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# THE ACT OF THINKING



DEREK MELSER

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# **The Act of Thinking**

**Derek Melser**

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to Helen



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## Foreword

### Aims

The main aim of this book is to present a new theory about the nature of thinking. I mean *thinking* in a broad sense that includes most of the various “mental phenomena.” The theory equates thinking with the covert “token performance” or “tokening” of actions of one kind or another. The covert tokening of actions is identified as itself a species of action. As well as being intended as a contribution to the philosophy of mind, the book aims to contribute to a larger project that I mention only in this foreword and at the end of the book. The larger project is to establish actions as a legitimate philosophical given. The claim here is that the concept of “something one does” is self-sufficient and *sui generis*. Our knowledge of actions need not be, nor can it be, justified or explained by knowledge of any other kind. Actions are philosophical hard currency in themselves.

The conventional assumption is that the concept of an action includes and presupposes concepts of mental phenomena—beliefs, desires, decisions, intentions, volitions, etc.—and that these latter are concepts of a fundamentally non-actional kind. If the theory in this book is right, the conventional assumption is mistaken and mental concepts are really actional concepts. If this is so, then, in specifying the thinking that leads to and/or accompanies actions, one is not specifying the action plus some other kind of phenomenon, rather, one is specifying a more complex kind of action, or specifying an action plus some ancillary actions. In this case, the claim that actions are a basic philosophical “given” would no longer be vulnerable to the fact that actions often, or always, involve thinking.

In order to perform any action, the agent must (among other things) perceive things in the world that are relevant to that action—that is, the action’s patient, venue, instrument, product, goal state, etc. It is assumed that perception is an impersonal natural process—something that happens to a person, more than an action the person performs. Thus, the agent’s perceivings of relevant things would introduce another necessary but non-actional element into actions, also jeopardizing actions’ ontological independence. However, if it can be shown that perceiving is not a natural (say, physiological) process but a form of personal action, then the “actions as given” thesis would be defensible here too. My attempt in chapter 6 to show that perceiving is an action may be too brief to convince. Even so, I thought it worth indicating how this might be argued. Actions do have an essential perceptual component, but in my view this perceptual component is itself actional and not an impersonal process. Thus, the actional status of actions is not compromised by their perceptual component.

It is widely assumed that actions must, like everything else in the world, be in-principle specifiable in objective, scientific terms. It is assumed that scientific descriptions of actions would primarily concern macro- and micro-physiological events but would also encompass complex causal interaction between external objects and these physiological events. The physiological events believed to underpin actions are thought to include perceptual and mental (brain) events as well as muscular ones. In opposing this assumption, proponents of the “actions as given” view could agree that, if actions are real things in the world, they must be scientifically describable. However, while continuing to assert the reality of actions, they could claim that actions are not “things in the world” in the required sense. And they could claim that actions are not explicable in physiological terms. I argue both of these claims, albeit briefly, in chapter 11.

The question of the possibility of scientific analysis of people’s actions is as large and controversy-fraught as the questions about the nature and relation to action of thinking (or “mental phenomena”) and perception. To establish that actions are *sui generis* would require addressing all three questions at length. In this book, I devote a chapter each to the questions relating to perception and scientific explanation of actions. My main aim is to tackle the question about thinking and its relationship with action.

### Excuses and Apologies

At some points in this book I make large claims, sometimes in relation to issues around which there is ongoing controversy in the philosophical literature. This is due partly to my mooted what is, for better or worse, a large theory—a theory of thinking that has applications not only in the philosophy of mind but also in several other philosophical areas. I have chosen to paint with a broad brush rather than concentrate on details. I am aware that many philosophers would disagree with much or all of the theory of thinking I advance. However, it would be impossible in one book to properly integrate my theory into the vast contemporary literature, or even to argue the theory closely enough to persuade a skeptical lay reader. Yet if I had hedged all my claims with enough caveats to make them acceptable, you would be reading a boring and much longer book. Undue deference to skepticism is anyway premature, since I am introducing a theory and not defending one.

I also wanted to keep the book fairly short. The present book is an abbreviation, by about a third, of a doctoral dissertation that is itself a considerable reduction of the germane material I accumulated during my doctoral research. The result of my desire for comprehensiveness and brevity is a style that might sometimes seem peremptory. I have tried to avoid giving this impression; if I have not succeeded, I apologize. Anyway, if what this book adumbrates is the large new area for philosophical research and discussion I believe it is, then it might not be too long before detailed maps of the area are made by others and the preliminary sketchwork this book offers can be set aside.



