In Hilary Kornblith, *Second Thoughts and the Epistemological Enterprise*, Cambridge University Press, 2019, 243-261.

**12**

**OUR RATIONAL NATURE**

 It is often claimed that rationality is a distinctive feature of human beings. We are capable, to be sure, of rational belief and action, but in saying that rationality is a distinctive feature of the human species, it is suggested that other animals lack this important capacity. There can be little doubt that there are many other animals that have the capacity to act in ways which reliably satisfy their biologically given needs, and their ability to do this is dependent on their capacity to reliably pick up information about their environment. But these capacities, many believe, fall short of genuine rationality. If all of this is so, the question naturally arises as to what it is that we humans have that other animals lack. What is the special feature of rationality that somehow eludes other animals?

 We find this view of rationality throughout the history of philosophy, from Aristotle to the present day. Among contemporary philosophers, Ernest Sosa has given a rich articulation of the view. What is distinctive about human belief acquisition, according to Sosa, is that we, unlike other animals, are responsible for what we believe. In light of this, Sosa defends a view of human knowledge he refers to as *responsibilism*, a view which places this responsibility for what one believes at the center of an understanding of human intellectual capacities in general, and rationality in particular. And when we see the connection between responsibility and rationality, we are led to make a distinction between two fundamentally different sorts of belief.

At a certain level of abstraction, we can distinguish two sorts of “belief,” one implicit and *merely* functional, the other not merely functional but intentional, perhaps even consciously intentional. It is the latter that needs our attention in giving *responsibilism* its proper place in epistemology. This is because our rational nature is most fully manifest in such reasoned choice and judgment. Accordingly, it is consciously, rationally endorsed judgment that is at the focus of the epistemological tradition from the Pyrrhonists through Descartes.[[1]](#footnote-1)

Thus, when I walk across campus thinking about what I will focus on in my seminar next semester, my attention is on philosophy, and not on my surroundings. Nevertheless, I successfully negotiate the various pathways crossing campus, weaving in and out to avoid the many students who are looking down at their cellphones. I consciously entertain thoughts about my seminar, and not about my route across campus, but I am reliably taking in information about the contours of the route, appropriately responsive to the many pitfalls that a walk across campus provides. The beliefs I form along the way about the route are ones which Sosa regards as implicit and merely functional. And this is not where rationality resides.

 When I self-consciously think about my coming seminar, however, and self-consciously consider the advantages and disadvantages of taking on various topics, the beliefs I form in the course of my deliberations are what Sosa calls *intentional*. I mentally rehearse the reasons for and against various courses of action, as well as the reasons for and against various beliefs about the effects of those actions. Here, according to Sosa, is where “our rational nature is most fully manifest.” And it is this capacity for self-conscious deliberation, both about what to believe and about what to do, that distinguishes us from the other animals.

 Sosa is not the only contemporary philosopher to hold such a view. It is widely held that, although other animals register information about their environments, this is something that merely happens to them, given their native biological endowments. We, on the other hand, play an active role in cognition; acquiring beliefs, in the human case, is something that we do, rather than something which merely goes on in us. And that is why we, and not other animals, can be responsible for the beliefs we have. Thus, Paul Boghossian remarks that, “…the sub-personal transitions of a person’s visual system are not ones that we can hold the person *responsible* for, and they are not ones whose goodness or badness enters into our assessments of her *rationality*.”[[2]](#footnote-2) Boghossian elaborates further: “It is only if there is a substantial sense in which they are transitions that a thinker *performed* that he/she can be held responsible for them. That is the fundamental reason why such transitions cannot, in and of themselves, amount to reasoning.”[[3]](#footnote-3) As Boghossian makes clear, other animals do not reason because they do not play an active role in cognition. Although we do not play an active role in the transitions among our sub-doxastic states, we can play such a role in transitions among our beliefs. And this is why we, unlike other animals, may be said to reason; why we can be held responsible for our beliefs; and why we, unlike other animals, count as rational.

 Like Sosa and Boghossian, Tyler Burge sees a deep connection between the ideas of rationality, agency, and responsibility. As Burge sees it, there is another player which needs to be added to the mix: the first-person concept.

A being that lacked the first-person concept could be sensitive to the norms of reason, and might (I am conceding for the sake of the argument) even sensitively shape its attitudes according to a conception of good and bad reasons and reasoning. But the agent would lack full conceptualization of what it is doing… Insofar as *full* intellectual (or any other) responsibility requires the capacity to understand the way norms govern agency and the capacity to acknowledge the responsibility, a being that lacked the first-person concept would not be fully responsible intellectually. It would not have a fully realized rational agency.[[4]](#footnote-4)

So, for Burge, a “fully realized rational agency” is something of which we, but not others animals, are capable.

