



Does illusionism imply skepticism of animal consciousness?

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Abstract

Illusionism about consciousness entails that phenomenal consciousness doesn't exist. The distribution question concerns the distribution of consciousness in the animal kingdom. Skepticism of animal consciousness is the view that few or no kinds of animals possess consciousness. Thus, illusionism seems to imply a skeptical view on the distribution question. However, I argue that illusionism and skepticism of animal consciousness are actually orthogonal to each other. If illusionism is true, then phenomenal consciousness does not ground intrinsic value so that the non-existence of phenomenal consciousness would not have ethical implications. In this case, the adequate reaction is to reformulate the distribution question in terms of the quasi-phenomenal functional features associated with the illusion of phenomenal consciousness which do ground intrinsic value. Hence, either illusionism is false or the distribution question does not concern phenomenal consciousness. In any case, illusionism does not directly tell us anything about the distribution question. However, since illusionism forces us to revise our traditional conception of consciousness, it indirectly affects research on animal consciousness by questioning that consciousness is a unified and an all-or-nothing property.

Keywords Illusionism · Phenomenal consciousness · Animal consciousness · Intrinsic value · Functionalism

1 Introduction

The following question is at the heart of the debate on animal consciousness: Which kinds of beings possess phenomenal consciousness? Call this the 'distribution question'. The term 'being' is supposed to be maximally inclusive. The distribution question does not just concern animals since parallel problems sometimes arise in debates of consciousness in plants (Pelizzon & Gagliano, 2015; Taiz et al., 2019), photodiodes

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(Tononi & Koch, 2015) or electrons (Goff, 2017; Strawson, 2006). A being possesses *phenomenal consciousness* iff it undergoes states which are *phenomenally conscious*. Mental states are phenomenally conscious iff they involve a subjective experiential feel like smelling coffee or seeing a red rose often do in humans. This pertains to how the state is experienced from the first-person perspective respectively “what it’s like” (Nagel, 1974) to be in such a state.

Like most questions regarding phenomenal consciousness, the issue of the distribution of consciousness in the animal kingdom is highly contested. Views range from the restriction of consciousness to humans or only language-using humans¹ (Carruthers, 1989, 1992) to attributions of consciousness to insects, all complex systems with recurrent processing or even literally every material entity, including elementary particles (Goff, 2017). Despite those huge disparities, I take it that the majority of researchers is willing to ascribe consciousness to quite a wide range of animals. For instance, the commentaries on Key’s (2016) target article indicate that a clear majority of researchers believes that (some) fish consciously experience pain. Furthermore, the majority seems open-minded about claims of consciousness in insects (Klein & Barron, 2016 and associated commentaries). In this respect, the trajectory of the science of animal consciousness parallels other branches of comparative psychology where the attribution of quite sophisticated cognitive processes and capacities to animals is commonplace nowadays.

More specifically, it seems to me the mainstream view that (at least) all mammals, most typical birds, many fish and some cephalopods (Godfrey-Smith, 2016) are conscious. Accordingly, I will treat anyone as a ‘skeptic’ who believes that this view is—at least in respect to one kind² of animal—unjustified. Thus, there is room for two kinds of skeptics. *Agnostics* hold that there are neither rational grounds to prefer the hypothesis that beings of a particular type are conscious nor that they are unconscious. This agnosticism in turn can be either *principled* such that there in principle cannot be rational arguments or evidence to favor one hypothesis over the other or it can be *temporary* and thus be expected to be removed in the long run due to the growth of scientific understanding.³ By contrast, *disbelievers* hold that the hypothesis that beings of a particular type are not conscious is rationally preferable to its counterpart.⁴

In this paper, I will engage with illusionism about consciousness as skeptical argument for disbelief of animal consciousness. In the next section, I will briefly outline the scientific and ethical motivation to tackle the distribution question. Subsequently, I will characterize the illusionist view on phenomenal consciousness. Starting in Sect. 4, the relation between illusionism and the distribution question will be analyzed. In Sect. 5,

¹ Furthermore, Dennett (1991, 1995) is sometimes interpreted along these lines.

² I tend to use vague terms like ‘kind’ or ‘type’ of animal because it is a non-trivial practical question what the appropriate unit of investigation for the empirical study of animal consciousness is. For instance, suppose we obtain conclusive evidence that bees are conscious. Nevertheless, we probably shouldn’t infer that all insects are conscious. However, it seems impractical to look for evidence of consciousness in every single species of insect separately. Some level of generality in between must be the correct unit of study and inductive inference (Birch, 2017).

³ Carruthers (2019) is an example of principled agnosticism, while Michel (2019) and Irvine (2020) seem to embrace temporary agnosticism.

⁴ Key (2016) is a disbeliever of fish consciousness.

