, touched, and explored with a character of self-sameness over time. Sight also presupposes a distance, "a laying out of surfaces," as Ong puts it,⁵³ which then functions perfectly as an analogy or symbol of a rational mind standing over its object, freely deciding what to engage in or reject. A perfect example of what Ong points to is Descartes's *oculi mentis* (mind's eye), which reflects upon its own rational content by directing consciousness towards the "clear and distinct perception of what I affirm to be the case."⁵⁴ This intellectualist idea is typical of Western literacy, according to Ong. The rational text is the perfect visual medium for its hypervisualist orientation.

Admittedly, reading all this into Schön's brief statement is to push things. But the perspective is worth considering since statement D, so construed, also is at odds with how aural musicians describe their playing as a way of *thinking* precisely *in* their musical media. It is no accident that Berliner's monumental portrait of an African American jazz community is called *Thinking in Jazz*.⁵⁵ As familiar with the rhythmic and tonal language as they are with their mother tongue, these musicians

51 An elaboration of this model of improvising cognition is suggested by musician, psychologist, and (in our classification) the BBA proponent Jeff Pressing, "Improvisation: Methods and Models," in *Generative Processes in Music: The Psychology of Performance, Improvisation, and Composition*, ed. John Sloboda (Oxford: Oxford University Press, 1988).

52 Walter Ong, *Interfaces of the Word: Studies in the Evolution of Consciousness and Culture* (Ithaca: Cornell University Press, 2013).

53 Ong, *Interfaces of the Word: Studies in the Evolution of Consciousness and Culture*, 122.

54 René Descartes, *Meditations on First Philosophy: With Selections from the Objections and Replies* (Oxford: Oxford University Press, 2008), 25.

55 *Thinking in Jazz*.

do not need a reflective mind operating outside its expressive medium. Similarly, Høffding has demonstrated how a group of expert musicians frequently becomes fully absorbed in the playing, thus engaging in the mutual dialectic activity without any intellectual stance “above” the activity itself.⁵⁶ Finally, recall from Section 2 how this, in a sense, also holds for our everyday linguistic communication: Just as we all, when we talk, do not need to reflect-in-action *on* the words we are going to use before saying it, but on the contrary, *say* the words as part of becoming aware of what we are trying to say. Analogously, fluent musicians become aware of what they’re trying to express musically by acting it out. The accomplishment in collective aural-communicative action *is* the thinking. Or as we now will put it in the final section: The achievement in collective aural-communicative action *is* the reflection in communicative action.

4. REFLECTION IN COMMUNICATIVE ACTION IS PARTICIPATORY AND OPEN-ENDED SENSE-MAKING

In the previous section, we interpreted four of Schön’s statements about the RiA exercised by jazz musicians. As we have seen, Schön does an impressive job of revealing an ambiguous and complex phenomenon. At the same time, his analysis does not seem completely phenomenologically adequate, lending itself a bit too easily to problematic approaches and models left unexamined. Many of his statements also fit nicely into models suggested by Western literacy. From what we have seen, it is not difficult to understand how that could happen. Several other theories of jazz playing fall into the same trap. Western literacy is a fundamental cultural trait that permeates everything from analyses of perception to knowledge systems.⁵⁷ Nevertheless, it is essential to get rid of this model if we want to understand the oral and aural modes of knowing developed and preserved in the jazz tradition.

What, then, is the positive alternative? We have already indicated our preferred position in the previous sections. But we can now lay it out in more detail, launching off from an observation by Sidran. In contrast to the typical epistemic ideal

56 Høffding, *A Phenomenology*.

57 David Abram, *The Spell of the Sensuous; Perception and Language in a More-Than-Human World* (New York: Vintage Books/Random House Inc., 1996); Hans-Georg Gadamer, *Der Anfang Der Philosophie* (Stuttgart: Reclam, 1996); Eric A. Havelock, *Preface to Plato* (Cambridge, MA: Belknap Press of Harvard University, 1963); Walter Jackson Ong, *Orality and Literacy; the Technologizing of the Word* (London: Routledge, 2012); Walter Jackson Ong, *The Presence of the Word: Some Prolegomena for Cultural and Religious History* (Birmingham: Global Publications, Binghamton University, 2000).

developed in Western rationality, he explains, univocity and unambiguity were no ideals in the aural West African knowledge system that eventually merges into jazz.⁵⁸ It was considered vulgar and unintelligent to express something in a manner that could be understood in only *one* way. We must not misunderstand the point: *Hitting the right note at the right time to generate the open-ended ambiguity requires utmost exactness, precision, and competence.* Wynton Marsalis hits this point on behalf of jazz: “Jazz is not just, ‘Well, man, this is what I feel like playing.’ It’s a very structured thing that comes from tradition and requires a lot of thought and study.”⁵⁹ This is why jazz students need to be precise. Unless one prefers to venture into unsubstantial contact with the musical sense, the exact character of the music demands a precise correlate of imitative behavior.⁶⁰

Our notion of reflection in communicative action sits well with Sidran’s emphasis on ambiguity, openness, and exactitude. For instance, when the rhythm is considered the main logic in music associated with jazz, the rhythms are usually not “closed” or “static” unfolding of sound but rhythmic gestalts that *swing or groove*, thus “bouncing” or “pushing” the music forward.⁶¹ The swing beat is an excellent example. It can be rephrased in terms of the *continuous flow of syncopated rhythm*: When the beat starts swinging for real, it flows off as if it created itself from one moment to the next, one note anticipating the other, always keeping the music open to what comes next. The musician Cecil McBee compares the beat metaphorically with a wave: “The moment you pick up the instrument and put it into motion you’re supposed to *feel* [the beat], and then the other things kind of ride the wave.”⁶² Analogously, when competent jazz musicians explore the major-minor tonality again and again, either in standard repertoire or in self-created tunes, they explore the infinity of this tonal language by keeping open the aural horizon of the language. The tonal gestalts enabled by the twelve-tone system, the major-minor tonality, and the tune are breached and kept open in ever new explorations. Thus conceived, jazz’s rhythmic and tonal logics *are* the fluctuating and never-resting ambiguity of continuous unfoldment.

This is the participatory creation of a musical sense by linguistic bodies. The musical sense – the expressive, sonorous-temporal unfolding of the musical performance as a whole – emerges as an autonomous structure in its own right. The structure guides the individual contributions to the whole, constituting them as

58 Sidran, *Black Talk*.

59 Cited from Berliner, *Thinking in Jazz*, 63.

60 Solli, Aksdal, and Inderberg, “Learning the Jazz Language (Part 1).”

61 Roholt, *Groove*; Solli and Netland, “Enacting a Jazz Beat: Temporality in Sonic Environment and Symbolic Communication”; Galper, “Hal Galper Master Class – Rhythm and Syncopation.”

62 Cited from Monson, *Saying Something*, 28.

meaningful *parts* of the whole at the very moment they are played. And in turn, every new individual contribution modifies the whole, realizing a potential that a moment ago was only an indeterminate possibility of the performance's open horizon and opening new opportunities for its future unfolding. In this way, the musicians' reflective activity is a joint accomplishment embedded and realized *in* the development of the musical structure itself. At the same time, each musician clearly informs the whole in their own distinctive ways. That is, their musical utterances do not only contribute to the collective achievement but are simultaneously constituting and expressing their own individual identity as autonomous musico-linguistic bodies. The music unfolds through participatory discrepancy, as Keil would say.⁶³ The musical performance as a whole is a gestalt, and each individual's contribution to that gestalt embeds a unique positioning, a personal voice expressing an individual's perspective on a whole that, as a symbolic and linguistic structure, affords multiple perspectives to be present simultaneously.

This leads us back to the point on innovation made above. Even if something *new* appears in the musical flow from time to time, this newness is a result of openness, not (necessarily or primarily) something sought for its own sake. The continuous flow of open-ended musical wholes and the individual players' expressive identities allow new expressions to naturally emerge when expert jazz players are negotiating their own and the whole's identities within an open horizon of musical sense. As Di Paolo et al. note, "The mode of existence of linguistic bodies and communities entails a permanent opening to potentiality."⁶⁴ In our context, the musical language is an ever-unfinished structure, with each new situation giving rise to new possibilities for linguistic expression. As linguistic bodies fluent in the language of jazz, jazz players' participatory sense-making is an exploration of the potentialities inherent in their shared language. Thus, the music emerges as a dialectic whole, involving both the collective experiences and history inherent in the jazz language shared by all the players as well as the unique perspective and life history of each individual musician, making the musical sense of the whole an ambiguous structure oscillating between the old and the new and between collectivity and individuality.

We can grasp a central aspect of what is going on here with the help of Bengt Molander's contribution to this anthology. That is, the kind of knowledge displayed by expert jazz musicians playing together is a clear example of knowledge as a

63 Term borrowed from Charles Keil, "Participatory Discrepancies and the Power of Music," *Cultural Anthropology* 2, no. 3 (1987).

64 Di Paolo, Cuffari, and De Jaeger, *Linguistic Bodies: The Continuity between Life and Language*, 325.

temporal pattern of intersubjective “knowing together” and, crucially, as “*knowing how to go on*.”⁶⁵ Through their participatory musical sense-making, the knowledge exploited by the musicians resides *in* the temporal unfolding of their shared musical medium and manifests as a way of dealing with the open-ended future of their cooperation by – precisely – knowing how to go on.

Further, we can say with Heidegger and Gadamer that, in successful performances, *the musical language speaks*. Gadamer would call it a radical form of play:⁶⁶ The prime subject of the music is not the musician or band “inventing” stuff, but the musical play itself, bouncing or grooving off, loosened from the pragmatic constraints that close off the play. Unlike football or tennis, jazz play is loosened from the normative endpoints associated with the competition.⁶⁷ Although competition might also occur in jazz, it is not the main point of the play to create a winner but to keep the music swinging, grooving, and open to spontaneous variations and modulations that suggest themselves from moment to moment.

And this is what we now – in the qualified sense emancipated from the inadequate models and approaches that can be read into Schön’s passage – mean with reflection in communicative jazz action. That’s the reflection: to be and to let others – peers and audiences, now and in the future, listening to records – be in the openness, in the open aural horizon.

4.1. Tasks ahead

In this chapter, we have discussed and expanded on Schön’s notion of reflection-in-action in light of the enactive-phenomenological idea of jazz players as linguistic bodies engaged in a special form of participatory sense-making. Being largely sympathetic to the core of Schön’s notion, we identified ambiguities in his presentation of the reflection-in-action involved in jazz music that seems to conflict somewhat with the adequate interpretation of this core. In particular, we have shown how four of Schön’s statements seem to lend themselves to inadequate assumptions about jazz expertise that can also be found elsewhere in the literature. We have especially challenged the tacit presupposition that models all forms of knowledge on Western literacy’s abstract and schematic nature, emphasizing the significance of jazz as belonging to an oral and aural tradition. In the last section, we suggested how the enactive notions of linguistic bodies and participatory sense-making are able to make sense of the complexities of jazz music thus

65 See Chapter 1, in this volume.

66 Solli, “Tradisjon, Individualitet og Spontanitet. Gadamer og Jazz.”

67 Finke, Netland, and Solli, “Art and Linguistic Bodies: A Transformative View.”

conceived. Further research is needed to elucidate more of the productive forces of this oral co-creative reflection. Let this be the task for the next conversation.⁶⁸

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Part 4
Seeing bodies/being bodies



9. Looking and making visible

Gisela Bengtsson

Abstract Drawing has been seen as the most intellectual in character among the forms of art, and croquis drawing has been taught within an academic and scientific framework, as theoretical knowledge about the human body was considered necessary to become a master of depiction. Knowledge of this kind may nevertheless become a hindrance when trying to capture the appearance of a model in a drawing: to be able to rely on eye and hand, suppressing knowledge may be required. I discuss this paradox with regard to croquis drawing and the conception of *seeing* in Wittgenstein's *Philosophical Investigations*.