 It is not necessary to continue in this vein. The family of views these philosophers hold, and many others as well,[[5]](#footnote-5) is both familiar and attractive. Human beings are undeniably different from other animals. Our cognitive lives are far more sophisticated than those of other creatures, even if it is also true that the mental sophistication of other animals has often been vastly underestimated. Perhaps most striking is our ability to engage in self-conscious deliberation, a seemingly unique ability in the animal world. Such deliberation seems to have all of the features which Sosa, Boghossian, Burge, and so many others, make note of: we reflectively consider reasons for and against various beliefs and actions; we take responsibility for our beliefs and actions, and we hold others of our species similarly responsible; the manner in which we do this seems essentially to involve our ability to mentally represent not only states of the world, but our own mental states as well, in addition to representing these states as our own. We are responsive to reasons, and we are responsive to reasons as reasons.

 Those who subscribe to this family of views thus see an examination of the nature of self-conscious deliberation as the key to understanding rationality, and they see the capacity for such deliberation, as well, as the seat of rationality. Animals who lack this capacity may be able to register information about the world reliably. They may even be credited with beliefs. They certainly act in ways which are informed by such informational states. But they do not count as rational. Rational belief formation, on the view under consideration here, is different in kind from the goings-on which occur in non-human minds.

 In this chapter, I critically examine this view, in part, by bringing together a number of considerations which are raised in various places in the foregoing chapters. In addition, I present a rival picture of rationality, one which does not regard as sub-rational the kind of automatic processing we see in other animals and in ourselves most of the time. More than this, I seek to explain, or rather, explain away, the attraction of the picture of human adults as uniquely rational animals and self-conscious deliberation as the home of rationality.

I

 Let us begin with a quick overview of the phenomenology of deliberation. When we deliberate about what to believe, or what to do, we engage in the self-conscious consideration of reasons. Our engagement with reasons qua reasons, on the view under consideration, is the hallmark of rationality.

 Consider, once again, my walk across campus, carefully considering various possibilities for my epistemology seminar next semester. I self-consciously consider a number of options: I might teach a seminar on self-knowledge, or a seminar on philosophical methodology, or a course on the epistemology of ethics. I bring to mind some of the advantages and disadvantages of each, and after thinking it through a bit, I settle on one of these options as the best, all things considered. This process of thinking things through, and bringing reasons to mind, seems a paradigm of rationality, quite unlike my automatic and seemingly mindless accommodation to the many students who cross my path in the course of my walk. My choice of seminar topic involves the consideration of reasons as reasons. My choice of a path across campus seems to involve little if any mental engagement; my mind, as we so often put it, is elsewhere.

 My self-conscious consideration of reasons involves subvocalized speech. Although I do not actually say words out loud—or at least not typically—my deliberation about what to do and what to believe involves my expressing, subvocally, various sentences in English. I might explicitly entertain the following thoughts, expressing them to myself, subvocally, in English: “What should I do my seminar on next term? I could do something on self-knowledge. Or maybe I could do something on philosophical methodology. Or perhaps I should do something on the epistemology of ethics.”

 Having enumerated various options, I might then turn to thinking about considerations for and against each of them. Sometimes a single reason, by itself, might seem definitive. As I consider the possibility of teaching a seminar on philosophical methodology, I remember that one of my colleagues taught such a seminar just last term. And as soon as this thought occurs to me, I immediately dismiss the possibility of doing my seminar on methodology. I don’t attempt to see whether other reasons in favor might outweigh this concern, and I don’t stop to think about whether there are additional reasons why this option is not a good one. This reason, by itself, is sufficient to narrow my search. In the case of the other possibilities, however, I might bring to mind some considerations in favor of each, and considerations against them as well.

 One thing I don’t do—and I am surely not idiosyncratic in this—is organize my thinking on these issues into simple deductive arguments. When I dismiss the possibility of teaching the seminar on philosophical methodology because a colleague recently taught just such a seminar, I do not explicitly entertain the conditional thought that if a colleague taught such a course, then I shouldn’t do such a course again so soon afterwards. I could entertain that thought, but I need not. I might simply move directly from the thought that my colleague taught that course to the thought that I shouldn’t do so as well, at least as far as the phenomenology of my reasoning goes. And in cases in which the considerations I entertain might form the basis for a good non-deductive argument for the conclusion that I should teach a seminar on some particular topic, I need not explicitly entertain a conditional thought that if such and such conditions hold, then this gives me good even if not decisive reason for thinking that I should teach a particular seminar. My own thinking, at least as it is explicitly represented to me in subvocal speech, is not expressed so pedantically. For better or for worse, the content of my subvocalized reasoning looks enthymematic at best.

 These are the kinds of thoughts that pass through my mind as I deliberate; this is how it seems from the first-person perspective. And it is here that Sosa, Boghossian, Burge, and so many others locate the home of rationality.

II

 Although these philosophers see self-conscious deliberation as the place where “our rational nature is most fully manifest,” this is not to say that the thoughts which I self-consciously entertain when deliberating—the statements I express to myself in subvocal speech—constitute the whole of my rational dealing with the question of what to teach next semester. My sub-vocalized thoughts look like argument-sketches rather than full-blown arguments. These argument-sketches do not look at all like a “fully realized rational agency.” Instead, they need to be filled out a bit if the rationality of my deliberation is to be properly exhibited. The enthymemes of subvocal speech need to be augmented so as to properly reflect the very rationality which distinguishes adult human beings from other animals. But where are we to find the additional premises to turn the enthymemes of subvocal speech into paradigms of rationality?