I will argue that—despite appearances—illusionism has no immediate implications for the distribution question. In particular, it does not support skepticism of animal consciousness. Section 6 discusses more indirect ways in which illusionism is nevertheless relevant to the distribution question. Section 7 concludes.

2 The scientific and ethical stakes

Prima facie, answers to the distribution question are crucially important, both for consciousness science as well as for ethics. Let's begin with the former. The ultimate goal of consciousness science is to develop and validate a theoretical framework which satisfactorily describes the cognitive role and the neural substrate of consciousness and explains behavioral, neuroscientific and folk psychological phenomena associated with it.

Different candidates have already been proposed. The most influential contenders currently seem to be global-workspace theory and its relatives (Baars, 1988; Dehaene, 2014; Dehaene & Naccache, 2001; Prinz, 2012), higher-order theories (Lau & Rosenthal, 2011; Rosenthal, 2005), the fragile short-term memory account (Block, 2007; Lamme, 2015) and integrated-information theory (Massimini & Tononi, 2018). Yet, there are many more theories and there is internal differentiation within one family of theories.

For this discussion, it is only relevant that those theories make very different predictions regarding the distribution question. To pick the most extreme contrast: While integrated-information theory is standardly taken to have nearly panpsychist implications such that every system with complex causal feedback loops, including bacteria and photodiodes (Tononi & Koch, 2015), possesses a degree of consciousness, higher-order theories make consciousness dependent on metacognition. Hence, according to some proponents of higher-order theories (Carruthers, 1998), only humans and maybe some other primates are conscious. If different theories of consciousness entail opposing predictions regarding the distribution question, then (independently arrived at) answers to the distribution question could be used to test various theories of consciousness.

Furthermore, the distribution question is ethically significant. The basic reason is that some conscious states plausibly ground (positive or negative) intrinsic value. For a situation to possess intrinsic value means that it is good or bad in and of itself, i.e., its good- or badness is not derived from other properties. For instance, it's bad if someone is regularly haunted by excruciating pain even if this pain has no further negative effects (Kammerer, 2019, p. 899). Plausibly, this intrinsic badness stems at least partially from the negative phenomenal feel of pain.⁵ Furthermore, we tend to view consciously experienced pain as much worse than unconscious pain signals which gives us reasons to remove it (Kammerer, 2019, p. 900).

⁵ The view suggested here, according to which some conscious experiences ground intrinsic value in virtue of their phenomenal character, is consistent with the view that consciousness does not ground value independently of its specific phenomenal character, which is defended by Lee (2019). Lee argues that some conscious experiences are not intrinsically valuable, but explicitly concurs that conscious experiences like pleasure and pain are intrinsically valuable.

In general, various ethical views see consciousness as necessary condition, sufficient condition or otherwise important determinant for moral status, i.e., for beings to matter morally for their own sake (Jaworska & Tannenbaum, 2018; Kriegel, 2019; Nussbaum, 2007; Singer, 2011).⁶ Even if consciousness does not determine moral status, it plausibly influences how we should weigh the interests of different creatures. *Ceteris paribus*, conscious creatures and (some of) their conscious states matter more than unconscious ones. Thus, on almost all ethical views, the distribution question significantly influences our obligations to various kinds of animals.

3 Consciousness as an illusion

It's about time to introduce our final player into the debate: illusionism. Illusionism is an attempt to solve (or dissolve) the so-called 'problem of consciousness'. Broadly speaking, the latter consists in determining the ontological relation between phenomenal consciousness, i.e. the subjective, experiential character of being in certain mental states, and the physical world. The version of illusionism at issue, which is sometimes labelled 'strong illusionism' (Frankish, 2017, p. 17), reacts to this problem by denying the existence of phenomenal consciousness.

According to illusionism, experiences⁷ do not possess phenomenal properties, they just seem to possess them. This appearance of phenomenal consciousness is caused by some sort of introspective illusion, in which sensory states are misrepresented as having phenomenal properties. Thus, illusionism is defined by adherence to two claims:

(i) Phenomenal properties do not exist.⁸

(ii) It seems that we are phenomenally conscious, because we are subject to an introspective illusion.

(ii) might be taken to straightforwardly follow from (i), because it is very plausible that it introspectively seems as if we were phenomenally conscious.⁹ If we are in fact not phenomenally conscious, then an introspective illusion in some sense has to be involved. If phenomenal properties do not exist, then the problem of consciousness

⁶ One reason why consciousness might not be sufficient (but nevertheless necessary) for moral status is that—arguably—only valenced phenomenal states, i.e. states with an attractive or aversive quality, are normatively relevant (Shevlin, 2020, preprint). The medical condition *pain asymbolia* where experimental subjects report that they are in pain but “not bothered by it” suggests that even typically valenced states like pain can be dissociated from their negative valence (Grahek, 2001). In those cases, there seems less reason to care about these pain experiences.