Keywords mimesis | croquis | human body | knowledge | Wittgenstein

1. INTRODUCTION

A thin line is used in drawing to bring out form, volume, and movement when the aim is to depict the human body. Color is used in the art of painting to communicate a sense of liveliness, skin, and volume when the human body is depicted, and a sculpture has form and volume in itself. The line that marks the contours of a body seems almost like the negation of a body, it has been suggested, but may nevertheless succeed in making the living body, which is seen by the artist, visible in a sketch. For reasons of this kind, drawing has been conceived as primarily directed at the intellect and as spiritual in character, in contrast to painting and sculpture that have been described as directed at our senses.¹ Further light is shed on this difference if we consider the central place that the depiction of the human body has had in the education of artists at the art academies in Europe since the Middle Ages up until the late twentieth century. Theoretical education in anatomy,

1 Immanuel Kant, *Kritik der Urteilskraft*, Bd. 5, *Gesammelte Schriften / Akademieausgabe* (Berlin: De Gruyter, 1963), § 14; Jacques Darrilat, "Kant et l'esthétique du dessin," *Revue philosophique de la France et de l'étranger*, 132, no. 2 (2007); Roland Barthes, "Cy Twombly ou 'Non multa sed multum,'" in *Catalogue raisonné des oeuvres sur papier de Cy Twombly Vol. 6 1973–1976*, ed. Yvon Lambert (Milan: Ed. Multhipla, 1979); see also Plato on the art of painting in Plato, *The Republic: II, Books VI–X*, the Loeb Classical Library, vol. 276 (Cambridge, MA: Harvard University Press, 1987), bk. X.

the proportions of the human body, light, surfaces, shadows, movement, etc., were central elements of the artist's training towards mastering depiction. Practicing drawing by way of life studies was at the core of the art student's training that took place within an academic and scientific framework.² When we consider the surrounding of life drawing it seems to support the conception of this art form as intellectual in character. However, it is interesting to observe that knowledge of the human body also may represent a hindrance for the draftsman when she aims to depict a model. Her knowledge may function like a veil that hinders grasping the appearance of the model, as an obstacle that she wants to avoid for the sake of looking. A paradox seems to arise from the fact that knowledge about the human body is required to master depiction, but this knowledge creates difficulties when we try to make visible in a drawing that which we know well and are thoroughly familiar with – the human body.

In the following, I will try to shed light on this paradox by focusing on the practice of croquis drawing, seen in relation to a philosophical investigation, and move towards dissolving it. I will use my perspective as a person who engages in croquis drawing and my perspective as a philosopher to bring out different aspects of this practice. More specifically, I will discuss the character of the task in croquis drawing in connection with two different conceptions of *mimesis*: one that places emphasis on depiction as copying or registration of what is seen and another that highlights depiction as representation. What is brought to the fore in these sections will be closely related to two different elements in the process of croquis drawing that will be discussed in Section 4. My focus will then be on a remark by Wittgenstein where he puts forth the instruction: "Don't think, but look!"³ I suggest an interpretation of the conception of *seeing* in this remark and make a comparison between a philosophical investigation and the difficulties that adhere to looking and seeing in the case of croquis drawing. With reference to parallels and distinctions that have been brought out in the previous sections, I aim to dissolve the appearance of paradox formulated above. In the final section, reconnecting with questions that concern the aim in croquis drawing, I discuss what it means to capture the essential in a drawing. In doing this, I will also consider two different conceptions of *personal expression*.

2 Lena Holger, ed. *Kroppen: konst och vetenskap* (Stockholm: Nationalmuseum, 2005).

3 Ludwig Wittgenstein, *Philosophical Investigations / Philosophische Untersuchungen*, ed. Peter M. S. Hacker and Joachim Schulte, rev. 4th ed. (Chichester: Wiley-Blackwell, 2009).

2. THE PRACTICE OF CROQUIS DRAWING

I started taking courses in croquis drawing in high school and have continued to do so since then. Being able to capture, in a drawing, the lines that are formed when someone is sitting down, walking, or holding a certain position has for me always stood out as something worth striving for. The beauty of the angles formed when arms are crossed or when a cheek rests in the palm of a hand took me to croquis: I wanted to make what I see visible in drawings. The basic structure of a course in croquis drawing is optimal for the pursuit of this goal: a master of drawing guides and instructs both students and a model at a croquis session. Surrounded by students who stand at their easels, the model changes his or her pose at certain intervals. In the first part of the session, the change of pose comes after two to three minutes, according to the teacher's guidance. Towards the end, the model will hold a pose for five minutes or longer. The length of the poses varies in different contexts: A long pose may last for seven minutes or two hours (with breaks), but at art academies in the nineteenth century, for example, a long pose could last for up to three weeks (with breaks), allowing students to perfect their drawings.⁴ The word "croquis," however, is commonly used when speaking of sketches that are made very quickly as there are frequent shifts of poses, and it is primarily in this sense that I will use the word here.

3. THE TASK AND GOAL OF CROQUIS DRAWING

If we look at the etymology of the word croquis to elucidate the relation between this practice and others, we soon find that "croquer" is an onomatopoeic word, that reflects a dry and cracking noise, such as when a pen is used on paper.⁵ The *Petit Robert* tells us that "croquer" means painting, sketching, or drawing speedily, using a few lines to capture something *spot on* (a place, a personality), and adds "from analogy; to take note of, indicate quickly, the essentials. To sketch a personality in a book."⁶ The entry ends by pointing to a use of "croquer" in the sense of making a caricature drawing and to an idiom used to express that someone lends herself to croquis drawing. A Swedish source makes frequent use of the words "ethereal" and "speedily" in explanations of the verb "krokera" and adds that in

4 Torsten Weimarck, *Akademi och anatomi* (Stockholm: Brutus Östling, 1996).

5 Nicolas Le Roux, *La langue française*, s. v. "croquer," last modified October 3, 2022, <https://www.lalanguefrancaise.com/dictionnaire/definition/croquer>.

6 Paul Robert, Alain Rey, and Josette Rey-Debove, *Le petit Robert 1: dictionnaire alphabétique et analogique de la langue française*, nouv. éd. rev., corr. et mise à jour en 1990 (Paris: Le Robert, 1990), s. v. "croquer."

the nineteenth century, the word “kroki” was used to speak of sketches of landscapes made hastily in the field – in a manner similar to how we take snapshots of the places we visit. A remark from 1795 by the poet, painter, writer, and architect Ehrensvärd indicates a use of the word within different forms of art, as he expresses a wish to write in the same way as one draws in croquis.⁷ The emphasis on speed in the Swedish dictionary is to the point since the brief time given for each sketch in a croquis session with short poses places different demands on the draftsman than those that hold during a long pose. When the time given for each sketch is very brief (say two minutes), the use of an eraser to make changes and improvements is not only meaningless because of the lack of time, but represents a conflict with the very nature of the task: It is to LOOK and to CAPTURE what is seen swiftly and unhesitatingly – using for example a soft pen or a piece of charcoal on paper. This requires certainty in movements and an immediate cooperation between eye and hand. The task could also be described by saying that I must depict what I see, exactly the way it appears before my eyes, at that moment. Interpreting what is seen within a specific genre of drawing or painting or expressing the atmosphere in the studio in a drawing is not part of the task in croquis.

Now, art is often understood as an area for personal expression, but one could say that the space for personal expression is limited in the practice of croquis in the following sense: If I deviate in what I draw from how the task is generally understood, one will no longer say that I engage in croquis drawing. So, one might want to say that croquis drawing stands out from many other art forms in that there is a specific, delimited aim, and those who engage in the practice strive towards it. Could we then simply conclude that it is at the core of the practice of croquis that depictions of the model are to be produced in the form of drawings? Well, let's look at the different ways of describing the task and the goal strived for in croquis drawing:

1. To look and to capture what is seen swiftly and unhesitatingly using a pen on paper and to rely on the cooperation between hand and eye.
2. To depict, i.e., to imitate or copy, what is seen exactly the way it appears to me (to register, record, or reproduce what I see in a drawing).
3. To make a drawing which is a reflection of what I see when looking at the model – to transfer my visual impression onto the paper, so that the form of my drawing corresponds with the shape of the model, as I see it.
4. To make a representation of the model in the form of a drawing.

7 Svenska Akademiens ordbok, Spalt K 2877 band 15, 1938, s. v. “kroki” (Stockholm: Svenska akademien, 2022), <https://www.saob.se/artikel/?seek=kroki&pz=1>.

5. To capture the model as a representative of the human form in a drawing.
6. To capture the being, form, or essence of the person who holds a certain pose before my eyes.

In the first description, the emphasis is on using a focused and trained form of seeing – in combination with reliance on the cooperation of hand and eye. The second and third descriptions agree with the first, but in the latter ones, depiction becomes a matter of copying the visual impression in the form of a drawing, of reproducing or recording the visual impression, so to speak. These ways of describing the practice of croquis bring Plato's conception of *mimesis* to mind, i.e., depiction in art seen as an imitation of a copy of what is real (and a conception of *reality* as something we come to know by way of reason, not the senses). Looking at croquis drawing in this manner stresses the limited space for personal expression. This conception of *croquis drawing* also places perception at the center and portrays the process of drawing as an almost slave-like form of copying rather than as an artistic effort. The fourth and fifth descriptions of the task presented to a draftsman in a croquis session rather correspond to the Aristotelian conception of *mimesis*; depiction of the model becomes representation, it is directed at making a form visible in the drawing, namely, the model as a representative of the human form. According to this way of looking at it, the artist is not merely to copy what is seen but to capture what is representative of the human form in the drawing. The fourth and fifth descriptions are slightly different expressions of the same conception of *representational art*. In the sixth description, the task is seen as making a representation of the unique form of the person who stands before the artist. This is an interpretation of the task which is compatible with the Aristotelian conception of *mimesis*, but it need not be tied to that conception. If we enquire about the status of croquis as an art form, it seems that the descriptions point in different directions. Bearing the different understandings of the task in mind, we will now take a closer look at how the process of drawing moves forward during a croquis session.

4. TWO ASPECTS OF THE PROCESS OF DRAWING

One aspect of croquis drawing is to focus on what is seen and to rely on the cooperation between hand and eye to capture what is seen onto the paper, but another, equally important aspect is the following: during the croquis session, I must take a step back to look at my drawing as a whole and ask: does this look like a human being – a person? Do human beings stand or sit like that? Does it look right? This element of the process of drawing has the form of a comparison with a standard

of some sort – I consult my knowledge of human beings, of human anatomy, and my knowledge qua human being with a human body. Croquis drawing involves the two elements that I have described. The first means reliance on seeing, in combination with trust in the cooperation between hand and eye. The second element means reflection and evaluation of whether the drawing as a whole is right.⁸ Switching between them comes naturally (if there is time to do so). When it comes to the descriptions of the task in croquis that we have looked at, it could be said that the descriptions agreeing with Plato’s conception of *mimesis*⁹ correspond to the first element of the process of drawing, while the descriptions expressing an Aristotelian conception of *mimesis*¹⁰ rather correspond to the second element of the process of drawing.

5. LOOKING WITHOUT THINKING

When I try to capture the stance of the model in a croquis drawing, the teacher will sometimes present criticism of my drawing, and I see that something is not right. The effort required to improve the drawing may be described as aiming to transfer what I see with my eyes, via the arm to the hand onto the paper – bypassing the brain, so to speak. Another way of putting it would be to say that I must turn off thoughts, or turn away from certain kinds of knowledge, to be able to rely exclusively on eye and hand. It is difficult to find an object of comparison for this experience, but certain techniques are used for the purpose of putting that which may hinder seeing and depicting out of play. The teacher may suggest, for instance, that those who are right-handed use the left hand when drawing. Drawings made with the non-dominant hand often have a certain bold and spontaneous character.

8 It is interesting to observe that in Wittgenstein’s discussions of aesthetic judgements, he writes: “It is remarkable that in real life, when aesthetic judgments are made, aesthetic adjectives such as ‘beautiful’, ‘fine’, etc. play hardly any role at all. ... The words you use are more akin to ‘right’ and ‘correct’ (as these words are used in ordinary speech) than to ‘beautiful’ and ‘lovely.’” Ludwig Wittgenstein, *Lectures and Conversations on Aesthetics, Psychology and Religious Belief*, ed. Cyril Barrett (Oxford: Blackwell, 1966), 3, § 8. See also *ibid.*, 13 ff. It should be noted that Wittgenstein does not focus on or discuss examples of depiction in art in these lectures.

9 See, e.g., Plato, *Sophist*, Loeb Classical Library, vol. 123 (Cambridge, MA: Harvard University Press, 1987), 235c–236d, 267b–e; *Gorgias*, Loeb Classical Library, vol. 166 (Cambridge, MA: Harvard University Press, 1983), 463a–465a; Republic, bk. IX.