 Gilbert Harman faces a similar problem in his approach to the Gettier problem. Harman treats perception as inference to an explanation, despite the fact that no such inference is present to consciousness. If this approach is to succeed, then premises for the argument, absent from conscious thought, need to be found. Here is how Harman deals with an illustrative example.

A man looks and comes to believe that there is a candle directly before him. There is a candle there; but a mirror intervenes to show the reflection of a candle actually off to one side. The man’s belief is justified and true; but he does not know. If his belief is the result of inference, his failure to know is easy to understand. Since inference attempts to find the best total explanatory account, he infers an explanation of the way things look. He infers that it looks to him as if there were a candle before him because there is a candle there and because of the normal connection between the way things look and the way things are. Since that explanation is essential to his conclusion but is false, he does not come to know that there is a candle before him even though his belief is justified and true.[[6]](#footnote-6)

The inference Harman attributes to this ordinary perceiver involves premises which are not self-consciously brought to mind. Nevertheless, we may reasonably attribute belief in these premises to the perceiver, according to Harman, and the inference of which these premises are a part, because this attribution allows us to make sense of the perceiver’s belief about the candle. The beliefs missing from consciousness, moreover, are ones, it seems, which any adult human being would endorse, even if they have never self-consciously entertained such thoughts about the normal connection between appearance and reality. Moreover, as Harman urges, this provides a neat solution to the Gettier problem.

 Those who see our ability to deliberate self-consciously as the home of rationality may adopt a similar strategy. The thoughts I express to myself in subvocal speech may be enthymematic, but the additional premises needed to turn them into valid deductive arguments or strong non-deductive arguments are easily found. When, for all the first-person perspective shows me, I move directly from the thought that a colleague taught a seminar on philosophical methodology last semester to the thought that I should not teach such a course this coming term, the needed conditional premise which would turn this into a valid argument—that if my colleague taught such a course last semester, then I should not teach such a course this coming term—may nevertheless be attributed to me. It makes sense of my subvocal speech, and it allows us to see my thinking on this matter as rational. Moreover, just as in Harman’s example, the missing premise is one which the thinker would endorse if asked, even if that premise was never self-consciously entertained. By attributing beliefs and inference in this manner, we may see the argument sketches which are available from the first-person perspective as offering a glimpse of a deeper rationality. My ability to self-consciously deliberate may be the seat of my rationality, but it is aided and abetted by mental capacities which do not present themselves to consciousness, at least in the ordinary course of events.

 These conditional beliefs are not the only ones which are needed to provide a complete picture of the way in which my deliberation rationally addresses the question of what to teach next semester. When thinking about that question, I brought to mind only three candidates for the subject of my coming seminar. But these are not the only subjects I’m capable of teaching! There are, indeed, a very large number of subjects on which I could obviously teach a worthwhile graduate seminar. And there are other subjects, as well, in which I have a real interest, which are worthy, perhaps, of consideration. So the menu of seminars I might teach is considerably longer than three I actually bring to mind in the course of my deliberations. Should we see these other possibilities as playing a role in my choice, despite the fact that they were not consciously considered? We have already seen that a full picture of the rational features of my deliberation is not present to consciousness in the course of my thinking. In order to provide such a picture, do we need to include further possibilities not brought to consciousness, or is it sufficient to fill out the argument-sketches consciously considered with additional premises in the manner described by Harman?

 I think it is clear that at least some of the possibilities not brought to consciousness must be seen as playing a role in my decision, even if it is very far from clear just how many of these possibilities should be seen as playing such a role. After all, it is not just a coincidence that the possibilities I self-consciously considered were the ones I brought to mind. Some of the courses I’m capable of teaching would be quite far down my list of good choices for next semester, even if they would be perfectly legitimate topics for a seminar. If I only considered topics of this sort, then the best of the topics considered would be far inferior to many of the topics left out of consideration, even if they passed some reasonable threshold of acceptability. A random pick of, say, three possible topics out of the very long list of topics I might teach would not very likely leave me with a menu of seminar topics containing a strong choice. My worry here is not that such randomness is incompatible with optimal choice. I don’t assume that, rational as my choice of seminar topic was, that it was optimal. But if the topics which come to mind are just randomly brought to mind from the long list of possible topics, it is not remotely clear that the resulting choice of the best among these, or the best among these which exceeds some reasonable threshold, would be a rational one all things considered. The seminar topics I self-consciously considered included topics which were, in fact, serious contenders for my course; many topics which I could have taught, but would have been very bad choices, for one reason or another, were not brought to mind. This cannot just be a coincidence. So, here too, just as in the perceptual case which Harman discusses, it seems there must be features of my rational choice which are not present to consciousness. The options I choose among, in the case described, just present themselves to me; I am unaware of any reasoning that led to considering these possibilities rather than various others. But that menu of options must itself reflect my rational nature, even if no reasoning in putting the menu together was ever present to consciousness. And in this case as well, just as in the move Harman makes in the perceptual case, the missing argumentation needed to justify the menu of choices considered would plausibly be argumentation I would endorse if asked, despite the fact that it is argumentation that did not self-consciously cross my mind. Once again, we see that, even if we view our rational nature as most clearly revealed in self-conscious deliberation, the features that make such deliberation rational must be augmented with mental states and processes which are not present to consciousness.