⁷ I will use 'experience' from now on as a concept which picks out its referents in virtue of their functional role, not their phenomenal character. Given this usage, it is not inconsistent to speak of 'non-phenomenal experiences'.

⁸ Illusionism does allow that phenomenal properties exist as universals. However, it denies that those universals are instantiated in the actual world.

⁹ However, one might object that non-philosophers typically not even possess the concept *phenomenal consciousness*. Thus, it's disputable how they can even be subject to the illusion that we are phenomenally conscious. If the illusion only befalls philosophers, this would suggest that it is more due to theoretical background assumptions and special prompting in certain conversational contexts than unmediated introspection (Rosenthal, 2019). In any case, I am going to focus on (i), the non-existence claim, in what follows.

clearly vanishes. You do not have to explain how phenomenal consciousness and the physical world are related, or how the latter “gives rise” to the former, if phenomenal consciousness does not exist. According to illusionists, an explanation of our reports and judgements about phenomenal consciousness, including our intuition that consciousness cannot possibly be explained in physical terms, explains everything there is to explain about phenomenality (Chalmers, 2018). I will not provide further elaboration or defense of illusionism here. However, I have to clarify one frequently misunderstood aspect of the view.

Illusionism is often dismissed as absurd (Searle, 1997, pp. 120 et seq.; Strawson, 2019). How could we be mistaken about something seemingly as fundamental to our life as the existence of phenomenal consciousness? In particular, critics assert that denying the existence of phenomenal consciousness, while conceding that it appears to exist, is self-refuting. Illusionists can answer this charge.

The charge of self-refutation seems to confuse two senses of ‘appearance’ or ‘seeming’ (Schwitzgebel, 2008). The illusionist claims that it appears to us *epistemically*, i.e. we believe, that our experiences appear to us *phenomenally*, i.e. we have certain phenomenal experiences, but that our experiences do not really possess such phenomenal appearance. Since phenomenal appearance, i.e. the possession of phenomenal experiences, and epistemic appearance, i.e. the possession of beliefs, are distinct, there is no contradiction involved.

More generally, illusionists respond to the accusation of absurdity by emphasizing illusionism’s commonalities with traditional ways of thinking about human experience. While illusionists deny that experiences actually possess phenomenal properties, they note that experiences possess *quasi-phenomenal* properties where “a quasi-phenomenal property is a non-phenomenal, physical property (perhaps a complex, gerrymandered one) that introspection typically misrepresents as phenomenal” (Frankish, 2017, p. 18). Thus, the illusionist provides a different account of the nature of experiences while acknowledging their existence. Since quasi-phenomenal properties are defined purely functionally, in terms of how they are introspectively represented, experiences can be functionally understood.

Similarly, illusionists grant that we are not “zombies” like they are typically understood, i.e. creatures without an inner subjective perspective and whose existence is not like anything to them. Instead, illusionists hold that we possess a subjective inner life but that it is a mistake to describe our inner life in terms of the possession of experiences with phenomenal properties. Instead, our inner life “consists in having a form of introspective self-awareness that creates the illusion of a rich phenomenology” (Frankish, 2017, p. 27). We possess our subjective experiential outlook on the world and ourselves entirely in virtue of introspective representational mechanisms, introspectable sensory states and their cognitive, affective and motivational reactions which can be fully accounted for in functional, i.e. non-phenomenal, terms. This view is nevertheless illusionist since these introspective mechanisms represent experiences as phenomenal which are not, i.e. they misrepresent them.¹⁰

¹⁰ Given that illusionists ascribe quasi-phenomenal properties, one may ask how illusionism differs from traditional reductionism. I do not take a stand on this, since I am not sure whether there is a substantive difference between radical forms of reductionism and illusionism. I am sympathetic to the view that there is

Since the notion of a quasi-phenomenal property will occupy a central role in the main argument of this paper, I will recap its main characteristics: First, quasi-phenomenal properties are physical or functional properties which are typically mis-represented by introspection as phenomenal. Second, and relatedly, they are the properties actually tracked by the concepts we use when we intend to refer to phenomenal properties. Third, they may be heavily disjunctive, corresponding to a vast array of physical and functional features. Notably, it is possible that animals have neuro-cognitive properties which are mis-represented as phenomenal in humans without actually possessing introspective capacities themselves. That is, there is no a priori reason to view introspection as necessary for quasi-phenomenality.

Over the course of this paper, I will argue that quasi-phenomenal properties have a fourth feature: Given that illusionism is true, they ground the intrinsic value which we thought phenomenal consciousness grounds. However, I first need to make the relation between this claim and the distribution question explicit. For this purpose, I will begin next section to investigate the relation between illusionism and the distribution question.