10 Aristotle, *Poetics*, Loeb Classical Library, vol. 199 (Cambridge, MA: Harvard University Press, 1995), ix, 1451b.

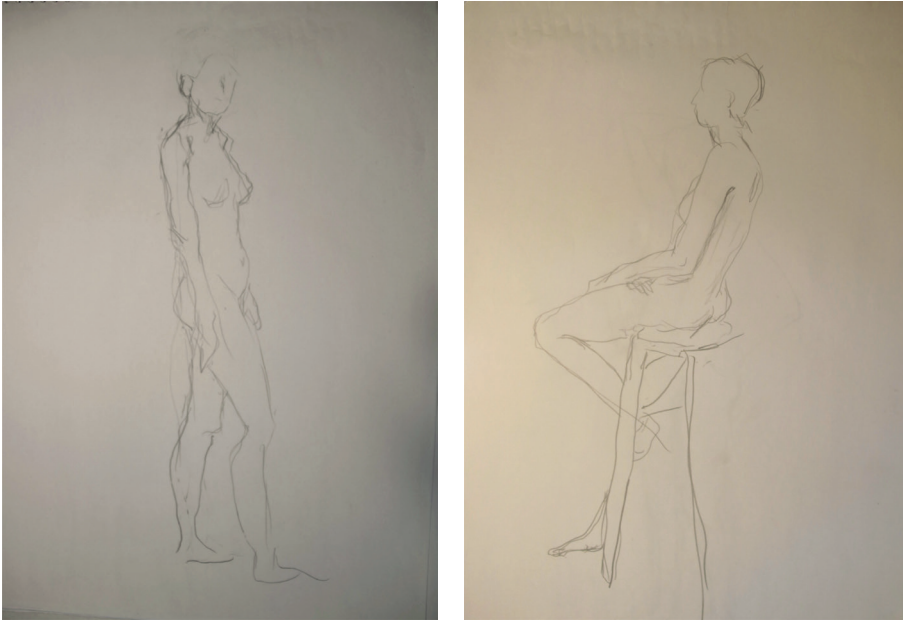


Figure 9.1. and Figure 9.2: Examples of croquis sketches drawn using the non-dominant hand, by author.

Other techniques, used for the same purpose, are not to aim at drawing the model, but instead the spaces in between parts of the model's body (between an arm and the torso, for example) or the spaces between the body of the model and an object in the room, such as a chair or an easel. Using techniques of this kind involves a distinct element of forcing oneself to disregard what one knows (or *knows that one sees*), to avoid habitual movements of the hand. These techniques bring out a different way of looking at the model which is transferred to the drawing. So, success in improving a sketch may require turning off certain kinds of knowledge and certain skills that have become second nature.

I would like to look at the effort of trying to improve a sketch in light of a remark in Wittgenstein's *Philosophical Investigations*, namely the often-quoted instruction, "Denk nicht, sondern schau!" in § 66. The remark comes at a point in this work when a series of examples of how language is used have been presented. A critical voice points out in § 65 that no answer has been given to the question of what is essential to language. In § 66, Wittgenstein responds by directing us to the way we speak of games. He writes:

Betrachte z. B. einmal die Vorgänge, die wir "Spiele" nennen. Ich meine Brettspiele, Kartenspiele, Ballspiele, Kampfspiele, u. s. w. Was ist allen diesen gemeinsam?—Sag nicht: "Es *muß* ihnen etwas gemeinsam sein, sonst hießen

sie nicht ‘Spiele’ – sondern *schau*, ob ihnen allen etwas gemeinsam ist.–Denn, wenn du sie anschaust, wirst du zwar nicht etwas sehen, was allen gemeinsam wäre, aber du wirst Ähnlichkeiten, Verwandtschaften, sehen, und zwar eine ganze Reihe. Wie gesagt: denk nicht, sondern schau! – Schau z. B. die Brettspiele an, mit ihren mannigfachen Verwandtschaften. Nun geh zu den Kartenspielen über: hier findest du viele Entsprechungen mit jener ersten Klasse, aber viele gemeinsame Züge verschwinden, andere treten auf. ... Schau, welche Rolle Geschick und Glück spielen. Und wie verschieden ist Geschick im Schachspiel und Geschick im Tennisspiel. Denk nun an die Reigenspiele ... Und so können wir durch die vielen, vielen anderen Gruppen von Spielen gehen. Ähnlichkeiten auftauchen und verschwinden sehen.

Und das Ergebnis dieser Betrachtung lautet nun: Wir sehen ein kompliziertes Netz von Ähnlichkeiten, die einander übergreifen und kreuzen. Ähnlichkeiten im Großen und Kleinen. [My underlining]

The English translation of the remark makes frequent use of the words “see” and “look” but blocks us from clearly perceiving how Wittgenstein puts different forms of seeing, looking, and thinking side by side. When we turn to the remark in German, we see, for instance, that § 66 begins with the invitation to look, “Betrachte,” soon followed by the imperative “Sag nicht ... sondern schau,” followed by the use of “anschauen,” “sehen,” and then the instruction “denk nicht, sondern schau!”¹¹ We see how different forms of seeing and looking are placed next to thinking. One might say that they all are part of “schauen” – a word that may not be translated as simply “looking” in general but rather as “looking closely” or perhaps “checking by way of looking” how things are. Towards the end, we find that our “Betrachtung” yields “sehen” as a result.¹²

The advice in § 66 is commonly understood as central to the anti-essentialism that takes different forms in the *Philosophical Investigations*. The opposition between thinking and looking, suggested by the words Wittgenstein uses, is often understood as prevailing between being guided by preconceptions and

11 Wittgenstein, *Philosophical Investigations*, § 66, shows us the complexity of our concept of *seeing* in relation to our concepts of *thinking* and *saying*. Wittgenstein also pursues this theme as part of his discussion of aspect seeing, and he speaks here of “half visual impression, half thought.” Wittgenstein, *Philosophical Investigations*, PPF § 140.

12 Cf. Wittgenstein’s use of “schauen” here and von Wright’s reference to the ancient Greek conception of *theoria* when he uses the Swedish verb “skåda” to speak of a kind of looking which is guided by a wish to further understand and get an overview of phenomena in the world. See Georg Henrik von Wright, *Att förstå sin samtid: tanke och förkunnelse och andra försök: 1945–1994* (Stockholm: Bonnier, 1994), 44.

dogmas in a philosophical investigation, as opposed to reminding ourselves of examples of our use of words in comparison with those doctrines. “Look” in the advice from § 66 is then understood as “examining,” “comparing,” and “reflecting on” the examples of our use of language in relation to something else (philosophical preconceptions and doctrines). Looking as in “look with your eyes,” i.e., as in perception, is suppressed or ignored in interpretations of this kind and the contrast between “thinking” and “looking,” implied in the advice from § 66, becomes indistinct and vague.¹³ It is also interesting to notice that reflecting, comparing, and examining something in relation to a norm or standard corresponds with the second element of croquis drawing: taking a step back to look at the drawing as whole, to see whether “it is right” while making use of (theoretical) knowledge.

In view of the different forms of looking and seeing that are presented in § 66 as part of “schauen,” which is said to result in “sehen,” one might perhaps take the opposition implied in the advice to be between reasoning and looking with the eyes.¹⁴ Wittgenstein is urging us, it seems, to forgo reasoning (thinking) and rely on perception, in that we are asked to notice that which is in front of us, namely, our use of language in different contexts. We are hence to rely on perception in that sense, but *seeing* in another sense is also in play here: In the *Philosophical Investigations* Wittgenstein, when offering different examples of language use, uses a mode of presentation than can be compared to the use of an internal perspective in literary figuration.¹⁵ The reader is placed inside a scene of the story, so to speak, and Wittgenstein gives us an internal perspective on, for instance, the language game in § 2 of this work. It is easy for us to see how the calls “slab,” “beam,” etc., are used by the builders A and B since the mode of presentation allows us to gain an overview of what goes on, and we almost want to lend B a hand, when A calls out for a stone. The language game is expanded in § 8 by “a,” “b,” “c,” etc., that function as number words. We immediately see that their use is different from the calls

13 See, for instance, Gordon P. Baker and Peter M. S. Hacker, *An Analytical Commentary on Wittgenstein's Philosophical Investigations*, Vol. 1 (Oxford: Blackwell, 1983); and Robert J. Fogelin, *Taking Wittgenstein at His Word: A Textual Study* (Princeton, NJ: Princeton University Press, 2009), 47.

14 Cf. Wittgenstein, *Philosophical Investigations*, § 144. Here Wittgenstein discusses putting pictures in front of someone with the suggestion or order: “Look at this!” in connection with proofs in mathematics.

15 Cf. Beth Savickey, *Wittgenstein's Investigations: Awakening the Imagination* (Cham: Springer International Publishing, 2017), who suggests that Wittgenstein uses a dramatic form in the *Philosophical Investigations*, in line with for instance Plato in his dialogues or Sartre in his plays.

“slab” and “beam,” and their function within the context of the language game is transparent to us.¹⁶ Another way of putting this is to say that we are able to imagine the builders and see their activities with our inner eye, as the author is showing us the language game.¹⁷ *Seeing* in this sense does not involve reasoning in the form of reflection or comparing in relation to established standards or norms but lies close to looking at something immediately in front of one’s eyes, taking notice of how it appears. In this interpretation, there is a clear distinction between the opposing approaches in the advice “Denk nicht, sondern schau!” from § 66. To engage in *thinking* or reasoning involves being guided by doctrines and preconceptions in a philosophical investigation, as opposed to *seeing*, i.e., checking by way of looking what goes on, trying to get a grip on how something in fact appears. This means relying on perception but also turning away from paradigmatic pictures and conceptions to be able to sharpen the ability to look with an attentive eye at that which is familiar and well-known: our use of language.

6. DRAWING WITHOUT THINKING

In the previous section, Wittgenstein’s advice in § 66 was discussed in relation to philosophical investigations, and we noticed that difficulties must be overcome for the one who wishes to follow the approach recommended in the remark. Let us now turn to the practice of croquis drawing in the light of the same guideline. We noticed in the introduction that drawing has been conceived of as more intellectual in character than other art forms and as directed at the intellect rather than to the senses. Croquis and life drawing was at the core of the education at art academies in Europe, and practicing drawing ran parallel with acquiring abundant knowledge of human anatomy, of light and shadows, etc. It is fair to say that the study of the depiction of the human body was closely connected with reliance on knowledge and the use of a scientific approach.¹⁸ Now, while a philosopher is to enquire about language use, according to the advice in § 66, the draftsman is to ask: How does this human being in front of my eyes appear to me right now?

16 In this section, I have benefitted from discussions with Pär Segerdahl on Wittgenstein’s conception of *seeing* and his suggestions to an understanding of the difference between “reasoning” and “looking and seeing” in Wittgenstein’s later philosophy.

17 Cf. how Wittgenstein often begins a remark with the words “Denk dir...” or “Wir können uns vorstellen...” (“Imagine this...”) in the *Philosophical Investigations* and elsewhere.

18 See, for instance, Weimarck, *Akademi och anatomi*.

The difficulty is to be able to look at the model with a gaze which lets me see the shape and form of that which is in front of me – but is otherwise not seen – and make this visible in the drawing. I possess knowledge of the human body, know what arms, hands, and feet look like, how they move, bend, and how they, so to speak, ought to be drawn. But this hinders me when I aim to capture the model's appearance in the croquis sketch. Interpreting the advice from § 66 as an instruction for the draftsman to rely only on her eyes is therefore appropriate in the case of croquis. To achieve the goal set in the croquis session, it is sometimes necessary to use the techniques we looked at earlier, to prevent habituated ways of looking from guiding the process of drawing that block accustomed movements of the hand, and it is necessary to force oneself to shut off thinking and reasoning that hinder the cooperation and immediate connection between eye and hand. Letting the hand do the drawing after the guidance of the eye, without intermediate links, is strived for when I want to make what I see visible in the drawing. In a similar manner as when we are asked to turn away from preconceptions and to suppress internalized ways of approaching questions that have become second nature in a philosophical investigation, it is necessary to turn a blind eye to knowing when trying to improve the sketch. The difficulty of doing this in philosophy corresponds to the force which is needed when looking and making visible what is before one's eyes during the croquis session.

7. DISSOLVING THE APPEARANCE OF PARADOX

In the former section, my primary focus was on the first of the two aspects of the process of croquis drawing that were outlined earlier. At this point, the second aspect will be brought in as we return to the question of how to characterize the goal in croquis drawing. How may the task be described? We have seen that the first aspect of the practice of croquis is to strive to let the hand transfer the visual impression on the paper with the pen, sidestepping the brain, i.e., thinking and reasoning. Such a notion of registering or copying of what one sees corresponds with a Platonist conception of *mimesis*, as we observed earlier. The second aspect of the process of drawing, however, involves taking a step back and considering the sketch in relation to established knowledge and norms that concern, for example, the proportions of the human body. This aspect involves actively using knowledge and engaging in reflection. It corresponds, in other words, with an Aristotelian conception of *mimesis*, being directed at capturing what is representative of the human being and involving assessments and choices in relation to standards and established conceptions.