 Nor is the augmentation needed here limited to the adding of premises. Premises and conclusions alone do not make an argument, and when we are considering an agent’s rationality, it is not arguments as abstract objects alone which we need to take into account. Rather, we are interested in the inferences which agents actually make. One may come to believe a certain claim, and have available a supply of beliefs which would form the basis for a perfectly sound argument for that claim, but if one does not believe the claim on the basis of the argument, then the existence of such a sound argument is irrelevant to questions about one’s rationality. Inference involves some sort of mental transition from premises mentally represented to a conclusion which one accepts. Thus far we have been considering how it is that one finds the stock of premises needed for rational inference, but now we need to consider the mental transition from premises to conclusion which constitute that inference.

 Boghossian has focused a good deal of attention on this issue.[[7]](#footnote-7) On Boghossian’s view, what is needed to connect premises to conclusion is a mental *taking*, in which one takes the premises to provide support for the conclusion. Without any such taking, Boghossian argues, one just has a series of beliefs passing through one’s mind in sequence. It is crucial that one distinguish the notion of a taking from a belief one might have, say, that the premises support the conclusion. Additional beliefs such as this cannot perform the relevant work, for one would still need to know how it is that these beliefs play a role in some sort of mental transition, rather than sit idly by in one’s stock of mental representations. Any appeal to beliefs about the relationship between premises and conclusion cannot, as a result, perform the needed work without generating a vicious regress. And once again, just as was the case with the premises needed to fill out the argumentation self-consciously considered in deliberation, the taking of premises to support one’s conclusion need not be self-consciously entertained. At the same time, the suggestion that agents in the situations under discussion do, indeed, take the premises of these arguments to support the conclusions they draw is not one which lacks all grounding in features of the agent: just as in the case of missing premises, agents in the situations described would endorse the claim that their premises support their conclusions if they were asked.

 The view that self-conscious deliberation about what to believe and what to do is where our rationality is most fully manifest thus cannot be identified with a view according to which all of the features of one’s mental life which make one rational are fully present to consciousness during deliberation. That view is a non-starter, and it is certainly not one which is endorsed by any of the philosophers under discussion here. If the materials present to consciousness during deliberation are to play a central role in explaining our rationality, they will need substantial augmentation.

III

 Thus far, we have focused on the ways in which the first-person perspective presents a rather truncated view of the features of our deliberation which make it rational. But this is not the only limitation of the first-person perspective, for the view it offers of deliberation is not only incomplete; it is also inaccurate. And this is where the real problems begin for the view that self-conscious deliberation is the seat of human rationality. We will need, however, to get at these problems indirectly.

 Let us return to Harman’s example of the man who, failing to realize that he is looking into a mirror, comes to believe that there is a candle in front of him. Harman very plausibly supposes that such a person would believe that how things look to him is a product of “the normal connection between the way things look and the way things are.” And Harman goes on to suppose that the man’s belief that there is a candle in front of him is a product of inference involving this very belief about the relationship between appearance and reality. That is, Harman is committed to the claim that the belief about the relationship between appearance and reality plays a causal role in the production of the belief about the candle. But there is a problem with any such causal claim. Very young children, who do not have the concepts of appearance and reality, and non-human animals, who similarly lack such conceptual sophistication, make the very same perceptual errors. Lacking the requisite conceptual sophistication, these subjects cannot have the belief which Harman supposes is causally responsible for the production of the belief about the candle. Since these subjects obviously form the belief about the candle without the benefit of some connecting belief about the relationship between appearance and reality, there must be some causal process present in these subjects which allows them to reach the belief about the candle without the benefit of going through the bit of sophisticated argumentation—even sub-consciously—which Harman attributes to an adult.

It should not be surprising that natural selection has endowed both young children and many non-human animals with mechanisms of visual information-processing which allow them to acquire beliefs about the world around them even without first acquiring the concepts of appearance and reality. But once we recognize this fact, it seems that we should expect that the very same kind of visual information-processing goes on even in conceptually sophisticated subjects. And what this means is that in the typical cases of perceptual error like the one that Harman imagines, and in normal cases of perception where there is no error at all, any belief about the relationship between appearance and reality plays no role at all in the production of the belief about the world. If our adult subject is questioned about why he believed that there was a candle in front of him, he might appeal, in the face of sufficiently persistent Socratic questioning, to his belief about the relationship between appearance and reality.[[8]](#footnote-8) He might even believe, understandably enough, that this belief explains why he came to believe that there was a candle in front of him. He might believe, that is to say, in the face of persistent Socratic questioning, that his belief about the candle was brought about by the very inference which Harman would have us attribute to him. But if he did come to believe this, he would be mistaken. The belief about the relationship between appearance and reality which sophisticated subjects may have is typically epiphenomenal with respect to the production of perceptual belief. And this will leave those, such as Harman, who wish to fill out the meager phenomenology of deliberation so as to credit subjects with the operation of sophisticated arguments in support of their beliefs without a crucial connecting premise.