4 Illusionism and the distribution question

The distribution question concerns the distribution of phenomenal consciousness. On the face of it, illusionism seems like the strongest conceivable skeptical position on the distribution question. It not only denies that other animals are phenomenally conscious, but also that humans are. This might be viewed as excessively radical, but it is, without question, an unambiguous claim about the distribution of phenomenal consciousness.¹¹ Since arguments for illusionism don't depend on animal research at all (while the specifics of different scientific theories of consciousness are similarly beside the point), illusionism might be thought to provide a new path to skepticism on the distribution question.

However, on second thought, one might doubt that illusionism is a proper answer to the distribution question at all. The following line of reasoning motivates doubt. We have seen that illusionists ask us to reconceptualize what our subjective perspective on the world consists in. According to illusionism, not phenomenal properties but a host of objectively describable internal causal mechanisms are responsible for the characteristic self-awareness enriching human life. This is a reason to reconceptualize the distribution question as well.

Footnote 10 continued

merely a verbal difference between the illusionist view that phenomenal consciousness does not exist and an analytic functionalist reductionism according to which all it means to be conscious is to have experiences with certain quasi-phenomenal properties. Warren (2021) seems to share the sentiment. If illusionism were to be interpreted as version of reductionism about phenomenal consciousness, then it would follow trivially that illusionism does not (by itself) tell us how phenomenal consciousness is distributed in the animal kingdom. However, my argument in this paper is independent of this interpretation of illusionism.

¹¹ That being said, one question left open by illusionism concerns the nomological possibility of artificial consciousness. Even if phenomenal properties are not instantiated in the actual world (now), it's still reasonable to ask whether artificial beings could be designed to—in contrast to humans—possess phenomenal consciousness.

One might suspect that the distribution question is properly thought about without essential reference to phenomenal consciousness. Instead, one might characterize the distribution question neutrally, i.e. in non-phenomenal terms. In this case, we could conceive of the distribution question as the question of how the type of subjective experience which in fact characterizes human life—whether it is correctly characterized in terms of phenomenal properties or a diverse array of functional mechanisms—is distributed in the animal world. Whatever experience is in humans—phenomenal or quasi-phenomenal—we can ask which non-human beings possess the same thing.

To stipulate some terminology: I will henceforth call the question that constitutes the proper target of animal consciousness science the *distribution question*. It is the question animal consciousness researchers ought to address and the question we should interpret them as addressing, insofar as we interpret their activities charitably.¹²

If phenomenal consciousness exists, the distribution question is equivalent to the *p-distribution question* which concerns the distribution of phenomenal consciousness. I will argue that—if illusionism is true—the distribution question is equivalent to the *q-distribution question* that asks which kinds of beings possess quasi-phenomenal experiences. Clearly, illusionism about phenomenal consciousness does not entail a stance on the q-distribution question. The non-existence of phenomenal consciousness leaves open how quasi-phenomenal properties are distributed.

For now, we have seen that we can consistently deny that illusionism has implications for the distribution question if we hold that—given illusionism—the distribution question equals the q-distribution question. All we need is an argument in favor of the latter claim. The task for the rest of this paper is to supply this argument. In Sect. 2, we pointed out that the significance of the distribution question partially derives from its scientific and ethical ramifications. Thus, we would expect that solving the distribution question assists us with the scientific and ethical issues which contributed to sparking our interest in the distribution question in the first place. Can the p-distribution question play this role, even if illusionism is true? If not, then this speaks in favor of reconceptualizing the distribution question as the q-distribution question (if illusionism is true).

Let's start with the scientific issue. Recall that an answer to the distribution question was supposed to help choose between competing theories of phenomenal consciousness. Illusionism purports that phenomenal consciousness doesn't exist. Thus, there is no true theory of phenomenal consciousness. Consequently, one could conclude that illusionism entails that all theories of consciousness are false—because they presuppose the existence of their explanandum—and leave it at that. However, in analogy to the treatment of the distribution question sketched above, we might also infer from illusionism that theories of phenomenal consciousness should be reconceptualized as theories of quasi-phenomenality. For even if illusionism is true, theories of consciousness still have to answer the question of what makes a state possess quasi-phenomenal properties.¹³

¹² Of course, I am not claiming that the distribution question is the only valuable research question regarding animal consciousness. Importantly, we can not just ask whether various species have (quasi-)phenomenal experiences, but also which kinds of (quasi-)phenomenal experiences they undergo.

¹³ I thank an anonymous reviewer for making this point very succinctly.