Now, when discussing two different interpretations of Wittgenstein's advice in § 66 of the *Philosophical Investigations*, we saw that his words are often taken to indicate that we should not simply follow doctrines and established norms, but carefully study and examine examples to see if they correspond with those norms and doctrines. The last part of his advice, that urges us to look and see, is then understood as reflection on and assessment of a specific case, guided by the question: Is there correspondence between the example and the standards we use? The interpretation I suggested instead lays out the first part of the advice – “Denk nicht” – as an effort to *turn away from* preconceptions and doctrines. Here the second part of the advice means to approach an example of language while aiming at liberation from demands and expectations to how a specific case must be. It means to look at something familiar in front of one's eyes with a new gaze, to sharpen the ability to notice how it appears – to engage in SEEING. This, as we noted, is very similar to attempting to improve a sketch in croquis by “bypassing the brain.” “Schau!” in this latter sense places emphasis on the use of perception, and on noticing similarities and differences by means of a focused way of looking at what is seen, in order to capture its appearance.

The paradox mentioned in the introduction may be expressed in questions of the following kind: How can it be that knowledge, thinking, and reasoning hinder a philosophical investigation or represent obstacles when we want to depict a human being in a drawing? How can it be that reliance on perception and forsaking of reasoning is required to be able to move ahead and reach desired goals, be it in philosophy or figurative art? An answer to these questions would be that reasoning and thinking with departure in established norms and conceptions hinder SEEING, in the sense of grasping how something appears when it is placed immediately in front of one's eyes, in particular when one is looking at something which is familiar to the degree that we no longer pay attention to differences and similarities in use – to shadows, lines, form, and the relation between surfaces. To be able to SEE, in this particular sense of the word, we need freedom from norms, demands, and expectations, in philosophical investigations as well as when engaged in the practice of croquis.

Due to the short time allotted for each pose in croquis there is not always time for reflecting on the drawing as a whole or for making corrections, but if we ask whether a drawing is true in the sense that it corresponds with what is seen at that moment – an individual model who holds a specific pose – certain problems may arise because one tends to adjust the picture in relation to internalized preconceptions of what a human being looks like or established norms concerning the proportions of the human body. These norms and preconceptions give rise to demands on what the drawing should look like. If the model, for instance, has

slightly short arms or deviates in some other way from what I have learned about the proportions of the human body, it will seem as if something is wrong when I look at the drawing, even if it corresponds with the proportions of the model who is depicted. It may then be difficult to pin-point what is amiss and to know how to improve the sketch. Similar difficulties may arise in philosophy: a philosopher may have become convinced that the notion of a philosophical thesis is incoherent, by way of SEEING in the sense that belongs to the interpretation of “schau!” in § 66 suggested above. She has seen that such a notion cannot be upheld within the activity of a philosophical investigation as she now understands it. Nevertheless, she may go on to communicate what she has come to see in a text that corresponds with standardized norms for academic texts, i.e., a text that begins by defining a problem, followed by a thesis representing a solution to the problem. Then arguments are added – in favor of the thesis and against challenging claims – and a conclusion that the thesis is correct is reached. Here, the conflict between her message and the form of her text is not yet transparent to her – neither does she have a full grasp on the essential features of what she saw, nor has she found a way to make these features visible in her writing. A contrasting example would be a philosopher who actively tries out different ways of writing and approaching philosophical questions for the sake of finding a form of presentation that agrees with what she saw when looking and seeing in the sense recommended in § 66, while succeeding to turn away from paradigmatic pictures and her own preconceptions. What becomes visible in this manner will perhaps not be acknowledged as an example of a philosophical investigation by those working with the same questions in a conventional manner, or it might be rejected as being off track or “not right.”¹⁹

8. MAKING VISIBLE

In the first part of this chapter, I spoke of the demands that are put on the drafts-person when there are frequent shifts of poses. To be able to draw swiftly and unhesitatingly is crucial – once the model changes the pose, the moment is gone. This is similar to how hastily made sketches of landscapes in the nineteenth century served to preserve what was seen in memory – the sketch could be looked at later, like a photograph. Under circumstances like these, only the *essential* makes it into the drawing. A sketch of that kind may look like this:

19 Cf. the criticisms of Wittgenstein’s form of representation in the *Philosophical Investigations*.



Figure 9.3: Croquis drawing, short pose, by author.

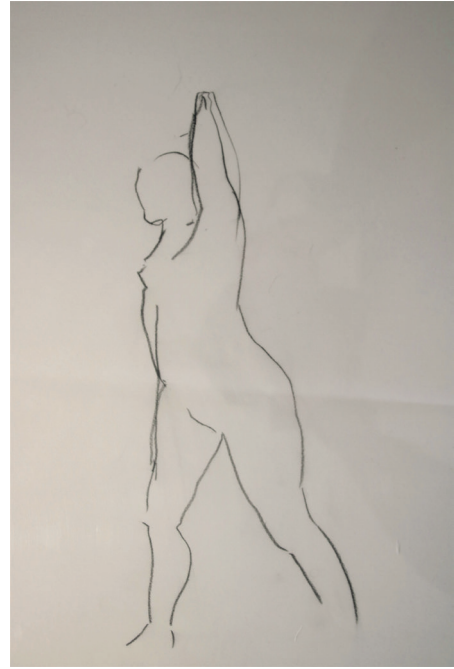


Figure 9.4: Croquis drawing, short pose, by author.

We see that the drawings are different in character: I would say of the first that it is simple, free of unnecessary details; it hints but does not say too much; it is open for discovery and is not necessarily unfinished. The second drawing may instead be described as not unfinished since the whole Gestalt is there, and we could say that it is distinct but does not describe exactly.²⁰ But what does it mean to speak of “the essential” that makes it into the drawing when time is sparse? In which sense do we use this expression within the context of croquis drawing (and depiction in art more generally)? When approaching this question, it will be helpful to return to the two elements of the process of drawing: The first is to focus on what is seen and rely on the cooperation between hand and eye to depict precisely that which is before my eyes. The second aspect takes the form of an assessment: When evaluating a drawing, I do not only use my eyes, but look at my drawing as a whole and ask: does this look like a human being, can a human being sit like that? Does it

20 Here I borrow the words used to characterize the drawings from an essay on art and science by Bengt Molander, “Mellan konst och vetande: att ge verkligheten form och innehåll,” in *Mellan konst och vetande: texter om vetenskap, konst och gestaltning*, ed. Bengt Molander (Göteborg: Daidalos, 1996).

look right? Is the drawing correct? This step involves consulting a standard, a general image of a human being – a template so to speak – to which I compare my drawing when I make an aesthetic judgment. The answer to the questions I pose might be yes – I have made the model, in this pose, visible in my drawing, as I saw her. This judgment is of course also based on the knowledge I have of the human body as a human being. To speak of the “essential” in this sense, then, roughly amounts to having captured what is characteristic of this pose. What is sought after is then something general that holds for human beings or for the human body – the drawing is a representation of a certain way of sitting, standing, or leaning against something that is typical or possible for human beings.

Ordinarily, however, something is not quite right and ought to be adjusted in the drawing – since it is a sketch in the sense of something that is unfinished. This brings the use of the word “utkast” in Swedish and Norwegian to mind, when we speak of a draft that is unfinished and imperfect in its form. The German word is “Entwurf” which translates to “jet” in French, and the verb “jeter” is used to speak of making a sketch.²¹ The French verb is also used in the sense of “throwing,” and in the croquis session one must throw the lines onto the paper with the pen, rapidly, to capture the essence – as something ethereal that easily escapes us (we are now talking about the human body) – the being, the person. In Swedish we use the word “väsén” to speak of a being which is there to be seen and perhaps will be made visible in the drawing, and the German word here is, of course, “Wesen.”²²

According to this way of looking at it, it seems as if our talk about “the essential” refers to the object of sight, the model’s appearance. Now, in the first part of this chapter, I said that croquis is different from many other art forms because the space for personal expression is very limited. But during a session of croquis with short poses, when I do not have the time to make changes to correct my work according to a standard or a preconception of the human form, it could be that the drawing makes something essential about *me* visible. That is, when I must make a sketch under pressure, my way of looking, how I see the model, becomes transparent and distinct. Hesitance, and the possibility to correct, brings me further from, rather than closer to, my personal expression, according to this understanding.²³ Talking about personal expression in this sense does not refer to an intellectual or

21 Cf. Robert, Rey, and Rey-Debove, *Le petit Robert*, s. v. “ébaucher”; and Martin Heidegger, *Sein und Zeit* (Tübingen: M. Niemeyer, 2006), § 30–32.

22 I take “väsén” to be different from “gestalt” in that the first word points to something inner, internal, rather than the external form of a being.

23 It can be interesting to compare this perspective on what a croquis sketch makes visible to Wittgenstein’s suggestion that “[w]ork on philosophy – like work in architecture in many respects – is really more work on oneself. On one’s own conception. On how one sees things.

reflective process in the form choices, intentions, or assessments, or to the way in which an artist may actively aim to make her personal expression visible in a work of art. It may be of interest to compare this understanding of personal expression with a conception of *representation* according to which photography cannot result in representational art since a photograph only shows what someone saw, but not how to see it.²⁴ In the conception of *personal expression* that we have looked at, it is precisely the fact that a sketch shows *what someone saw* that gives it the potential to be perceived as a work of art.²⁵

It is characteristic of the practice of croquis that a series of attempts are made at coming closer and closer to capturing a shape, the form of a person, in a depiction. What the draftsman is looking at is genuinely familiar to her – a human being – and therefore difficult to capture onto the paper with her piece of charcoal. This observation recalls Wittgenstein's approach in the *Philosophical Investigations* and the way he speaks of making sketches of the same point from different directions to give someone else an idea of the landscape. The sketches display his work on philosophical difficulties and show what he saw when looking at the landscape that surrounds us.

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(And what one expects of them.)" Ludwig Wittgenstein, *Culture and Value*, ed. G. H. von Wright and H. Nyman, rev. ed. by A. Pichler (Oxford: Blackwell, 1998), 24.

24 Roger Scruton, "Photography and Representation," *Critical Inquiry* 7, no. 8 (Spring 1981), 133.

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10. Knowing and acknowledging trauma – psychoanalysis, phenomenology, and the lived body

Ståle Finke

Abstract The experience of trauma and of dissociation of traumatic experience raises important questions concerning the phenomenology of the self. What are the conditions for us humans to be vulnerable to trauma? Drawing upon the analysis by Merleau-Ponty, it is argued that trauma and the bodily structuration of traumatic experiences need to be thought of as the result of broken patterns of bodily sense-making coupled with the bodies of others. Traumatic symptoms are conceived as forms of disrupted implicit relational knowing.

Keywords PTSD | trauma | psychoanalysis | phenomenology of the body | implicit relational knowing | imitation

1. INTRODUCTION

Trauma refers to a singular event in a person's life or in a collective biography, or, in some cases, to the cumulative repercussions of smaller break-downs within the developmental trajectory of an individual.¹ However, trauma has no clear boundaries and is in clinical terms not distinguishable from the entire complex, commonly designated as posttraumatic stress disorder (PTSD). Victims of abuse, of war-crimes or torture, of catastrophic accidents, or of systematic social deprivation and misrecognition live their traumas in their sleeplessness, in recurring violent phantasies or dissociative and multiple personality-organization, in their anxieties over engaging in intimate relations with others, manifest in their posture, movement, and overall bodily language. Trauma is something that invades

1 M. Masud R. Khan, "The Concept of Cumulative Trauma," *Psychoanalytic Study of the Child* 18, no. 1 (1963).

and shatters one's personal existence, one's very sense of everyday continuity and one's bodily integrity. As Judith Herman states in her classic work on trauma: "Traumatic events violate [...] the person at the level of basic bodily integrity. The body is invaded, injured, defiled".²

Yet, what are the conditions for us humans to be vulnerable to trauma? In what ways are we susceptible to events so as to suffer traumatization? Moreover, how can trauma be made sense of? How do we *know* trauma?