My point here is not that there is nothing going on mentally during deliberation which is not present to the first-person perspective. Such a view would be absurd. But Harman’s strategy of adding sophisticated premises so as to make the processes of belief-acquisition track subtle argumentation does not present a realistic account of the way in which psychological processes operate. More than this, the fact that adults who deliberate about their reasons for belief may well appeal to such sophisticated argumentation and sincerely believe that such argumentation played a role in their coming to believe as they do does not provide us with good reason to believe that they are correct in this.

What I want to argue is that the difficulties which face Harman’s reconstruction of perceptual processing present a problem for those who see our capacity to deliberate as the source of our rationality. As I will argue, these philosophers view deliberation as involving psychological processes which track sophisticated argumentation attributable to the activity of cognitive agents. But just as in the perceptual case which Harman discusses, the sophisticated argumentation which adult human beings are capable of is often epiphenomenal with respect to the processes by which their beliefs are produced, even when such beliefs are formed under conditions of deliberation. Or so I will argue.

IV

The perspective of the deliberating agent provides us with argument-sketches in favor of conclusions apparently arrived at as a product of self-conscious consideration of what to believe and what to do. Theorists can easily fill out these enthymematic argument-sketches with appropriate missing premises and rules of inference so as to turn them into valid deductive arguments or strong non-deductive arguments. If the material needed to turn the deliverances of self-conscious first-person thought into high quality argumentation seemed somehow forced—if it seemed implausible that the deliberating agent was actually committed to these missing premises and rules of inference—then the project of locating our rationality in our capacity to deliberate, and explaining this rationality, in turn, by way of good argumentation,[[9]](#footnote-9) would lose all plausibility. But the missing material is not hard to come by, and its attribution to the agent does not seem forced at all. In particular, the agent him- or herself will not only offer up the missing material under appropriate Socratic questioning from others; under conditions of deliberation, where the agent considers the question of what his or her own reasons for belief or action were, the agent will endorse the missing premises and rules of inference as the very ones which played a role in deliberation. And this lends an air of plausibility to the attribution to the agent of a process of inference which tracks the argument-sketches augmented in this way.

We have already seen one reason for thinking that this strategy misunderstands the psychological processes by which beliefs and decisions are produced under conditions of deliberation. The fact that young children and non-human animals arrive at the same perceptual beliefs as more sophisticated agents shows that, at least in the case of those unsophisticated believers, the needed additional premises cannot have been playing a role in their belief acquisition. And this, in turn, suggests that it is implausible to think that, even in sophisticated adult humans, the sophisticated content which they are privy to is actually playing a role in their belief acquisition. While they do, indeed, believe the claims which would constitute the missing premises of a good argument for their beliefs, the belief in these sophisticated claims is epiphenomenal with respect to their belief acquisition. And this is so even if these believers think otherwise.

It is important to see, however, that this is a special case of a much more general phenomenon. It has long been understood that we do not have direct cognitive access to psychological processes.[[10]](#footnote-10) When we stop to introspect, when we think about the processes by which we arrived at some belief or some decision, we have the very powerful impression that we have some sort of direct knowledge of our own psychological processes. Such an impression is especially powerful in the case of deliberation, where it seems we can just tell that the goings-on we are so vividly aware of in the deliberative process are effective in guiding and producing our beliefs and actions. What is actually going on, however, is sub-conscious inference. We are reconstructing what our inferential process must have been, and the result of this inferential process of reconstruction is then delivered into consciousness as if we were directly aware of the very process which we have attempted to reconstruct.

The evidence for this process of reconstruction is most clear when we examine cases of confabulation. Our beliefs are influenced by a large variety of non-rational factors. Our judgments about the quality of consumer goods laid out upon a table are influenced by the order in which they are placed; we show a pronounced preference for the right-most object.[[11]](#footnote-11) We are susceptible to priming effects so that, for example, our judgments about the motives and character of strangers can be manipulated by exposure to reading material which includes such words as ‘rude’ or ‘polite.’[[12]](#footnote-12) The evaluation of abstracts of scientific papers is influenced by the font in which the abstract is typeset.[[13]](#footnote-13) Moral judgments may be influenced by the smell of the room in which the judgment is elicited.[[14]](#footnote-14) Mere knowledge of the stereotypes of various racial and ethnic groups may influence our judgments, even when we believe the stereotypes to be inaccurate.[[15]](#footnote-15) There is, indeed, an enormous range of non-rational factors which influence our judgments on all manner of topics.[[16]](#footnote-16) What is common to these influences, however, is not only that we are unaware of the fact that they play a role in the beliefs and decisions at which we arrive. In situations where these non-rational factors play a decisive role in influencing our judgments, we sincerely believe that we can tell directly by introspection how we arrived at our beliefs and decisions, and the accounts which subjects offer in these situations portray the subjects as responding exclusively to rational considerations. In a word, we confabulate. We are under an illusion that we can directly introspect the source of our judgments, and the manner in which we arrive at our view of these psychological processes assures that the judgment we reach about them will be that they were rational. The portrait which self-conscious reflection paints of the psychological processes involved in producing our beliefs and decisions is a portrait of an impressively rational agent, whether the judgments we are reflecting upon were arrived at in a rational manner or not. Reflection portrays us as rational, not because it is in direct cognitive contact with the processes by which our judgments are produced, but rather because it operates in such a manner as to assure that, however our judgments were produced, we will view them as the product of rational factors.