If theories of consciousness are theories of quasi-phenomenal properties, then—given illusionism—the p-distribution question does not assist our decision about which theories of consciousness are true. In the remainder of the paper, I will sideline the scientific role of the distribution question and focus on its ethical implications since the latter are more controversial and seem more important to me. Nevertheless, I expect that an argument analogous to the one I will present soon could be made in respect to the scientific function of the distribution question as well.

In the ethical case, the implications of illusionism are contested. A situation has intrinsic value iff it is non-derivatively good or bad. According to the almost uncontested mainstream view—which we described in Sect. 2—phenomenally conscious states (at least) contribute to intrinsic value. This suggests that the truth of illusionism bears implications for what has intrinsic value.

For instance, it is usually assumed that the interests of particular beings matter more if they are phenomenally conscious, i.e., that it is worse if the interests of phenomenally conscious beings are frustrated. Some think that beings need to possess consciousness to matter ethically at all. What should we infer, given those views, from illusionism? It seems we are forced to conclude that all beings and many states which we typically regard as phenomenally conscious matter less than we thought or not at all. However, it's not clear what this entails for the practical question of how we should weigh the interests of different animals. In the next section, I will argue that, properly understood, illusionism does not have any (direct) ethical implications.

Let's step back for a moment and look at the broader dialectic regarding illusionism and the distribution question. Our leading question is whether illusionism supports a skeptical view on the distribution question. To decide this, we need to figure out whether we should treat illusionism as a proper answer to the distribution question or whether it is in fact orthogonal to it. My argument will have the following structure:

- P1: The answer to the distribution question has significant ethical implications on how much to value and how to weigh the well-being of different animals. (premise).
- P2: If Illusionism is true, then the answer to the p-distribution question does not have ethical implications on how much to value and how to weigh the well-being of different animals. (premise).
- P3: If illusionism is true, then the distribution question is not the p-distribution question. (from P1 and P2).
- P4: The distribution question is either the p-distribution question or the q-distribution question. (premise).
- C: If illusionism is true, then the distribution question is the q-distribution question. (from P3 and P4)

Let's first look at the conclusion. If the distribution question equals the q-distribution question, then illusionism does not answer the distribution question. For, to repeat, illusionism is silent on how quasi-phenomenal properties are distributed. Thus, given the conclusion of this argument, illusionism cannot be used to infer a skeptical view on the distribution question.

I will postpone the argument for premises 2 and 4 to next section. By contrast, the case for the ethical significance of the distribution question, i.e. P1, has already been made above.

For conciseness, I will introduce new terms for the available positions here. The conclusion of the argument I have just presented entails that illusionism does not imply an answer to the distribution question. I will call this the *orthogonality view*. By contrast, the *sufficiency view* states that illusionism provides a satisfactory, namely a skeptical, answer to the distribution question. According to the argument above, the orthogonality view is correct because illusionism does not have the kinds of ethical implications that solutions to the distribution question have.

To summarize, I have argued that illusionism does not imply skepticism on the distribution question if we reformulate the distribution question as the q-distribution question. We should regard the distribution question as the q-distribution question, given illusionism, because the distribution question owes its interest partly to its ethical implications and because, given illusionism, the distribution of *phenomenal* consciousness does not have ethical implications. Yet, I still have to demonstrate the latter claim, i.e., that the p-distribution question does not have ethical significance, given illusionism, which forms the second premise of my argument. This is the aim of the next section. In addition, the next section will defend P4 as well.

5 Illusionism and value

To develop my case for P2, I will discuss the views on the normative consequences of illusionism which have been spelled out by Kammerer (2019). We will see that all positions considered by him seem to conflict with my argument, since they either attribute ethical implications to illusionism (in conflict with P2) or appear to conflict with attributing ethical implications to any solution to the distribution question (inconsistent with P1). While Kammerer does not address the distribution question, Kammerer connects different claims about the relation between phenomenal consciousness and value to different positions on the ethical implications of illusionism. According to him, the illusionist has three options.¹⁴

First, he can accept the *nihilist* view, i.e., the view that there is no value. He is committed to this view if he believes that intrinsic (non-derived) value is entirely grounded in phenomenal states, i.e., that no non-phenomenal properties ground intrinsic value. If no non-phenomenal properties ground intrinsic value and if phenomenal properties don't exist, there is no value. Obviously, nihilism would be a radical ethical consequence of illusionism. Second, the illusionist can adopt the *moderate* view according to which illusionism has some revisionary ethical implications which are less radical than nihilism. He is compelled to take this option if he believes that some intrinsic value is grounded in phenomenal states while some non-phenomenal states also ground intrinsic value.

¹⁴ For reasons of space, I cannot introduce and define all of Kammerer's terminology here. Therefore, my description of the views he considers will—although sufficient for our purposes here—be slightly less precise.