In approaching these questions, I shall consider psychoanalytic as well as phenomenological perspectives, and rather than seeing them as mutually exclusive, as is often the case, I shall follow the French phenomenologist Maurice Merleau-Ponty in looking at them as mutually enlightening.³ Thinking about trauma, I want to suggest, needs to begin by thinking about our general "bodily passivity" as part of our sense-making capacity.⁴ The role of passivity was already crucial to the early Freud's understanding of the formation of desire and of psychopathological development⁵ and was given a more general formulation by the French psychoanalyst Jean Laplanche.⁶ The contribution that is made by the phenomenology of the body consists in recovering passivity beyond the context of the psychoanalytic approach to sexuality, working towards a more comprehensive understanding of its role in the formation and development of the self. In phenomenological terms, trauma is an injury and manifestation of the *lived body*.⁷ Trauma afflicts a sense-making and symbolic body engaged in the world and in others.⁸

2 Judith Herman, *Trauma and Recovery* (New York: Basic Books, 2015), 52–53.

3 Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Donald A. Landes (New York: Routledge, 2014), 160–161. See also Ståle Finke, "Perceiving the Vulnerable Body: Merleau-Ponty's Contribution to Psychoanalyses," in *Phenomenology of the Broken Body* (London: Routledge, 2019); James Phillips, "Merleau-Ponty's Non-Verbal Unconsciousness," in *Phenomenology and Psychoanalysis (Contributions to Phenomenology 88)*, ed. Dorothee Legrand and Dylan Trigg (Cham: Springer Verlag, 2017); D. Romanyshyn, "Phenomenology and Psychoanalysis," *Psychoanalytic Review* 64 (1977); E. Simms, "The Infant's Experience of the World: Stern, Merleau-Ponty and the Phenomenology of the Preverbal Self," *The Humanistic Psychologist* 21 (1993); Giuseppe Civitarese, "Between 'Other' and 'Other': Merleau-Ponty as a Precursor of the Analytic Field," *Fort Da* 20, no. 1 (2014); Patricia Moya and Maria Elena Larrain, "Sexuality and Meaning in Freud and Merleau-Ponty," *The International Journal of Psychoanalysis* 97, no. 3 (2016).

4 Merleau-Ponty, *Phenomenology of Perception*, 191.

5 Sigmund Freud, *Aus Den Anfängen Der Psychoanalyse* (London: Imago Publishing Company, 1950).

6 Jean Laplanche and David Macey, *New Foundations for Psychoanalysis* (Oxford: Basil Blackwell, 1989).

7 J. P. Sartre, "Being and Nothingness", trans. H. Barnes (London: Routledge, 1943), 348ff.

8 Ezequiel A Di Paolo, Elena Clare Cuffari, and Hanne De Jaegher, *Linguistic Bodies: The Continuity between Life and Language* (Cambridge, Massachusetts: MIT Press, 2018). I thus see

This perspective is critical to certain current trends in the literature on trauma. As often argued, in being traumatized, the language of the body is dissociated from the language of ordinary mutual understanding, retreating to bodily responses at the level of mere automatized modes of coping exposed to intolerable threats.⁹ Although, not as such entirely wrong, I shall argue, this account fails to take the lived and symbolic body into account, that is, how procedural levels of enactment are also symbolic, embedded in what I want to call an *original situation of communication*. The traumatized has a body that *knows* and that expresses, in posture, movement, and affective arousal, a contorted or disrupted sense-making relation to others. The question of how to come to know trauma, clinically and otherwise, then, reflects on this bond of implicit knowing and sense-making that the body still exhibits, and the possibility to enter it in favour of a mode of communication that is genuinely participatory and capable of renewing bodily trust. As we shall see from the clinical literature, knowing trauma is not knowing in terms of interpreting a patient's affective state or even this patient's mind or history so to speak top-down, yet it is also not merely the working on ground-floor coping-responses but, crucially, an integrated participatory *acknowledging* that is procedural as well as symbolic all the way through. Addressing the contorted language of the body, as well as providing bodily safety, is as important as implying oneself in the experience and enactment of the intolerable, making oneself a witness, personally and culturally, sharing and modifying what the patient implicitly knows and fears by engaging in mutual sense-making and symbolic reconstruction.¹⁰ As I shall conclude, this clinical perspective also carries ethical implications, drawing attention to the moral fact of our human vulnerability, beyond principles of moral reasoning.

2. THE SCENE OF SEDUCTION AND THE COMMUNICATIVE BODY

The role of passivity in interpersonal human relations was for the early Freud the very basis for the development of neurotic psychic pathologies. As Freud writes in an early manuscript posted to Wilhelm Fliess on 1 January 1896: "In all my

the following discussion as a contribution to what might be called a broad *enactivist* approach to trauma specifically and to psychopathology more generally. See, e.g., Giovanna Colombetti, "Psychopathology and the Enactive Mind" (2013).

9 See, e.g., Pat Ogden, "The Different Impact of Trauma and Relational Stress on Physiology, Posture, and Movement: Implications for Treatment," *European Journal of Trauma & Dissociation* 5, no. 4 (2021).

10 Samuel Gerson, "When the Third Is Dead: Memory, Mourning, and Witnessing in the Aftermath of the Holocaust," *International Journal of Psychoanalysis* 90 (2009).

cases of compulsive neurosis, a *purely passive* experience had taken place, something that is hardly accidental".¹¹ The primary psychopathological phenomenon has a traumatic origin in the child's early experience of the other's sexuality. Due to passivity, according to Freud, we are critically vulnerable to sexual seduction; it is the excessive nature of the adult's sexual communication that prompts neurotic reaction-formations.

However, in the famous letter to Fliess from 21 September 1897 Freud expresses doubts about his clinical findings and the patients' recovered memories of traumatic scenes. This doubt indicates the shift in thought that one usually takes to constitute the beginning of Freud's meta-psychology: instead of focusing on the child's vulnerability to seduction, psychopathology reflects the *repression* of libidinal impulses that are conceived as *constitutive* from the very beginning, expressed in only *wishful* phantasies.¹²

For the French psychoanalyst Jean Laplanche, Freud's initial ideas concerning passivity and seduction should be generalized rather than abandoned in favour of the later meta-psychology. As a consequence, passivity should not be seen as limited to scenes of sexual seduction but encompassing the very bodily nature of being dependent upon the other in care, handling, and affective support. We are passive bodies, *de-centred*.¹³ The primary relation of the child to the adult is thus not that of a libidinal desire that finds its gratification in an object, however diverse, but of a bodily and affective dependency upon the other.¹⁴ This, of course, turns the mature Freud's theory of drives on its head: libidinal phantasies and desires are not to be conceived as primarily belonging to the infra-structure of the infant, but are first *awakened* in the scene of seduction, involving the rupturing of the basic and prosaic trust of ordinary care and affective support: "[P]rocesses in which an individual takes an active part are all secondary in relation to the original moment, which is that of passivity: that of seduction".¹⁵

11 Freud, *Aus Den Anfängen Der Psychoanalyse*, 160.

12 J. Laplanche and J.-B. Pontalis, *The Language of Psycho-Analysis* (New York: W. W. Norton and Co., 1973), 363. For a balanced account of Freud's abandonment of the seduction-theory, which also meant downplaying environmental deficiencies and traumas in psycho-sexual development, see Joel Whitebook, *Freud – an Intellectual Biography* (Cambridge: Cambridge University Press, 2017), 220ff. See also the account in Herman, *Trauma and Recovery*, 10ff., and Jody M. Davies and Mary G. Frawley, "Dissociative Process and Transference-Countertransference Paradigms in the Psychoanalytically Oriented Treatment of the Adult," *Psychoanalytic Dialogues* (1992): 8ff.

13 Jean Laplanche, *Essays on Otherness* (London: Routledge, 1999), 52ff.

14 Jean Laplanche, "Sexuality and Attachment in Metapsychology," in *Infantile Sexuality and Attachment* (London: Routledge, 2018).

15 *Essays on Otherness*, 135.

This is interesting to our understanding of trauma, as it places the child in a vulnerable situation in which it is anthropologically susceptible to trauma. Interestingly, as Laplanche goes on to explain seduction, this is due to a general bodily passivity that implies not only our basic needs but the very sense-making significations of the body. The infant is already taking part in “a world of signification and communication”, in which “any gesture, mimicry function as a signifier”.¹⁶ Bodily passivity towards the other is thus a primary phenomenon of lived and *meaningful* experience; through the body, the infant receives and adopts the significations inherent in the other’s behaviour. It is placed in an original situation of communication that relies entirely upon bodily capacities of sense-making. Although Laplanche never develops his thought on infant sexuality on the basis of a phenomenology of the body, it is clear that he might have drawn from Merleau-Ponty’s lectures on this point: what Laplanche refers to is the *lived body* that is ambiguous in its significations and not the objective or functional body of medical statistical analysis. Moreover, bodily passivity is in this context no longer merely referring to sexual seduction, but discloses our very ways of being bodily dependent beings and how our bodies are coupled in sense-making relations. Surely, Laplanche’s focus here is still the realm of sexuality and erotic bodily significations, trying to address how this realm of human experience is potentially traumatic and dissociative.¹⁷ Due to the infant’s symbolic incapacity to match the adult’s behaviour, the significations of the other’s sexual body become *excessive* and *enigmatic* – marking a rupture of the child’s perception of the other.¹⁸ The study of infant sexuality and its interpersonal origin thus circumscribes a general situation of being a body for an Other under the pressure of an intolerable excess that is due to the sexual body. Trauma is thereby inherently a possibility within ordinary relations of care, because the adult’s behaviour always carries ambiguous and excessive significations related to bodily pleasure, such as the suckling of the breast and so on – experiences the child is incapable of fully integrating and making sense of.

However, although it offers us an approach to trauma that takes the symbolic body and coupled sense-making as its context of analysis, we need to expand the analyses beyond Laplanche’s limited context of infant sexuality. In more general terms, trauma signifies the experience of events that are no longer capable of being integrated, repaired, and modulated within the affective bonds of attachment and

16 Ibid., 126.

17 Jean Laplanche and David Macey. *New Foundations for Psychoanalysis* (London: Basil Blackwell, 1989), 121ff.

18 Ruth Stein, “The Otherness of Sexuality: Excess,” *Journal of American Psychoanalytic Association* 56 (2008): 47.

mutual sense-making that a person relies upon or has access to.¹⁹ In thus evading the symbolic level of bodily communication, traumatic significance becomes discontinuous with reflexive forms of explicit knowing and retreats to the pre-reflective language of the body; it evades the efforts of reflexive communicable speech and narrative. Thus, my contention is that as much as one might speak of traumatic events, these events are *always* of intersubjective and relational significance – reflecting the ways in which a person is left on their own when they lack access to reliable others for modulation, repair, and meaningful reconstruction. A traumatic experience shutters basic bodily *trust* in the other at a communicative level – shaking the very grounds for meaningful communication; in trauma the original communication-situation with others is distorted or breaks down. The body thus turns to forms of distorted communication. However, to be clearer about these suggestions and their clinical implications, we need first to recover, in somewhat more detail, the implicit phenomenology of our observations thus far.

3. THE PHENOMENOLOGY OF THE PASSIVE BODY

One might ask whether it is at all possible to reconcile phenomenological analysis with the current understanding of the role of the body in trauma found in much of the contemporary literature. Bodily passivity and the responses to intolerable threats – such as freezing and feigned death – seem to be best described as automatized coping-styles in the face of threats to survival, naturally developed. As Pat Ogden makes clear: “Because trauma threatens survival, patterns ensue that pertain to instinctive survival responses”.²⁰ Yet, I shall argue, bodily passivity and its responses are not only responses of a “living body” adapted to the environment, but it also reflects the *symbolic environment*, that is the body’s place and contributions to a symbolically structured life-world. This argument, though, depends upon a plausible integration of passivity within the scope of a phenomenology of the sense-making body.

The contribution of phenomenology might initially come out as somewhat limited as long as it remains preoccupied mostly with first-person experience. The body I *am* is in this view opposed to the body I *have*, the body that might become an obstacle to me, such as when making itself felt in illness. As Merleau-Ponty also

19 Jessica Benjamin, *Beyond Doer and Done To: Recognition Theory, Intersubjectivity and the Third* (London: Routledge, 2018), 181ff.

20 Ogden, “The Different Impact of Trauma and Relational Stress on Physiology, Posture, and Movement: Implications for Treatment,” 6.

writes: “I am not in front of my body, I am in my body, or rather I am my body”.²¹ On a closer look, however, the phenomenology of the body need not only be concerned with the lived experience of the body in its *active* mode, but also reflects inherent passivity in so far as it is also a *living* body. As according to Merleau-Ponty: “We are not, in some incomprehensible way, an activity tied to passivity, a machine surmounted by a will [...] rather, we are entirely active and entirely passive”.²² Even in the simplest perception of the world, I rely upon the resources of passivity. I perceive, say, the presence of the chair in front of me in accordance with the way in which this chair presents itself by its shape – inviting my body to take a certain hold of it, finding support in it for a sitting posture. The perceiving body adjusts itself spontaneously – it *inhabits* the world prior to taking a grip upon things. Lived experience is thus ambiguous; it is first-person experience situated in the world in virtue of a body that exceeds merely the personal level of awareness.