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## Introduction: Is Thinking a Natural Process, or Is It an Action?

By *thinking* we usually mean such activities as calculating, cogitating, pondering, musing, reflecting, meditating, and ruminating. But we might also mean any of a broader range of actions or activities (or dispositions, states, processes, or whatever). I mean remembering, intending, imagining, conceiving, believing, desiring, hoping, feeling emotion, empathizing, following what someone is saying, minding, being conscious of something, and so on. This is admittedly a mixed bag. It might seem that feeling, in particular, should be separated out. Certainly thinking and feeling can be contrasted, but in the context of this book it is what they have in common that is interesting. Anyway, I would like to include all the above as “thinking.” The general term most philosophers would use is *mental phenomena*, but, for various reasons, I want to try to do without it. We can use *thinking* instead.

The notion of thinking helps us to explain people’s behavior. We appeal to thinking to explain actions, qualities of action, abilities and dispositions to act, and even certain kinds of bodily agitation. Consider the distinctive posture of Rodin’s *Penseur*, an attentive and methodical performance, any goal-directed activity, explaining to someone what one is doing, producing a list of relevant facts, finding the solution to a problem of woodworking or arithmetic, having a disposition to racist remarks or effusive greetings, and trembling or blushing at what someone is saying. We explain these different behaviors and aspects of behavior, and many others, by positing different kinds of thinking going on behind the scenes. The thinking determines the nature of the behavior, then motivates and guides its performance, from within.

What kind of thing is thinking? Is it a “mental” process? Is it a physiological process in the brain? Is it both? Or is it something different again—an action or activity the person performs?

## Cognitive Science

According to the currently dominant theory as to the nature of thinking, thinking is the brain's computer-like processing of "mental representations." The brain acquires information about reality via the sense organs and encodes it into neural form as mental representations. The brain stores each representation and computes from it—and from other current and previously stored representations—a program of neuron firings that will produce a behavioral response appropriate to the current situation. This representational and computational understanding of the mind/brain is the basis of "cognitive science," the approach to psychology and philosophy of mind that took over from behaviorism in the mid 1970s.<sup>1</sup>

Cognitive scientists believe their theory is a more sophisticated and scientific version of the "folk" theory that ordinary people believe in. According to folk theory, thinking is a "mental" process carried out in and/or by "the mind." And the mind is assumed to be some kind of non-physical agent inside people's heads. Cognitive science agrees that thinking goes on inside the head. For the cognitive scientist, however, thinking is information processing done by or in the brain. Mind is redefined as a brain function.

The question to what extent the concepts of folk theory can be retained in scientific explanations of behavior is still a cause of philosophical debate. Nearly all cognitive scientists accept that the entities postulated by folk theory—mental phenomena such as beliefs, desires, intentions, and fears, and minds themselves—have some reality. They agree that folk theory of mind has not only practical utility but also some theoretical justification. Furthermore, cognitive scientists assume that the entities postulated by folk theory are real enough to be studied scientifically. This is implicit in the scientific-sounding terms cognitive scientists employ when referring to these entities: *mental phenomena* (or *processes, events, entities, states, representations*), *cognitive processes, conscious processes, conscious states, intentional states, propositional attitudes*, and so on.

Bald identification of the various mental phenomena with brain processes is the exception in current theory. However, mental phenomena are universally believed to be in some way intimately related to brain processes and brain areas. Various theories—with names like "identity theory," "functionalism," "anomalous monism," and "connectionism"—opt for one intimate relationship or another.

As well as developing formal theories about the relations between mental phenomena and brain processes, cognitivist philosophers often make do with metaphors. Brain researchers often use the same expressions. Consciousness and other mental phenomena are said to be “dependent on,” “supervenient on,” “underpinned by,” “caused by,” “correlated with,” or “the product of” neurophysiological processes. Or the latter are held to “support,” “be the mechanism for,” “be responsible for,” “give rise to,” “determine,” or “underlie” mental phenomena. Such language clearly implies that, even if mental phenomena are not strictly identical with brain processes, brain processes are still where the action is as far as mental phenomena are concerned. The following is a typical statement of the task of cognitive science:

We believe that at the moment the best approach to the problem of explaining consciousness is to concentrate on finding what is known as the neural correlates of consciousness—the processes in the brain that are most directly responsible for consciousness. By locating the neurons in the cerebral cortex that correlate best with consciousness, and figuring out how they link to neurons elsewhere in the brain, we may come across key insights into . . . the hard problem: a full accounting of the manner in which subjective experience arises from these cerebral processes.<sup>2</sup>

Here, despite the modest hopes of progress, it is unquestioned that brain processes constitute the underlying reality and that the task of explaining mental phenomena is just the task of finding the relevant brain processes and seeing how they work.