I am not suggesting that we are not ever, or that we are rarely, rational. That introspection portrays us on some occasion as rational, however, is no evidence whatever that we are. I have no doubt that our decisions and beliefs are often rational. The various non-rational factors to which our judgments are susceptible may often play a fairly limited role, even if, on occasion, they are the main causal factors in producing our judgments. But the manner in which introspection portrays the source of our judgments need not reflect the actual source of those judgments, even on those occasions when our judgments are, in fact, rational. That introspection portrays the source of our judgments as residing in argumentation which meets certain logical standards is not evidence that the manner in which our judgments are formed tracks the logical argumentation which introspection so vividly presents to us. Because our introspective judgments about the sources of our beliefs and decisions are due to confabulation, we need to look elsewhere to understand how it is that our judgments are actually produced.

V

There are a number of very different accounts available of the large-scale architecture of the mind. How we should think about the nature of rationality will depend, I believe, on which of these accounts is correct. In order to illustrate this claim, I will very briefly examine three such accounts here.

Let me begin by looking at the picture of cognition offered by Jerry Fodor. According to Fodor, mental content is represented in a language of thought.[[17]](#footnote-17) Thought is linguistically structured, and our cognitive architecture builds in various inferential principles which generate new mental contents by way of a responsiveness to the syntactic structure of existing mental contents together with new input.

 There are, of course, a great many ways in which this picture may be filled out, and Fodor, of course, has a great deal more to say about it. But it is worth pointing out that if something like this should be correct, it could well be that the identification of inferential justification with the availability of good argument can be defended in rich psychological detail.

 Lance Rips has argued, in *The Psychology of Proof*,[[18]](#footnote-18) that the rudiments of a deductive logic may be built in to our cognitive architecture, and just such a claim would be needed to fill out the Fodorian picture. More than this is needed, of course. Some sort of inductive logic is required as well, and I think it’s safe to say that no one knows just what such inductive principles might look like. But if the Fodorian picture should prove correct, we can expect that inductive principles are built into our cognitive architecture too.

And now we have what is needed for the proposed identification of inferentially justified belief with belief based on good argument. I will assume—conveniently, I might add—that the principles built into our cognitive architecture are ones which are plausibly viewed as principles of good inference. Fodor’s suggestion, that our minds are, in effect, syntactically driven machines, is certainly not plausibly combined with the view that, say, affirming the consequent is hard-wired into our cognitive architecture.

Now it’s not as if those epistemologists who have endorsed the traditional view of inferentially justified belief, and of rationality, have typically signed on to Fodor’s view of mental representation and mental architecture. On the whole, they have not committed themselves to any particular view about human psychology. But I believe that they should. Some picture such as this is needed, I believe, in order to fund the traditional view of rational belief, and I believe that those who favor this traditional epistemological view should welcome the thought that there could be empirical confirmation for their position.

 Of course, the Fodorian view is not without its problems. Indeed, while Fodor shows how modular input systems may be beautifully explained by the language of thought hypothesis, he has far less to say about central systems, which is where belief fixation occurs. Actually, it is worse than this. Fodor argues that central systems must have certain properties—they must be Quinean and isotropic—and such properties fall victim to Fodor’s First Law of the Nonexistence of Cognitive Science: “the more global (e.g., the more isotropic) a cognitive process is, the less anybody understands it.”[[19]](#footnote-19) Fodor thinks, indeed, that we really know nothing at all about central systems, and thus, nothing at all about belief fixation. So, at least at present, the empirical support for the traditional view about inferential justification and rationality is nothing more than a fond hope.

 I actually think that things are worse than this. The global features which Fodor assumes must inevitably characterize central systems are ones which seem to raise problems of computational complexity. There could not be a computational device which has the properties Fodor assigns to central systems.[[20]](#footnote-20) But I won’t stop to argue for this here. Let me leave it as a mere possibility. Even on Fodor’s own sense of the prospects for his account, we are very far from being in a position to endorse it.