Also, my body situates me in relation to the other. The other exists alongside my body, bearing the very significance of my own passivity, of my body being perceived, addressed. Like Laplanche’s child of seduction, I am awakening to the other. Hence, I am not the translucent subjectivity that stretches out to the world and to others. The opaqueness of others to me reflects the opaqueness of my own body to myself. As Merleau-Ponty writes: “Others can be evident because I am not transparent to myself, and because my subjectivity draws its body along behind itself”.²³ I am inhabiting a world *with* others, my being is a “being-with”.²⁴ Thus, shame or guilt are due to the suffering of bodily passivity, of being delivered to others, being looked upon, being available for their judgement, for their rejection or affirmation, beyond their sexual connotations, yet with an intrinsic symbolic and social meaning: “Insofar as I have a body, I can be reduced to an object beneath the gaze of another person and no longer count for him as a person”.²⁵ Because I have a body, I am helpless, delivered, exposed; yet, in my helplessness I am vulnerable to suffer the loss of sense, of meaning. If the other person is a person I depend upon or love, as a child loves their primary caretakers, my sense of being a body for an other truly affects my sense of being a self. Indeed, it is because I *have* a body, a passive and responsive body, that I *am* a body that can be invaded, denied, or even abused by others.²⁶ Despite the intellectualism of the modern philosopher’s notion

21 Merleau-Ponty, *Phenomenology of Perception*, 151.

22 Merleau-Ponty, *Phenomenology of Perception*, 452.

23 Merleau-Ponty, *Phenomenology of Perception*, 368.

24 Merleau-Ponty, *Phenomenology of Perception*, 361ff.

25 Merleau-Ponty, *Phenomenology of Perception*, 170.

26 Cf. Judith Butler, *Precarious Life* (London: Verso, 2006). See also the discussion in Jay M. Bernstein, *Torture and Dignity – an Essay on Moral Injury* (Chicago: University of Chicago

of the invulnerable self, I can be in the grip of an other, an aggressor, a traumatic situation, because I am a passive body beyond reflection, beyond my wilfulness. On the phenomenological analysis, we can be traumatized because we are helpless and ambiguous bodies and because certain situations put us back into a state of passivity and helplessness. Crucially, these situations are to the phenomenologist also communicative and symbolic situations, reflecting distorted modes of bodily sense-making. Our behaviour in such situations is therefore, at least tentatively, sense-making behaviour – having withdrawn to the confinements of a passivity that has disrupted its continuities with the active body and its trust in a familiar environment of relational support and sense.

4. IMITATION, SYMBOLIZATION, AND THE ENACTMENT OF TRAUMA

Being exposed to trauma makes it clear that sense might break down, that our bodies might become dissociated from normal patterns of sense-making. We become contorted symbolic bodies. Trauma refers to events in a person's relational biography that installs or institutes gaps in our ability to make sense with our bodies, it leaves us, as Merleau-Ponty writes, with "a region of non-sense in our experience".²⁷ However, this does not mean that our bodily responses to trauma are simply ground-floor or automatic coping-responses as maintained in much of the current literature. Rather, I want to claim, in trauma-behaviour, the paths to sense-making and communicative trust have broken down, leaving us with a broken symbolic body. A body bereft of normal and fluent symbolic capacities is not the same thing as a natural body thought independently of such capacities in the first place.

This poses the following problems: how do sense-making bodies express something that fails to make sense? And how might sense eventually be recovered? In turning to these questions, we cannot stay with phenomenological analysis alone,

Press, 2015), 198ff. This is also the reason why one should avoid, as some phenomenologist do, to define the lived body in terms of its active accomplishments, that is, the body *I am*, and then consider the passive body, and my awareness of bodily boundaries, the *having* of a body, as belonging to the physical body. See, e.g., Fredrik Svenaeus, "What Is Phenomenology of Medicine? Embodiment, Illness and Being-in-the-World," *Health, Illness and Disease: Philosophical Essays* (2013); Thomas Fuchs, "Phenomenology and Psychopathology," in *Handbook of Phenomenology and Cognitive Science*, ed. D. Schmicking and S. Gallagher (Berlin: Springer Verlag, 2010), 551.

27 Merleau-Ponty, *Phenomenology of Perception*, 148.

but need to consult developmental studies and clinical observations that might support the idea of the symbolic body as a primary phenomenon.

In recent decades, the child's initial communicative relation to their caretakers is conceived in terms of what is called *primary imitation*.²⁸ Merleau-Ponty also relied heavily upon contemporary studies of imitative behaviour, that came to some interesting results, even if the empirical material was limited compared to present-day studies.²⁹ The infant's imitative capacity is crucial to its ways of perceiving the other as a sense-making body correlated to their own, matching and accommodating to the moods, expression, and affective significance of the other's behaviour.³⁰ In spontaneous imitation, the infant finds themselves in an original situation of communication with a significant other. Through imitation, the infant stands in a pre-verbal and perceptive relation to the other, that perceives sense by adopting and enacting the gestures, postures, and movements of others. Imitation is thus a basic natural and procedural capacity that allows the child's entry into the symbolically structured life-world.

Simultaneously, it is through these inter-corporeal couplings with others that the infant also modulates and regulates their own states by accommodating to the adult. Imitative couplings are thus of major significance in creating affective bonds of attachment to primary caretakers and express a major pull between child and adult caretaker from the very beginning.³¹

Mutual imitative behaviour couples the infant to its environment in creative ways such as in play, but also through the typical patterns of soothing and emotional stabilization.³² Coupled imitative behaviour is symbolic behaviour at a

28 Colwyn Trevarthen, "Play with Infants: The Impulse for Human Story-Telling," in *The Routledge International Handbook of Play in Early Childhood*, ed. Pantti Hakkarainen and Milda Bredikyte Tina Bruce (London: Routledge, 2017).

29 Among others, Paul Guillaume, *Imitation in Children*, trans. Elaine P. Halperine (Chicago: Chicago University Press, 1968).

30 Maurice Merleau-Ponty, *Child Psychology and Pedagogy – the Sorbonne Lectures 1949–1952* (Evanston: Northwestern University Press, 2010), 20ff.

31 Cf. Louis W. Sander, "Thinking Differently — Principles of Process in Living Systems and the Specificity of Being Known," *Psychoanalytic Dialogues* 12, no. 1 (2002).

32 Cf. Daniel N. Stern, *Forms of Vitality – Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development* (Oxford: Oxford University Press, 2010), 106ff; Colwyn and Delafield-Butt Trevarthen, Jonathan, "The Infants Creative Vitality, in Projects of Self-Discovery and Shared Meaning: How They Anticipate School and Make It Fruitful," in *Routledge International Handbook of Young Children's Thinking and Understanding*, ed. Sue Robson and Suzanne Flannery Quinn (London: Routledge, 2014). For a discussion of this literature in view of Merleau-Ponty, see Shaun Gallagher, *How the Body Shapes the Mind* (Oxford: Oxford University Press, 2005), 65ff. See also Trevarthen, "Play with Infants: The Impulse for Human Story-Telling," 5.

pre-verbal level. Through the to-and-fro movement between child and caretaker, a mutual sense-making is already taking place by means of gestures and vocalizations, where both parties are mirroring one another. As the psychoanalyst Jessica Benjamin also makes clear, patterns of soothing and comforting are never just matching the infant's behaviour and mood, but re-establishes trust at the level of a mutually enacted pattern achieved in common for the sake of repair and relief.³³ This point is underscored by empirical observations of mother-infant interaction: the creative effort on both sides to overcome imbalances, anomalies, accidents, and break-downs creates patterns of mutual sense upon which bonds of reliable trust can be invoked in accommodation with an overall rhythm of interaction.³⁴ In general terms, such mutual bodily sense-making is what Di Paolo et al. captures more generally as "the practice of coordinating sensorimotor schemes together, navigating breakdowns, and it belongs to the system the participants bring forth together: the dyad, the group, the family, the community, and so on".³⁵

The Boston research group on the process of change and development (*Process of Change Study Group*) has coined the relational competence that pertains to the infant within such dyadic systems *implicit relational knowing*.³⁶ This relational competence is the infant's skill and procedural ability to invoke and enact intersubjective patterns of affective modulation and sense. Being an implicit and procedural form of knowing, this knowing of the Other is not a form of top-level cognitive achievement, in terms of what Peter Fonagy among others has called *mentalization*,³⁷ that is, the ability to interpret the other's mind or reflexively attend to the other's intentions; indeed, it is procedural all the way through, acting out a mutual pattern of imitative matching, accommodation, and repair.³⁸ Referred to as a *shared* and *implicit relational knowing*, this form of knowing is what grants the

33 Jessica Benjamin, *Beyond Doer and Done To – Recognition Theory, Intersubjectivity and the Third* (London: Routledge, 2018), 86.

34 Cf. Trevarthen, "Play with Infants: The Impulse for Human Story-Telling," 5; Edward Z Tronick, "Emotions and Emotional Communication in Infants," *Parent-Infant Psychodynamics* (2018).

35 Di Paolo, Cuffari, and De Jaegher, *Linguistic Bodies: The Continuity between Life and Language*, 75.

36 Karlen Lyons-Ruth et al., "Implicit Relational Knowing: Its Role in Development and Psychoanalytic Treatment," *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health*, 19, no. 3 (1998): 282–289.

37 Peter Fonagy, "Infantile Sexuality as a Creative Process," in *Infantile Sexuality and Attachment* (Routledge, 2018), 59.

38 Tronick, "Emotions and Emotional Communication in Infants"; Thomas Fuchs and Hanne De Jaegher, "Enactive Intersubjectivity: Participatory Sense-Making and Mutual Incorporation," *Phenomenology and the Cognitive Sciences* 8, no. 4 (2009).

child's access to the inter-corporeal couplings with other's that supports its own development.³⁹

To this extent, the child's bodily know-how is at the most basic level a developmental knowledge – a knowing of *how* to bring out change and integrate this within an open-ended relational pattern of sense that needs to be constantly invoked and re-enforced. Important to our concern here with the symbolic body is that the patterns of matching and repair, providing affective regulation, are the very patterns that support the entry into symbolic language and shared linguistic expression. As Fuchs et al. make clear: "Meanings and intentions [...] arise through participatory sense-making. They are emergent products of interaction [...] they can be viewed as distributed phenomena rather than as individual, private mental acts or properties."⁴⁰ In other words, meaning, and in the end linguistic meaning, emerges on the background of procedural imitative and affective couplings. At a procedural level, the body is already a sense-making body, a body that grasps sense by incorporating and enacting the sense-making gestures of the body of an Other. Inter-corporal couplings and dependencies are crucially symbolically distributed, enacted forms of mutual sense.

Taking this as our background to understand trauma and trauma-behaviour, we need to reflect upon how trauma distorts sense, how it places the victim in an original situation of communication that fails. In the small everyday traumas that fall within the scope of normality, for instance when the child hurts themselves, the caretaker is, if emotionally capable, able to repair and provide relief by invoking established patterns of soothing and recognition. The know-how that the child acquires through the enactment of mutual patterns of soothing is thus re-established, is confirmed, and becomes elaborated through the overcoming of small accidents, helping and strengthening the child's ability to modulate their own distress and gain access to others, personally and culturally. Traumas that are unspeakable, that is, are *excessive* to established patterns of affective sense-making, are destructive to these patterns and thus to the very implicit relational knowing of the child that grants access to reliable inter-corporeal couplings with others. Traumas thus leave scars in the form of anxieties, phobias, and dissociative self-experience – even in freezing and the feigning of death – and they thereby afflict a

39 Karlen Lyons-Ruth et al., "Implicit Relational Knowing: Its Role in Development and Psychoanalytic Treatment," *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health* 19, no. 3 (1998): 284; Stern, *Forms of Vitality – Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development* 111.

40 Fuchs and De Jaeger, "Enactive Intersubjectivity: Participatory Sense-Making and Mutual Incorporation."

person's basic or core relational competence and the procedural structure of normal patterns of relational knowing.

Our susceptibility to trauma thus shows that we as human beings might suffer a destruction and disintegration of sense, due to the break-down of our original bodily trust in communicatively structured interactions. Sense-making bodies are precarious bodies vulnerable to the loss of sense through a certain violence inflicted upon the body in a state of helplessness – a state that brings us back to our “core-self” as symbolic bodies.⁴¹ Thus, trauma-behaviour becomes the *contorted language* of sense-making bodies, a language that is not understood by either the victim or a sympathetic other. As pointed out above, the excess of trauma is thus indistinguishable not only from how it afflicts implicit relational and procedural responses and behaviour, but from its specific paradoxical ways of manifestation in a contorted body-language. Trauma refers to something in experience being uncontained within reliable patterns of inter-corporeal sense-making manifest as the delayed inscription of a disruptive and contorted sense of bodily selfhood.

