

Summary

In this book I investigate free will skepticism based on neuroscientific and psychological experiments. Neuroscientific experiments seem to show that, even if we feel we freely choose what to do, in fact the conscious intention ‘bubbles up’ from our brains and we only become aware of a decision that has already been made (e.g., Haggard & Eimer, 1999; Libet, 1985; Soon et al., 2008). The suggestion is that every time we seemingly freely act, the conscious intention is too late to play a causal role. Furthermore, psychological research seems to show that conscious states and processes play a much less prominent role in what we do than we might have expected (for an overview see, e.g., Bargh & Chartrand, 1999; Bargh & Ferguson, 2000; Caruso, 2012; Custers & Aarts, 2010; Dijksterhuis & Aarts, 2010). For example, priming with an elderly stereotype can make us walk slower, and our implicit bias that males are better police chiefs than females influences our decision to choose one candidate over another without being aware of it.

The findings suggest that what we do is more often than we might have thought the result of external triggers that activate unconscious states, for example stereotypes, and processes that directly cause us to do things, without conscious states and processes mediating or us being aware of these influences.

Although many definitions of free will have been defended in the abundant philosophical literature on the topic, one aspect of free will that is taken to be important by many is that free will is about actions and decisions being in some sense up to me. It has to be my decision to walk slower or to choose a certain candidate for it to be a free decision. If free will in fact is about what I do and decide being up to me, it seems that conscious processes have to play an important role. However, if it is really true that conscious processes play no causal role at all or hardly do, this suggests that what we do is never or much less often than we thought up to us, and free will does not exist or is much more limited than we might have expected. Furthermore, what makes these findings even more disturbing is that we often seem to experience that we have freely decided what to do. Therefore, these findings also seem to show that the perspective of the acting agent is unreliable. We feel that we freely decide and consciously intend what to do and that this has an influence on what we end up doing. But if these experiments really show that this is not the case, our experience of consciously deciding and acting is not in line with how our behavior actually comes about. Hence, this experience is an illusion.

In order to find out whether this conclusion follows, it is important to assess in what way

these experiments are exactly threatening to free will. My approach is to first exclude a couple of interpretations. First, even though some researchers interpret it that way, these experiments do not show that determinism is true. Second, we should not take these experiments to threaten free will because they might show that conscious states are not uncaused causes of what we do. Not being influenced by any factor does not amount to free will either; why would me deciding to move to Japan without taking any reason into account count as my decision? Then, in what way should conscious processes or states contribute to what we do and decide for us to act freely? Also here two interpretations can be rejected. Even though we might not always consciously deliberate before we act, and we are not aware of all the factors that contribute to what we exactly do, that does not mean that we do not have free will. Often, I already made up my mind about what to do, for example to go for a run at 10 every Saturday morning, but that does not mean that I am not free in doing so. Also, the fact that the smell of coffee influences me to call my parents at 11.34 sharp does not mean that I do not freely call my parents. Conscious deliberation or being aware of all the factors that influence what you do cannot be necessary for free will.

Rather, I conclude that these experiments are threatening because they might show that conscious intentions do not, or less often than we might think, cause what we do. If that is true, the conclusion is that we do not or only rarely act intentionally, since according to the causal theory of action that many philosophers adhere to, an intention should cause our bodily movements for them to count as intentional action. Furthermore, many philosophers think that intentional action is necessary for free will. Then, it follows that these experiments might show that we do not, or hardly ever, act intentionally and therefore that free will does not exist or is severely limited. On the basis of this, in the remainder of the book I aim to answer two questions:

- (1) Are causally efficacious conscious intentions necessary for intentional action?
- (2) Do neuroscientific and psychological experiments show that explanations of what we do in terms of (a) unconscious neural processes, or (b) external triggers and unconscious states and processes replace explanations in terms of conscious intentions?

In chapter 2 and 3 of this book I focus on question 1, whether intentional action depends on causally efficacious conscious intentions, and my conclusion is that it does. In chapter 2 I first examine whether we can make sense of intentional action without (a causal role of) intentions. I assess an alternative action theory, Frankfurt's (1978) guidance theory, according to which whether an agent acts intentionally does not depend on an actual causal relationship between the agent, or the intention the agent has, and the bodily movements (see Di Nucci, 2008, 2011, 2013; Pollard, 2006; Zhu, 2004 for a recent defense of this approach to intentional action). I first address Di Nucci's version of the theory, the guidance without intentions theory. I argue that without a role for intentions the theory fails to make the right distinctions between intentional actions, unintentional actions, and behavior. Furthermore, it is unclear how agents can come to know about what they are intentionally doing without having an intention in doing so, while this knowledge does play a crucial role in the theory.

Because of this, I address a version of the theory that does allow for the agent to have an intention that is not necessarily causally efficacious. However, I argue that no convincing examples have been given by proponents of the guidance view of a case of intentional action in which an agent has an intention that is not causally efficacious. I conclude that intentional action depends on causally efficacious intentions.