 At the opposite extreme from Fodor’s account of cognitive architecture, we find connectionist views, the modern-day descendant of Hume’s view that all of cognition can be explained in terms of association. On one way of thinking about this view, there is no such thing as inferentially justified belief because there is no such thing as inference. Much philosophical work on inference actually begins with the assumption that inference is different in kind from association, and if we simply build this in to our view of inference, eliminationism about inference follows straightforwardly from the connectionist approach. But one needn’t have such a narrow view of inferential processes. One might instead think that the right way to understand this view—or at least, one acceptable way to understand it—is that, if it is right, then inference turns out to be quite different than we thought it was.

 The connectionist picture not only forces a radical rethinking of inference. It forces, as well, a rethinking of the nature of rationality. Rational belief and action cannot be the product of psychological processes which track valid deductive arguments or good non-deductive arguments, for belief and action are not brought about by processes which track argumentation of any sort. Of course, the connectionist picture does not fit at all well with the way in which belief acquisition and decision are portrayed under conditions of deliberation. But this is not news to connectionists. For all of the reasons discussed above, we should not see the ways in which we seem to acquire beliefs and make decisions as viewed from the first-person perspective as carrying any real weight in psychological theorizing.

 Connectionist views are not without their problems. They seem incapable of accounting for various systematic features of thought. But given the problems with available alternative views, and given the many mental phenomena which connectionist views do neatly account for, it would, as I see it, be premature to count them out.

 Let me briefly mention one final view of cognition: Philip Johnson-Laird’s mental models approach.[[21]](#footnote-21) Johnson-Laird’s view imparts a good deal more structure to cognition than do connectionist models, without imposing the kind of linguistic structure provided by a language of thought. It provides a conception of inference—if this is the right way to conceive of mental transitions on such a view—which does not leave room for the traditional view of inferentially justified belief as a matter of argument structure. One might combine the mental models approach with a reliabilist view of rational belief, or one might, instead, seek to characterize good-making features of certain models in some other terms. It is safe to say, however, that an account of rationality which fits with Johnson-Laird’s picture of mental models will not answer to any traditional view about argument structure.

 None of these views is so well supported by current evidence that we can confidently assert that this is the way in which inference, and rationality, should be understood. But that is my point. The discussion of the nature of rationality cannot be pushed forward without a deeper understanding of the architecture of thought. There is a commonsense view of what rational belief and decision must answer to, and this view fits well with the picture of belief and action which the first-person perspective on deliberation presents to us. No doubt, this has a great deal to do with the appeal of the view. But even if we do not have a well-confirmed picture of the large-scale structure of the mind, we know enough now not to be taken in by the way that the first-person perspective presents our thinking to the reflective agent. And this means that we must take seriously the possibility that rational belief and rational action may have a very different etiology, and a very different nature, than they seem to have when we reflect.

VI

 What goes on in us when we deliberate seems fundamentally different in kind from what goes on in us when we form beliefs unreflectively. As I remarked at the beginning of this chapter, there is a way in which we often describe what goes on when we form beliefs without the benefit of reflection. We say, “My mind was elsewhere,” if our attention is focused on one thing—say, a choice of what to teach next semester—when we are unreflectively picking up information about another—perhaps the path across campus that will safely take us where we want to go. Of course, unreflective belief and decision cannot be literally mindless. The mind is engaged in sophisticated information processing even when our attention is focused on other things. But now the question arises as to whether the mental processes involved under these two conditions are genuinely different in kind. Should we see self-conscious deliberation as the home of rationality, the situation in which our rational nature is most fully manifest, or is our rationality no less present when our attention is elsewhere, and no less fully manifest when our attention is lacking?

 I have argued that the picture of our own cognitive processing which is presented to us when we deliberate is deeply misleading, both in what it leaves out, and what it includes. We cannot responsibly base an account of our mental processing on the way in which it appears from the first-person point of view. Once we see this, we need to think long and hard about cognitive architecture and the manner in which it constrains a theory of inference, and a theory of rationality as well. The claim that our rational nature should be identified with features of self-conscious deliberation—indeed, with the way in which self-conscious deliberation appears from the first-person point of view—places bets on the outcome of future research which are, at best, premature.