In being excessive to the established patterns of affective sense-making, a traumatic event becomes unbearable and impossible to integrate or make sense of.⁴² What I have called the original communication-situation breaks down, and the body finds alternative pathways to symbolic bodily expression. Trauma is due to the break-down of a total situation and, most significantly, the failure of the environment to modulate, contain, and facilitate symbolic repair and integration. In being thus dissociated from sense, trauma installs itself or institutes its own modes of bodily signification, taking hold of a symbolically contorted realm of the body, experienced as a zone of danger and a threat to survival. Thus, as Merleau-Ponty writes in *The Structure of Behavior*: “A situation which could not be mastered at the time of an initial experience and which gave rise to the anguish [...] is no longer experienced directly; the subject experiences it only through the physiognomy that it assumed at the time of the traumatic experience”.⁴³ Trauma thus inserts a *dissociation* of pre-reflective bodily experience from the normal patterns of sense-making that make up intimate relations, communities, institutions, and the wider culture. The traumatized carries the burden of *knowing* excess, implicitly knowing it with their own body. Hence, trauma institutes its own contorted implicit relational knowing that the body keeps as a secret to itself and which protects it from the world, to exposure. In this way, it is not strange that one comes to

41 Daniel N. Stern, *The Interpersonal World of The Infant* (London: Karnac, 1985), pp. 70ff.

42 Stein, “The Otherness of Sexuality: Excess,” 67.

43 Maurice Merleau-Ponty, *The Structure of Behavior*, trans. Alden L. Fisher (Pittsburg: Duquesne University Press, 2008), 178.

the conclusion that trauma prompts a recourse to natural coping-responses, since a victim's behavior is bodily, pre-verbal, and dissociated from symbolic forms of affective sense-making and repair. Yet, if we conceive of the body as symbolic all the way to its most natural responses, we need to see even these as signifying events, placed in a communication-situation with the environment, being responsive to the break-down of reliable sense-making patterns. The withdrawal from sense-making is still sense-making, yet not manifest in the verbal language understood in a fluent communicative environment, but only in the encrypted pre-verbal language of a contorted body.

Thus, the bodily responses highlighted by Pat Ogden above should be conceived as communicative, aimed at and responding to an addressee; coping responses are not merely just blind coping but express a communicative relation of distorted coupled sense-making, a relation maintained to an Other. Jay Bernstein has emphasised this point in his analysis of victims of torture: “[T]hrough the systematic infliction of pain under conditions of helplessness, the victim's voluntary body [i.e., active body] is severed from his involuntary body [...] In torture, I discover myself as always already betrayed, always in the grip of another”.⁴⁴ Being traumatized is thus always *relational*; it means being in the grip of the Other in some way or another. This is perhaps most perspicuous in cases of torture and abuse, but trauma is as such relational, implying procedural knowing and a relation to others, minimally to the failing social environment of facilitating others. The other who fails to make sense of the events, the failing other who is unable to contain the traumatic experience, often a primary person or care-taker, is implied in the traumatic situation, constituting the bond of implicit knowing that the body maintains. Trauma is essentially the break-down of a world of others, a disruption of the normal interpersonal world of implicit relational knowing.

Part of the devastation that is trauma is the break-down of normality and the fear of having been contaminated by the violence. Victims thus often describe their own alienation and guilt, fearing they are even themselves responsible or partaking in the very violence they have been exposed to.⁴⁵ Such victims are no longer able to gain access to normal sense-making environments, since they are afflicted by a bond of knowing shared with the aggressor. Or, in cases without an aggressor, victims simply feel excessive to their environment. Part of the traumatic complex of dissociation is thus due to the implied relational knowing that upholds the bond

44 Bernstein, *Torture and Dignity – an Essay on Moral Injury*, 169.

45 Martha Bragin, “Knowing Terrible Things: Engaging Survivors of Extreme Violence in Treatment,” *Clinical Social Work Journal* 35, no. 4 (2007).

to a perpetrator, or the broken bond to “normal” others, most often accompanied with a sense of implication and guilt, of being too much for the environment.

No wonder survivors describe their efforts at escaping the body. Susan J. Brison, who survived rape and total devastation and was left to die, describes her own relation to her body as being entirely shattered in the aftermath of the event: “My body was now perceived as an enemy, having betrayed my new-found trust and interest in it, and as a site of increased vulnerability”.⁴⁶ In being traumatized one feels betrayed by one’s own body as if it was acting on its own behalf. Yet, as I have argued, this sense of a body that responds, so to speak, by taking over the situation by its own means should not be conceived as based on a default modus of a coping body but as a dissociation of bodily sense-making from fluent communicative interaction. Indeed, manifest in the typical symptoms of PTSD such as dissociation and multiple personality-organization is an augmented and enhanced intellectualist awareness of the body, often preoccupied with surveying bodily passivity, and its critical openness towards others. Trauma introduces the split of body and mind as a pathological state, not because this split is already naturally there, but because of a catastrophic reaction to symbolic and affective break-down. The traumatized body is a body that is muted.⁴⁷

5. TRAUMA AND RECOVERY

Being afflicted by trauma means bearing the burden of unspeakable knowing, outside the patterns of what is tolerable, what familiar and significant others can bear and acknowledge. Yet, even if secret, even if dissociated, the language of the traumatized body still *aims* at sense, aims to be *understood*. Part of being traumatized, however, is the inability to be able to find paths to the normal reflective sense-making and linguistic articulation that characterizes normal human discourse and understanding – without the sense and feeling of compromising oneself, of betraying one’s implication in the events.

46 Susan J. Brison, *Aftermath: Violence and the Remaking of a Self* (New Jersey: Princeton University Press, 2002), 44. Quoted in Bernstein, *Torture and Dignity – an Essay on Moral Injury*, 119.

47 By contrast, as Donald Winnicott made clear, a healthy or normal development presupposes a continuity of one’s lived body with a trusting relation to an other: “The things go together [...] in healthy development: the sense of security in a relationship [...] and [...] the matter of in-dwelling or the inhabitation of the body and the body functioning”. D. W. Winnicott, “On the Basis for Self in Body (1970),” in *Psychoanalytic Explorations*, ed. Clare Winnicott et al. (New York: Routledge, 2018), 261–62. See also Louis Sass, “Explanation and Description in Phenomenological Psychopathology,” *Journal of Psychopathology* 20, no. 4 (2014).

This is particularly relevant to clinical considerations aimed at not only revealing the traumatic scene or situation behind symptoms, but where the very process of reconstruction and mutual sense-making is also the path to recovery. Recovery thus must presuppose that one is clinically able to bridge the gap between the contorted language of the victim's body and the normality that the therapist represents. As Martha Bragin highlights from her own clinical experience, for trauma-victims, normality is often experienced as estrangement, raising fears about what the therapist might be able to tolerate, what secret she will be able to recognize as humanly possible.⁴⁸ Only through achieving a common "moment of meeting",⁴⁹ and thus initiating a dialogue of *thirdness* overcoming the split or dissociation between the body of trauma and the mind of normal significations, will modifications of implicit bonds of knowing be altered.⁵⁰ Accordingly, the clinical aim is thus to open possibilities for translating the contorted language of the body into the terms of relational knowing that facilitates shared forms of acknowledgement and recognition, trust and intersubjective significance. In therapy, one might say, the aim is to provide repair and reconstruct an original communication-situation for the body that is safe. This requires an other that is neither the aggressor nor the other under the constraints and perhaps even prejudice of normality. The other that is there to know is an other that not only takes notice but is able to share and acknowledge the human possibility of being afflicted by the excessive. Trauma might be known insofar as the other who knows is capable of sharing in her knowing of terrible things.

This sharing implies the sharing and accommodation of symbolic bodies. Working clinically with young victims, Theodor Gaensbauer has retrieved astonishing material. Even months and years after an incidence, children re-enact traumatic situations in gestures and bodily postures, clinically referred to as *deferred imitation*.⁵¹ In view of the discussion above, one might see deferred imitation as the repercussions of an imitative and bodily figuration of an accident or breakdown, where the normal patterns of affective sense-making have broken down, often marked by the absence or loss of a significant other. A girl that witnessed her mother being killed by a letter bomb at the age of 12 months was figuratively

48 Bragin, "Knowing Terrible Things: Engaging Survivors of Extreme Violence in Treatment."

49 Lyons-Ruth et al., "Implicit Relational Knowing: Its Role in Development and Psychoanalytic Treatment," 286.

50 Lewis Aron, "Analytic Impasse and the Third: Clinical Implications of Intersubjectivity Theory," *International Journal of Psycho-Analysis* 87 (2006).

51 Cf. Theodore Gaensbauer, "Representations of Trauma in Infancy: Clinical and Theoretical Implications for the Understanding of Early Memory," *Infant Mental Health Journal* 23, no. 3 (2002).

exhibiting the situation to the therapist during a session at the age of four and a half. As Gaensbauer writes: “When asked how her mother had died, she suddenly dropped to the floor and thrashes about in a frenzied way. Later she abruptly brought her hand across a play scene that recreated the situation, immediately prior to the detonation, knocking dolls and furniture asunder in a gesture that captures the essential qualities of the explosion”.⁵² Even where the traumatic event as such is entirely a natural contingency, an illness or accident, and not the result of violence directly inflicted by an other person, the intersubjective, or we should say, inter-corporeal, structure of the event is retained. In deferred imitation, the traumatized bodily self exhibits its symbolic capacities; it is the natural and spontaneous ability to be involved in imitative sense-making that enacts the traumatic situation in front of the analyst. Yet, the imitative behaviour is no longer communicatively fluent; the very communication-situation is distorted as well as the language of the body. But, importantly, the lived bodily significance of trauma still carries a ciphered or encrypted sense that is not captured by referring us back to automatized coping-responses. In deferred imitation the body maintains an original communicative aim, an aim to be understood.

Certainly, considering bodily responses and sedimented behaviour as critical to the understanding of trauma is adequate to the phenomenon. Yet, this body is not simply the reified body of natural coping responses but the lived body, the body of symbolic sense-making. When isolating ground-floor bodily coping from the achievements of the symbolic body, one risks to miss just how ground-floor bodily coping is continuous with symbolic expression, being the result of the participatory sense-making of inter-corporally coupled bodies. Thus when Pat Ogden conceives the cry for help in a traumatic scene as a ground-floor reaction of the organism, akin to “first instinct of an infant [...] also called the ‘separation-cry’”;⁵³ this not only fails to grasp the communicative signification of the traumatic cry; in its likening to the first human expression after birth, it also misconstrues how the infant’s cry is already invoking and responding to the presence of others, how it is expressed by a body that sketches or outlines a certain meaning that is first accomplished by the response of the other, her acknowledgement. To place the cry within a closed circuit of automatic coping behaviour fails to see its sense-making signification, how the cry carves out a relational meaning only fulfilled or accomplished in the other’s responsiveness or lack of it. The cry thus belongs to an ambiguous field of symbolic sense-making, where what is expressed only attains to meaning

52 Ibid., 265–266.

53 Ogden, “The Different Impact of Trauma and Relational Stress on Physiology, Posture, and Movement: Implications for Treatment,” 4.

by virtue of entering a mutual pattern of open signification – placing it in the open circuit of an original situation of communication. It is an example of what Johnsen and Sulkin refer to as the human ability to “recruit” motor, affective, and perceptual resources for sense-making behaviour, adapted to the novel circumstances of linguistic surroundings.⁵⁴ Perhaps the problem here is the idea that the natural body is somehow alien to the symbolic realm. But this is indeed overly simplistic. In humans, the symbolic realm is enacted on the basis of natural capacities and is continuous with the natural body.⁵⁵

The contribution of Merleau-Ponty’s phenomenological analysis of the lived body is exactly to make us aware of this point, that bodily human reactions attain to a language; that posture, movement, and gesture sketch or carve out a signification, opening up to a field of mutual and intersubjective sense-making, beyond the closed circuits of instinctive adapted behaviour. As Merleau-Ponty writes: “[F]rom the beginning the sonorous phenomena [...] will be integrated into the structure: expression-expressed; the face – whether I touch my own or see that of another – will be integrated into the structure: alter-ego”.⁵⁶ The infant’s cry thus sketches out what the signification of help and relief will *mean*, relating it to another bodily self that has the capacity of knowing and relieving the situation, acknowledging pain and modulating it. The cry is thus an expression of the gestural body that is imitatively coupled with others at the very outset – and that progressively finds itself in a symbolically structured environment of bodily sense-making.