The important thing for the purposes of this book is that both the layperson and the cognitive scientist, by assuming that thinking is a process that goes on inside people’s heads, are excluding in advance the possibility I want to consider: that thinking may be a kind of action, something the person actively does. In both popular and scientific views, thinking is seen as an impersonal internal process rather than an action the person performs for himself. In the folk view, thinking is a mental process; in the scientific view, it is a neurophysiological one. But the same “impersonality” applies. In neither view is the person doing the thinking. Rather, as with natural processes such as gestation, blood circulation, and digestion, a dedicated organ or mechanism carries out (or hosts, or is responsible for) the process. The main difference between the popular and scientific theories is the nature of the organ or mechanism that is nominated for the job. In the one case it is the non-physical “mind”; in the other it is the physical brain.

### The Possibility of an Actional Account of Thinking

In chapters 1 and 2, I review several theories of thinking I call “action-based.” While all of the theorists I talk about in those chapters see thinking as having intimate logical and practical ties to action, none of them regards thinking as itself an action. Their accounts are “action-based” but not “actional” theories of thinking. For none of them is thinking something the person does. In Gilbert Ryle’s *logical behaviorist*, *adverbial*, and *refraining* theories, thinking is a behaviorally vacuous “grammatical construct” or some such. For *methodological behaviorists*, it is a theoretical construct: a hypothetical intervening variable between stimulus and response. *Physiological abbreviationists* believe thinking is an internal physiological process involving not just brain events but subtle physiological events throughout the body. For the various *internalized social activity* theorists, thinking is also an internal and hence impersonal process—it is social action that is so abbreviated as to be “internalized” in a person. But the emphasis in internalization theories is on the action’s becoming non-physical rather than on its becoming subtle and physiological. In these theories, thinking remains, effectively, a mental process in the folk sense.

It seems that every theory of thinking—from the folk theory of mind (which has been around since before Plato) through the various behaviorist, abbreviationist, and social internalization theories of the early and mid twentieth century and the contemporary orthodoxies of cognitive science—either discards or ignores the possibility that thinking is something people do. What I suggest in this book is that, despite the weight of popular and expert opinion, the possibility of thinking’s being an action of the person is a very real one. And by “action” I mean an ordinary, albeit unique, learned and voluntary action.

There are several initial grounds for believing that thinking must be an action. I will list some of these very shortly. However, first it is worth getting clear about the difference between impersonal (natural) processes and people’s actions.

#### Natural Processes vs. Personal Actions

In everyday speech, the word *process* is often used to mean things other than natural processes. In one usage it means much the same as *procedure* and

refers to an action or course of action with clear stages, often with more than one person contributing. Thus we might talk about a legal process or a manufacturing process, or being in the process of shaving, or something's being in the process of construction. For the purposes of my argument, these procedure-type processes can all go into the "action" bag.

In a closely related usage, we speak of a "process" when the contribution made by people's actions is about equal to, and intertwined with, one or more natural processes. This is true especially of technical processes. Industrial processes, such as steelmaking or electric power generation, involve natural processes that are everywhere controlled by people's actions. And there are mechanical and electronic processes that, once initiated, can proceed with little human intervention, but which nevertheless require people to design, make, and employ the mechanism (or other device or system) the functioning of which constitutes the process in question. The mechanism operates in conformity with natural laws of cause and effect, but putting it into operation is something people do. The respective actional and natural-process contributions to technical processes are often difficult to disentangle. Consider sorting out the actions from the natural processes in, say, drying one's hair with a hair dryer.