1. *Judgment and Agency*, Oxford University Press, 2015, 51. [↑](#footnote-ref-1)
2. “Inference, Agency and Responsibility,” in M. Balcerak Jackson and B. Balcerak Jackson, eds., *Reasoning: New Essays on Theoretical and Practical Thinking*, Oxford University Press, forthcoming. [↑](#footnote-ref-2)
3. “Reasoning and Reflection: A Reply to Kornblith,” *Analysis*, 76(2016), 50. [↑](#footnote-ref-3)
4. “Reason and the First Person,” in Crispin Wright, Barry Smith, and Cynthia Macdonald, eds., *Knowing One’s Own Mind: Essays on Self-Knowledge*, Oxford University Press, 1998, 262. [↑](#footnote-ref-4)
5. Similar themes are sounded in Robert Brandom, *Making It Explicit: Reasoning, Representing, and Discursive Commitment*, Harvard University Press, 1994; John Haugeland, *Having Thought: Essays in the Metaphysics of Mind*, Harvard University Press, 1998; Christine Korsgaard, *The Sources of Normativity*, Cambridge University Press, 1996; Eric Marcus, *Rational Causation*, Harvard University Press, 2012; John McDowell, *Mind and World*, Harvard University Press, 1994; Declan Smithies, *The Epistemic Role of Consciousness,* Oxford University Press, 2019; and Michael Williams, *Problems of Knowledge: A Critical Introduction to Epistemology*, Oxford University Press, 2001. [↑](#footnote-ref-5)
6. *Thought*, Princeton University Press, 1973, 174. [↑](#footnote-ref-6)
7. In addition to the papers by Boghossian cited above in notes 2 and 3, see especially “Blind Reasoning,” reprinted in his *Content and Justification: Philosophical Papers*, Oxford University Press, 2008, 267-287; “Inference and Insight,” *Philosophy and Phenomenological Research*, 63(2001), 633-640; and “What is Inference?,” *Philosophical Studies*, 169(2014), 1-18. [↑](#footnote-ref-7)
8. Compare the role of Socratic questioning in revealing what it is that justifies our beliefs in Roderick Chisholm’s work. See *Theory of Knowledge*, first edition, Prentice-Hall, 1966, 24-27; and second edition, 1977, 16-18. [↑](#footnote-ref-8)
9. I have examined the attempt to explain justification in terms of good argument in “Beyond Foundationalism and the Coherence Theory,” *Journal of Philosophy*, 77(1980), 597-612, and in Chapter 9 above. See also Anna-Sara Malmgren, “Availability, Goodness, and Argument Structure,” manuscript. [↑](#footnote-ref-9)
10. See, for example, Richard Nisbett and Timothy Wilson, “Telling More than We Can Know: Verbal Reports on Mental Processes,” *Psychological Review*, 84(1977), 231-259; Shelley Taylor, *Positive Illusions: Self-deception and the Healthy Mind*, Basic Books, 1989; Alison Gopnik, “How We Know our Minds: the Illusion of First-Person Knowledge of Intentionality,” *Behavioral and Brain Sciences*, 16(1993), 1-15 and 90-101; Timothy Wilson, *Strangers to Ourselves: Discovering the Adaptive Unconscious*, Harvard University Press, 2002; Peter Carruthers, *The Opacity of Mind: An Integrative Theory of Self-Knowledge*, Oxford University Press, 2011; David Dunning, *Self-Insight: Roadblocks and Detours on the Path to Knowing Thyself: Essays in Social Psychology*, Psychology Press, 2012; Joëlle Proust, *The Philosophy of Metacognition: Mental Agency and Self-Awareness*, Oxford University Press, 2013; Quassim Cassam, *Self-Knowledge for Humans*, Oxford University Press, 2014; Hugo Mercier and Dan Sperber, *The Enigma of Reason*, Harvard university Press, 2017. [↑](#footnote-ref-10)
11. Nisbett and Wilson, *Ibid.* [↑](#footnote-ref-11)
12. J. A. Bargh, M. Chen, and L. Burrows, Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action,” *Journal of Personality and Social Psychology*, 71(1996), 230-244. [↑](#footnote-ref-12)
13. Kai Kaspar, Thea Wehlitz, Sara von Knobelsdorff, Tim Wulf, and Marie Antoinette Oktavie von Saldern, “A Matter of Font Type: The Effect of Serifs on the Evaluation of Scientific Abstracts,” *International Journal of Psychology*, 50(2015), 372-378. [↑](#footnote-ref-13)
14. Simone Schnall, Jonathan Haidt, Gerald L. Clore, and Alexander H. Jordan, “Disgust as Embodied Moral Judgment,” *Personality and Social Psychology Bulletin*, 34(2008), 1096-1109. [↑](#footnote-ref-14)
15. For an extensive review of the literature on this subject, see the papers collected in Michael Brownstein and Jennifer Saul, eds., *Implicit Bias and Philosophy*, vol. 1: *Metaphysics and Epistemology*, Oxford University Press, 2016. [↑](#footnote-ref-15)
16. For an illuminating discussion of this issue, see Ziva Kunda, *Social Cognition: Making Sense of People*, MIT Press, 1999, Chapter 7. [↑](#footnote-ref-16)
17. *The Language of Thought*, Thomas Y. Crowell Company, 1975*; The Modularity of Mind*, MIT Press, 1983; *LOT 2: The Language of Thought Revisited*, Oxford University Press, 2008. [↑](#footnote-ref-17)
18. *The Psychology of Proof: Deductive Reasoning in Human* Thinking, MIT Press, 1994. [↑](#footnote-ref-18)
19. *The Modularity of Mind*, 107. [↑](#footnote-ref-19)
20. For discussion, see Christopher Cherniak, *Minimal Rationality*, MIT Press, 1986, Chapter 4. [↑](#footnote-ref-20)
21. *Mental Models*, Harvard University Press, 1983. [↑](#footnote-ref-21)