In chapter 3 I examine whether this occurrent intention that triggers, guides, and sustains the intentional action necessarily is a conscious intention. Neuroscientific and psychological experiments leave open the possibility that subjects act intentionally, because what they do might be caused by an unconscious intention. Most researchers take intentional action and intentions to be conscious by definition, and even though their research shows that unconscious processes are smart, flexible, and automatically controlled (e.g., Bargh & Ferguson, 2000, p. 939), they do not conclude that these unconscious processes might involve unconscious intentions and that agents might still act intentionally and freely. Conversely, Marcel (2003) and Mele (2009) propose that intentions might do the same causal work without the agent being conscious of them. However, I argue that this proposal is not convincing, and claim instead that those intentions that trigger, guide, and sustain intentional actions are best conceived as conscious intentions. I give two reasons for this. First, this would mean that we have to accept that agents can act intentionally without being conscious of what they are doing. This goes against the common conception that intentional actions are things agents are committed to doing. Second, it means that sometimes no one is in a position to determine which accurate descriptions of what the agent does are also correct descriptions of what she does intentionally. I provide alternative explanations for the examples of unconscious occurrent intentions that Marcel and Mele give on the basis of Papineau's (2015) understanding of basic action. I argue that either agents consciously intend to perform this specific action, or they consciously intend to perform an action on a higher level of description, but that this depends on the situation and the skills of the agent.

This means that in the remainder of the book I have to assess what exactly can be concluded from the neuroscientific and psychological experiments about the causal role of conscious intentions and intentional action. This brings me to question 2: Do neuroscientific and psychological experiments show that explanations of what we do in terms of (a) unconscious neural processes, or (b) external triggers and unconscious states and processes replace explanations in terms of conscious intentions? If intentional action depends on causally efficacious conscious intentions, the suggestion is that we might feel that we act intentionally, but in fact there is a different explanation of what we do. I will take up this question in chapters 4 to 6.

In chapter 4 I assess what precisely happens in Libet-style experiments and why it is concluded from these experiments that the brain 'decides' instead of the conscious agent. I specifically focus on experiments investigating the so-called free won't and argue that definitions and operationalizations of voluntariness and freedom play an important and problematic role in the conclusion that is drawn on the basis of these experiments. The

experiments are designed in such a way that the conclusion that the brain ‘decides’ is almost unavoidable, because potential reasons to act on are excluded from the experimental setting. I conclude that, for neuroscientific experiments to provide a valuable contribution to the debate on free will, researchers should at least acknowledge that intentional action and acting for reasons are central to free will. This means that the conclusion that is drawn from these experiments, that unconscious neural processes cause what subjects do, should be rejected.

Given that the conclusion that what subjects do is caused by unconscious neural processes is based on problematic experiments, an interesting question is whether these experiments might still allow for the conclusion that what we do is caused by conscious intentions. I take up this issue in chapter 5. The skeptical line of argument on the basis of Libet-style experiments that I will address consists of the following three claims: (a) Libet-style experiments show that the conscious intentions that are the object of study are not the causes of what agents do, (b) what agents do is only free if it is caused by a conscious intention, and (c) the results of Libet-style experiments can be generalized to all conscious intentions. In chapter 5 I argue that the common response to claim (c), pointing out the distinction between proximal and distal intentions, does not capture the distinction that is crucial, which is the one between passively acquired and consciously formed intentions. I argue that if an intention is consciously formed, conscious processes necessarily causally contributed to what the agent does, because the intention could not have already been there in unconscious form. Intentions are only consciously formed if the agent is uncertain about what to do and has to make up her mind, i.e., to integrate information in order to arrive at a decision. I show that these conditions are not met in Libet-style experiments. On the basis of my analysis I argue that not only claim (c) but also claim (a) should be discarded, because otherwise we end up with the problematic conclusion that only if we have to make up our minds about what to do, and consciously form an intention, we act intentionally. Rather, it makes more sense to conclude that passively acquired conscious intentions are causally efficacious as well. The experiments do not show that the agent’s experience that conscious intentions are causally efficacious is illusory.

Finally, in chapter 6 I focus on the psychological research from which it is concluded that causal explanations of what we do in terms of external triggers and unconscious states and processes replace explanations in terms of conscious intentions, and that because of that we lack conscious control. I discuss three prominent experiments on priming and implicit bias to see whether this conclusion follows, and I argue that it does not. I show that often the findings in these experiments do not exclude the possibility that agents act intentionally as well. Furthermore, I conclude that ‘lack of conscious control’ is not an interesting notion if not understood in relation to intentions, values, and principles an agent has. I suggest that in every situation in which we intentionally act there are also a lot of accurate descriptions under which we lack this kind of conscious control, but often this lack of control is simply irrelevant. I conclude that there is no reason to think that these experiments show that explanations of what we do in terms of conscious intentions are replaced. In line with our experience as acting agents, there is good reason to think that our conscious intentions often cause what we do.

On the basis of my analysis I conclude (1) that causally efficacious conscious intentions are necessary for intentional action, and (2) that neuroscientific and psychological experiments do not show that explanations of what we do in terms of (a) unconscious neural processes, or (b) external triggers and unconscious states and processes replace explanations in terms of conscious intentions. We should not conclude from these studies that what we do merely happens to us. Because of this, the experiments do not give us reason to think that our experience as acting agents is unreliable, and that free will is an illusion. In the epilogue I say more about the role of science, philosophy, and the perspective of the agent in understanding intentional action and free will. I suggest that science can contribute to our knowledge of intentional action and free will, but that, in order to conduct sound experiments and ask valuable research questions, what intentional actions are and what free will is needs to be established first. My suggestion is that in order to achieve this, philosophy and the perspective of the agent should play an important role.