Third, the illusionist can choose the *conservative* view. If he holds that no intrinsic value is grounded in phenomenal consciousness, he is entitled and presumably required to believe that illusionism has no ethical implications. For if phenomenal consciousness does not contribute to the instantiation of value, the non-existence of phenomenal consciousness can't make any difference to the values which are instantiated.

Those three views seem to constitute an exhaustive partition of logical space. Value is either determined entirely, partially or not at all by phenomenal consciousness. Depending on one's choice, the nihilist, moderate or conservative view seems to follow. Yet, *prima facie*, none of those three positions is compatible with the argument I endorsed. P2 implies that illusionism does not have ethical implications for the treatment of animals, while P1 expresses that we need answers to the distribution question in part because of their ethical implications. According to nihilist and moderate views, illusionism does have significant ethical implications, contrary to P2. For instance, depending on which of the two views one chooses, it presumably follows that torture or factory farming (and other situations that are judged as bad at least partly because they involve negative phenomenal experiences) are not as bad as one usually thinks or not bad at all (Kammerer, 2019, pp. 906–907).

Yet, the conservative view seems to conflict with P1. For, on a conservative view, it seems like no answer to the distribution question can have ethical implications. If phenomenal consciousness does not ground intrinsic value, then knowledge about the distribution of phenomenal consciousness cannot help us to determine what is intrinsically valuable. But if the view that no potential answer to the distribution question has any significant implications for how to best treat different kinds of beings was accepted, we could not employ P1 in our argument for the orthogonality view. Yet, if conservative, moderate and nihilist views exhaustively partition the space of possible views on the ethical implications of illusionism and all three of them conflict either with P1 or P2, then our argument cannot be sound. What is the solution to this conundrum?

The solution consists in the recognition that phenomenal consciousness is not needed to ground any intrinsic value, if illusionism is true, because illusionism reveals that the value which we thought depends on phenomenal consciousness actually depends on quasi-phenomenal properties.¹⁵ That is, *if* illusionism is true, intrinsic value depends on (some subset of) the host of introspective representational mechanisms, introspectable sensory states and their cognitive, affective and motivational reactions which create the illusion of phenomenal consciousness.¹⁶ At the same time, if illusionism is false, we have every reason to maintain that phenomenal consciousness grounds intrinsic value. In terms of Kammerer's taxonomy, this solution can be

¹⁵ While apparently defending a weaker view than me, Levy (2014) argues—independently from considerations of illusionism—that much intrinsic value which seems to be underwritten by phenomenal consciousness is actually grounded in the functionally defined properties with which it seems to co-occur.

¹⁶ As will be explained in the next section, I do not commit to any specific view on which precise functional mechanisms are the grounds of intrinsic value. I only claim that they are (a subset of all) quasi-phenomenal properties.

framed in terms of the denial of any connection between intrinsic value and phenomenal consciousness, i.e. as a peculiar version of conservatism.¹⁷

Then, because value doesn't depend on phenomenal states (but on quasi-phenomenal states), illusionism does not have ethical implications (as required by P2). At the same time, other potential answers to the distribution question do have ethical consequences (consistent with P1). For if illusionism is false, answers to the p-distribution question do have implications for what grounds intrinsic value. If illusionism is true, we have to interpret the distribution question as the q-distribution question. Then, answers to the q-distribution question have ethical implications. This is because, on the view of the relation between consciousness and value I propose, given illusionism, quasi-phenomenal properties ground the value that we thought phenomenal consciousness grounds.

I have championed a view on the normative implications of illusionism, according to which phenomenal consciousness is not needed to ground intrinsic value since the same value is grounded by quasi-phenomenal properties (at least in case illusionism is true). Besides, I have shown that this view is consistent with my argument above for the orthogonality view, since it entails P2 and is compatible with P1. To show that this argument is sound, I will now present three arguments in favor of the conditional claim that, if illusionism is true, quasi-phenomenal states ground all the value that phenomenal states were thought to ground.¹⁸

First, Muehlhauser (2017) suggests that our intuitions about the value of experiences don't depend on a particular theoretical conception of them (as phenomenal or not), but derive from demonstrative judgements. For instance, when my foot hurts, my intuitive judgement about the pain is roughly of the form "Whatever *this* is, *this* is really bad". Consequently, I infer that *this* must be also really bad for other beings.