For present purposes, we can safely ignore these technical processes. Despite popular conceptions of the brain as a computer, and despite talk of neurophysiological "mechanisms" in the brain, no one believes that thinking is literally a technical process involving people using technology to manage natural processes. The question whether thinking is an action or a process is not complicated in the way the same question about hair-drying might be. If thinking is a process, then it is a purely impersonal and natural kind of process that goes on in the brain unaided by technical interventions from us. In the case of thinking there is no problem of disentangling natural processes from the functioning of mechanisms and from the actions we perform in operating those mechanisms. Thinking is either all action or all process. The question is: How does thinking take place? Do people do it, or is it a natural process occurring in the brain?

Despite the variety in the everyday uses of *process*, I will restrict my use of the word to natural processes, such as biological, physiological, and chemical processes. It is natural processes that I want to distinguish actions, especially thinking, from. I will assume that the distinction between natural

processes and learned and voluntary doings of people is obvious. If it is not now, it should be by the end of the next section.

I also assume for now that the two categories are mutually exclusive—that a natural process cannot be an action, and vice versa. There is in fact a widely held philosophical assumption, which I call “action physicalism,” according to which the distinction between an action and a natural process is only superficially valid. It is valid “at the everyday level” perhaps, but not “at a deeper scientific level.” Action physicalists argue that people’s actions are physical events and can therefore, in principle, be analyzed down to and explained in terms of physiological and other natural causal processes. If action physicalism is true, showing thinking to be an action is pointless. Thinking still could (or would) be a natural process, such as a brain process. I tackle action physicalism in the final chapter. Until then, I assume that the everyday distinction between natural processes and actions is valid, and valid all the way down.

### **Initial Indications That Thinking Is an Action**

#### **Thinking Is Usually Self-Aware**

Actions are characteristically, even by definition, self-aware. That is, when performing an action we are generally aware of and can describe what it is we are doing. One indication that our concept of thinking is a basically actional concept is that this automatic self-awareness feature also applies to thinking. We generally know, and can say, both that we are thinking and what we are thinking. This cannot be said of the natural processes going on in our bodies. Such inner goings-on as digestion, circulation and oxidation of the blood, insulin secretion by the pancreas, and conception are not usually—and certainly not characteristically or by definition—subject to awareness by the host person. Some internal processes are sometimes accessible to awareness; however, few are characteristically so, and none necessarily. In the normal course of events, we are never aware of the neurophysiological goings-on in our own brains—and yet we usually are aware of our thinking.

#### **Thinking Is Often Publicly Observable**

Actions nearly always involve overt movements, so normally one can see people performing actions. On the other hand, internal bodily processes—

including brain processes—generally don't involve overt movements. One reason people might have for believing that thinking is an internal process rather than an action is that one often, and perhaps characteristically, cannot see it going on. This alleged characteristic unobservability of thinking could easily be equated to the characteristic unobservability of internal processes. From there, one could easily infer that thinking is an internal process too.

However, there are actions that one can perform without making observable movements. "Staying absolutely still" is one such action. Deliberately refraining from doing X may also involve "doing nothing." In these cases, the person is making no overt movement yet is performing an identifiable action. What is more, although it involves no movement, the action—staying motionless, say—is not unobservable at all; it can easily be observed.

Thinkers often deliberately stay still. They may freeze in a particular posture—grip their hair, say, or put on a particular intent expression, or hold up their index finger, or do a full *Le Penseur*. Such conspicuous, even ostentatious, immobility is plausibly an "overt behavior." It can also be a deliberate display of one's thinking, with an implied *Do not disturb*. At any rate, here is a perfectly good sense in which we very often, even usually, can see people thinking in just the way we can see them walking or knitting. And this too counts against thinking's being an intracranial process.

In fact, a considerable range of overt behaviors and mini-behaviors are associated with and reliably indicative of thinking. Apart from immobility, these include frowning, giggling, fist-clenching, and sotto voce muttering. Admittedly, there is an important distinction—which I will revisit later—between behaviors that are part of (or constitutive of) an action or activity and behaviors that are mere contingent by-products of an action or activity. There are certain movements with knitting needles that are constitutive of knitting, but the squinting and frowning that may also be associated with knitting are not parts of knitting; they are only by-products. In cases of a third kind, an action may occur in connection with knitting that is neither a part of it nor a by-product of it but rather is ancillary to it—as when you purl exaggeratedly so I can see it better.

On the "internal process" view, any overt behavior associated with thinking can only be either a by-product of it or ancillary to it. Nothing observable could count as constituting, or as part of, the actual thinking. It is true that many of the behaviors and micro-behaviors that go with thinking are



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