In the traumatic cry, or its inversion, in the feigning of death, the body is confirmed in its utter helplessness, the bodily self is left to its own efforts at symbolization cut off from any concrete addressee. Gaensbauer’s patient lost her mother in the explosion. Thus, one might, as Gaensbauer does, conceive the traumatic event as procedurally figured by the imitative body, retaining a sketch of the trauma-situation in a bodily contrived form. In posture, movement, and bodily language, the event has retained sense, pointing to the ways in which the bodily self is always beyond mere coping, reflecting the ambiguities of making sense, and being made sense of. Clinical material like this points to the very ambiguity of the symbolic body, that procedural bodily behaviour and symbolic articulation are entirely interwoven in human experience and practice. Even in trauma the body is not entirely dissociated from symbolic experience. By the same token, there is no split between what is merely affective or mental, and thus top-floor, from ground-floor

54 Cf. Mark L. Johnson and Jay Schulkin, *Mind in Nature: John Dewey, Cognitive Science, and a Naturalistic Philosophy for Living* (Cambridge, MA: MIT Press, 2023), 70ff.

55 Di Paolo, Cuffari, and De Jaegher, *Linguistic Bodies: The Continuity between Life and Language*, chapter 2.

56 Merleau-Ponty, *The Structure of Behavior*, 171.

bodily enactment. A body entirely left to its own responsive coping is not our default mode of bodily being in the world.

In the clinical setting, the process of recovery is not concerned with simply remembering, which is surely not an intellectual effort. Two symbolic bodies meet and are implied in one another and aim at finding a common basis, something that requires the therapist to accommodate her body to the patient's implications with the terrible. There are no clinical measures that merely address the body.⁵⁷ The therapist must be present to the other with her own body, relying upon the resources of her bodily passivity to accommodate, and take part in, the body-language of the patient, searching for a "moment of meeting" that will enable the crossing and translation of conflicting procedural relational know-how. The accomplishment of such a moment, and the very possibility of recovery, and of sense, will have to begin by providing sufficient bodily trust. As Judith Herman writes: "Safety always begins with the body. If a person does not feel safe in her body, she does not feel safe anywhere."⁵⁸ Beginning from regained bodily trust, recovery might proceed through enabling continuity between the dissociated and pre-reflexive language of the body and that of linguistic and narrative remembering within a framework of mutual understanding, reconstruction, and repair. The traumatized body aims at being known, being recognized in her implication in terrible things. Knowing amounts to acknowledging.

A bridge to the patient is, however, not established by mere bodily presence and sympathy. Learning that they are a victim, and that what has taken place is not at all their fault or responsibility, might be as alienating as reassuring. As noted, in many cases the survivor expresses deep concern over their own partaking in the terrible events and blames themselves, carrying the feeling of sharing violent and aggressive phantasies with the aggressor. This might surely best be seen as a defence enabling them to survive the horror, but it leaves a sense of otherness or excess in the victim which is often experienced as an intimate and shared bond to perpetrators. In order not to enforce the patient's sense of estrangement in the clinical setting, the clinicians often thus need to not just show their sympathy and understanding but share a knowing of aggressive and violent phantasies. Otherwise there will be no bridging of the gap between the separate personal life-worlds of victim and therapist, no symbolic bond to be worked on. As Martha

57 For instance, when Pat Ogden depicts the therapeutic measures of sensorimotor psychotherapy, this is within a context of exploring the resonance of relational and gestural sense in postures, movements and bodily feelings that take on a certain socially embedded meaning. Ogden, "The Different Impact of Trauma and Relational Stress on Physiology, Posture, and Movement: Implications for Treatment," 7ff.

58 Herman, *Trauma and Recovery*, 269.

Bragin writes: “It is this state of implicit knowing that the clinician must enter to begin to understand the state of mind of the survivor [...] [T]he therapist must convey the capacity to understand and tolerate the awareness of terrible, unacceptable events in the world and as well as parts of the psyche”⁵⁹

Due to the traumatic event, the very implicit relational knowing of the patient, manifest in body-language and the anxieties and defences that ensue, is still embedded in the scene of excess, more specifically, in the procedural knowing that constitutes the intimate sharing between victim and aggressor. In order to break this spell, and the spell the aggressor still has over the victim, the therapist must relieve the patient of this bond of implicit knowing and enter it themselves, replacing the aggressor. Only thereby might the clinician be included in the relational sense-making of the patient’s body, no longer exclusively gravitating towards the unspeakable in grip of the perpetrator. In short, the therapist must show that the perpetrator is not the only one who knows, enabling the patient to open up and embrace the life-world of the therapist.⁶⁰ Again, what is critical here is that this requires indeed a shared implication and understanding for the victim’s guilt and sense of being implied or affected by the horror. As Robert D. Stolorow writes: “Our existential kinship-in-the-same-darkness is the condition for the possibility both of the profound contextuality of emotional trauma and of the mutative power of human understanding”⁶¹

The severe cases of collective trauma such as genocide or deportation seem to call for similar considerations.⁶² In many survivors’ accounts, one is reminded of the importance of witnessing and for the need to be acknowledged and not be alienated by what one has gone through.⁶³ Trauma needs to be shared in order

59 Bragin, “Knowing Terrible Things: Engaging Survivors of Extreme Violence in Treatment,” 232.

60 The presence and knowing of the therapist is thus not the kind of knowing as Freud initially depicted this, limited to mirror the patient in neutrality, but has herself to be taking part in the *lived significance* of trauma, enduring and responding to its horror. As Freud recommended: “The doctor should be opaque to his patients, and, like a mirror, should show them nothing but what is shown to him.” Sigmund Freud, “Recommendations to Physicians practicing Psycho-Analysis” (1912), in *The Standard Edition of the Complete Psychological Works of Sigmund Freud XII*, ed. James Strachey (London: Vintage Books, 1999), 114.

61 Robert D Stolorow, “Intersubjective-Systems Theory: A Phenomenological-Contextualist Psychoanalytic Perspective,” *Psychoanalytic dialogues* 23, no. 4 (2013): 388.

62 Cf. Gerson, “When the Third Is Dead: Memory, Mourning, and Witnessing in the Aftermath of the Holocaust.”

63 I am thinking of the very style of prose in *If This Is a Man* by Primo Levi, reflecting the distinct voice of a human no longer capable of recognizing humanity, also in his fellow prisoners, accompanied by moments of human joy, say of spring, that are still shared under such circumstances. Thus remembering is already the acquisition of a voice and a certain mode of prose, reflecting its relation to a trauma, implying that false memory is already a matter of style. Thus

to become past, that is, a past that no longer has the present in its grip. Trauma-victims often report their guilt towards the aggressor and their inability to break this bond. In writing or telling, one is reclaiming a sense of *agency*, one might say an agency that recovers new forms of passivity, new forms of inhabiting the world together with a recognition of this agency as a matter of symbolic gesture. In the patterns of collective memory, in memorials and so on, there is thus not just acknowledgement of what has happened, but a voicing of a future obligation towards a culture, politically and ethically. In conceiving the traumatized body as originally sense-making, one becomes aware of the continuity between individual and collective trauma and their overlapping cultural demands of sense. There is nothing merely clinical, but the clinical situation is always situated within a culture, within a symbolic field.

This brings us back to our phenomenological considerations of the passive body. The suffering of the trauma is for the patient and victim related to its one-sided passivity, in being brought back, unwillingly, into a primary state of helplessness. Through trauma, passivity is bereaved of access to confluent sense-making agency, being in grip of the traumatic scene, and, as is often the case, an aggressor or perpetrator. The traumatized patient is haunted by the past, haunted by an aggressor who is still in grip of their body. The passive body thus enacts trauma – enacts the significance of the event and its contorted or perverted relations, against the conscious and reflective efforts at escaping from it. As Merleau-Ponty puts it, in trauma, “[t]he inaccessible installs itself as a norm and takes possession of our body”.⁶⁴ Yet, as I have argued, this does not mean that the language of the body, its procedural habits, merely confirms closed circuits of adaptive coping strategies, but it means that we as symbolic bodies, under certain circumstances, might speak and mean beyond ourselves.

However, the wounds left by trauma are never entirely healed. Working with trauma-victims of war, Judith Herman reminds us that the aim of therapeutic recovery can never be that of full restoration – as this cannot be achieved neither by means of justice or revenge nor by some form of compensation. There is no entirely therapeutic recovery in trauma, no complete healing of wounds. Yet, this is not an argument for the bodily-coping view as default mode. In mourning, loss is retained in its paradoxical nature: “Mourning is the only way to give due honour to

even a culture can be subject to a false memory, inadequately relating to its history of trauma, where both the victims as well as the aggressors might be remembering only pathologically, incapable of providing structures for acknowledging the excess of the events. See the discussion in *ibid.*, 1341–1357.

64 Maurice Merleau-Ponty, *Institutions and Passivity – Course Notes from the Collège De France (1954–1955)* (Evanston, IL: Northwestern University Press, 2010), 176.

loss; there is no adequate compensation”.⁶⁵ Mourning, eventually, unties the bonds to the events, to perpetrators, while preserving loss as part of one’s condition, not denying it. Mourning is in this sense a working-through which facilitates an integration of the trauma, and of non-sense, within mutual forms of sense-making and both implicit and explicit relational knowing. Our vulnerability to trauma is a manifestation of the ambiguity of sense that is the conditions of embodied beings. Symbolic bodies, as we have seen, as ambiguous bodies, in between sense and non-sense.

According to Herman, in its final stages, therapy enters into a stage of “reconnection” where victims become able to tell their story, to re-enact it narratively, without falling into habituated anxieties and defences. Thereby the survivor can also come to share their experiences and explore new possibilities of autobiography and recollection in open settings beyond the dyadic clinical relation: “Telling the same story to a group represents a transition towards the judicial, public aspect of testimony. The group helps each individual survivor to enlarge her story, releasing her from isolation with the perpetrator and readmitting the fullness of the larger world from which she has been alienated”.⁶⁶

In this way, the clinical considerations that pertain to trauma find meeting points not only between patient and analyst but also between the traumatized and the rest of culture.⁶⁷ Such considerations make the joint venture of psychoanalytical, developmental, and phenomenological approaches specifically acute, spelling out the personal and intersubjective life-worlds of traumatized individuals. As according to Merleau-Ponty, trauma prompts our general awareness of contingency, that is, “the junction of fact and meaning, of my body and myself, of self and other [...] of violence and truth”.⁶⁸ Trauma concerns our existential condition and the ethical implications of our vulnerability.⁶⁹ Being bodies we are gesturing and speaking beyond ourselves, showing beyond saying. Trauma makes this experience of being human acutely present, reminding us of our primary fragility and ambiguity, and the bodily boundaries of ethical obligations not based on principles, but on the concrete experiences of negativity and harm, and the promise of not trespassing. Yet, it also questions our perhaps too philosophically concerned sense

65 Herman, *Trauma and Recovery*, 190.

66 *Ibid.*, 221–222.

67 Beginning with ways in which both parties in the clinical dialogue are situated within a community and culture, constituting what Baranger et al. calls a “dynamic field”. Madeleine Baranger and Willy Baranger, “The Analytic Situation as a Dynamic Field,” in *The Pioneers of Psychoanalysis in South America* (London: Routledge, 2014).

68 Merleau-Ponty, *Signs* (Evanston, IL: Northwestern University Press, 1964), 241.

69 Butler, *Precarious Life*.

of knowing – where certainty is aimed for at the price of distancing, petrified into method. Knowing trauma, clinically or otherwise, amounts to the question of coming to terms with the very condition of our human embodiment and finitude, implying that knowing is not a matter of passing judgements or forming claims, but of acknowledging the vulnerabilities of lived human sense-making bodies. Knowing in this sense amounts to acknowledging, being the very condition for our efforts at making sense to ourselves and the world.

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This anthology focuses on “practical” forms and expressions of knowledge, like thinking through artistic media or by crafting things out of materials. The ten chapters follow and review various tracks in conceptions of contemporary knowledge, exploring human knowledge and experience from the perspective of human activities or practices, professional, artistic, domestic, or whatever. A guiding idea is that human knowledge seldom, perhaps never, fits into the traditional dualism between thinking and doing.

The chapters are written by philosophers and musicians – some with a double experience as artists and theoreticians. The themes are philosophical, but above all, they touch on questions that are essential for how we understand ourselves as thinking and playing bodies, indeed as parts of nature. The book does not propose one single “theory of knowledge” but steps towards a more diverse and open attitude to the meaning of knowledge.

We hope that the texts will be of interest and useful in both discipline-based and professional education: in philosophy, art schools, teacher education, and in other programmes where tacit and practical knowledge are essential for the (future) practitioners. It is possible to independently read, and profit from, most of the chapters.

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