Since my intuitive judgements pick out the pain demonstratively, they refer to whatever pain turns out to be in the actual world. If it is a type of phenomenal experience, they imply that *this* type of phenomenal experience has negative value. If it is an illusion created by quasi-phenomenal properties, they entail that *this* type of quasi-phenomenal state has negative value. Since it is plausible that some value judgements about experienced mental states get their reference fixed demonstratively, illusionism

¹⁷ Alternatively, equally compatible with my argument for the orthogonality view, one could grant that phenomenal consciousness would ground intrinsic value if it were instantiated. While this implies that there is a connection between phenomenal consciousness and intrinsic value, one can hold that the exact same value which would be grounded in phenomenal consciousness is always grounded in functional states sustaining the illusion of consciousness. Thus, in possible worlds in which phenomenal consciousness exists, the value grounded in it always has two distinct full grounds (i.e. is overdetermined). Kammerer considers this move but rejects it because it would require "an amazing coincidence" and because he regards this supposition as "exceedingly ad hoc" (ibid., p. 906). Yet, if the distinct non-phenomenal grounds of intrinsic value are the functional states that accompany consciousness and consciousness itself, the assumption that they necessarily co-occur and ground the same value neither requires a coincidence nor is it ad hoc. If consciousness merely overdetermines the value of situations, then the truth of illusionism doesn't affect the distribution of value.

¹⁸ Importantly, this does not imply that all quasi-phenomenal states ground intrinsic value. For it is common for non-illusionists to think that not all phenomenal states ground intrinsic value (Lee, 2019). For instance, hedonists about well-being think that phenomenal experiences without valence don't ground prudential value. I will take up this point again in the next section.

implies that some of our intuitive judgements about the value of phenomenal properties actually concern quasi-phenomenal properties.

Second—and similarly—all arguments citing particular cases in favor of the claim that phenomenal states ground intrinsic value can equally be interpreted as arguments for the value of quasi-phenomenal states. For instance, in Sect. 2, we mentioned the hypothetical case of someone who is regularly haunted by excruciating pain as argument for the intrinsic value of phenomenal experiences. It is bad that he often has to be in pain, even if this pain has no other negative consequences for his life. Yet, the observation that we think of a person we imagine to be in pain as being in a negative state can equally be taken as support for the disvalue of some aspects of our quasi-phenomenal states. After all, if illusionism is true, someone who is typically described as being in pain does not have any phenomenally conscious experiences, but is in a functionally defined state which he misrepresents as phenomenal pain.

In general, if illusionism is true, whenever we see someone who is suffering or who is happy and it seems obvious to us that she is in a bad or good situation in virtue of undergoing these experiences, the value of the situation cannot derive from her phenomenal states. Instead, the only hypothesis that does not require us to revise our beliefs about the value of many such states is that quasi-phenomenal properties are the actual grounds of intrinsic value. When we look at many cases of intrinsically good or bad situations and the experiences of people within these situations, illusionism implies that—while we usually thought that phenomenal experiences will (at least partially) explain the value of those situations—only quasi-phenomenal states are available to ground intrinsic value. Thus, illusionism shows us that the intuitions and arguments we thought to support the claim that phenomenal states ground intrinsic value actually support the claim that quasi-phenomenal states ground intrinsic value. Thereby, illusionism reveals that the value we thought to depend on phenomenal consciousness is actually independent from it.

Third, if quasi-phenomenal states *cannot* ground intrinsic value, it's hard to come up with a satisfactory account of the relation between phenomenal consciousness and value which is compatible with illusionism.¹⁹ Kammerer's three options for the ethical implications of illusionism are all, though not clearly false, problematic. The nihilist view implies that there are no better or worse situations which is obviously hard to swallow. The moderate view still seems to be committed to disagreeable revisionary normative consequences. For instance, it is hard for a moderate to explain why torture and factory farming are extremely bad. Furthermore, it seems moderates are forced to deny the seemingly all-important difference in value between introspectable and reportable pain and pain which is entirely unconscious.

Finally, conservative views, when they do not assume that the value phenomenal states are thought to ground is actually grounded in quasi-phenomenal states, must deny that a situation in which someone experiences extreme pain is bad *in virtue of* the feeling of pain. According to this form of conservatism, being in pain is either not bad or the negative value of pain is not intrinsic to the (quasi-phenomenal) pain experience. The latter move entails that *this* horrible experience one introspects is

¹⁹ As Kammerer's skillful discussion demonstrates.

not the source of negative value but only brings about something else which grounds intrinsic value. Again, this seems implausible.

The last remaining option to avoid unattractive ethical commitments stemming from illusionism is of course to give up on illusionism. Since I don't intend to defend illusionism in this paper, I won't elaborate on this move. I just note that the rejection of illusionism undermines arguments for skepticism on the distribution question which are based on illusionism. Since all three other views on the normative implications of illusionism seem quite problematic, there is, if one endorses illusionism, no attractive alternative to the view that the functional states that our talk of phenomenal consciousness actually tracks, i.e., quasi-phenomenal states, ground intrinsic value.

From these three arguments, I conclude that illusionism does not have ethical implications since it reveals that the value we thought to depend on phenomenal consciousness actually depends on quasi-phenomenal states.²⁰ This (trivially) implies that, given illusionism, no answer to the p-distribution question has ethical implications since illusionism has none and, given illusionism, there is no alternative answer to the p-distribution question. This puts us into a position to see why the argument given earlier is sound. Since, given illusionism, answers to the p-distribution question do not have ethical implications (P2) while answers to the distribution question are partly sought for their ethical guidance (P1), the distribution question cannot be the p-distribution question (P3).

The claim that quasi-phenomenal properties ground intrinsic value, if illusionism is true, also explains why we have to understand the distribution question either as the p-distribution or the q-distribution question (P4). For either phenomenal states or quasi-phenomenal states ground intrinsic value, depending on whether illusionism is true, and thus either the p-distribution or the q-distribution question fulfills the normative function of the distribution question. Since there is no other candidate for this normative function, there is no other reasonable interpretation of the distribution question.

As shown earlier, based on those four premises, we can derive that illusionism implies that the distribution question is best understood as the q-distribution question. Whether illusionism is true does not tell us how quasi-phenomenal properties are distributed. It follows that the orthogonality view is true, i.e., illusionism does not imply a solution to the distribution question. For this reason, illusionism is neutral between skeptical and non-skeptical views. Therefore, illusionism doesn't threaten belief in widespread animal consciousness.²¹

²⁰ An anonymous reviewer suggested that quasi-phenomenal properties might in general be the wrong sort of properties to ground intrinsic value. Why would functional features like the broadcasting of contents ground intrinsic value? However, I don't see any argument that leads me to question this, despite the intuition to the contrary. More specifically, the preceding argument was meant to show that the intuitions and arguments which justify the claim that phenomenal consciousness grounds intrinsic value equally support the connection between quasi-phenomenality and intrinsic value, if illusionism is true.

²¹ There is a different way, which I ignore in the main text, to generate a skeptical argument from illusionism. This skeptic accepts that, given illusionism, the distribution question has to be interpreted as concerning not phenomenal properties but quasi-phenomenal properties. However, he objects that only quite sophisticated animals can be in quasi-phenomenal states because this requires introspection. Thus, a skeptical view on the distribution of quasi-phenomenality would be plausible. On one variant of this understanding of illusionism, illusionism is a sibling of HOT theory, where the higher-order thoughts always *misrepresent* the first-order

It is crucial to note that my argument does not essentially rest on commitments regarding the meanings of the terms ‘consciousness’ and ‘distribution question’. One might reject P1 by insisting that the distribution question essentially is about the distribution of *phenomenal* consciousness and thus shouldn’t be reformulated as q-distribution question, even if illusionism turns out to be true and if quasi-phenomenal properties ground intrinsic value. This stance has no force as long as one grants that the distribution question is partially relevant because it promises ethical guidance and that illusionism has no ethical implications. For the substantive question left open by illusionism can be couched in different terms. Suppose one denies that illusionism forces us to interpret the distribution question as the q-distribution question: It is nevertheless true that—given illusionism—a different mental property than phenomenal consciousness grounds intrinsic value and that there is a substantive question about the distribution of that quasi-phenomenal property. This revised distribution question needs to be investigated, at least partly for the reasons that we care about the original distribution question, and animal consciousness researchers would do so. Whether this is *really* the distribution question or not is an empty verbal issue.

6 Gradualism, pluralism and normativism about consciousness

Up until now, I have shown that illusionism does not entail a skeptical view on the distribution question. In this section, I will examine more subtle and indirect ways in which illusionism might indeed have ramifications for the distribution question. This discussion does not aim to be conclusive but is supposed to stimulate further research by pointing to some important considerations.

As I have argued, illusionism does not straightforwardly constitute an answer to the distribution question. However, illusionism may influence our reasoning on the distribution question since it changes how we think about consciousness. In particular, illusionism may shape our discussion of the distribution question by suggesting *gradualism*, *pluralism* or *normativism* about consciousness. I will define each of those claims and explain how they relate to illusionism and the distribution question in turn.

Following Tye (2021), I take gradualism to be the view that consciousness is not an all-or-nothing phenomenon, that consciousness is vague and that there are borderline cases of consciousness. Like Tye, I regard these three conditions as equivalent. According to gradualism, it is not just the case that conscious experience admits of degrees of complexity or richness, but also that there are borderline cases of the property of being (at all) conscious. Tye argues that every broadly physical phenomenon admits of borderline cases. If this is true, illusionists will surely grant that the possession of quasi-phenomenal experiences admits of degrees as well.

This admission seems plausible on independent grounds as well. Quasi-phenomenal properties in humans might consist in a plethora of cognitive, perceptual, affective,

Footnote 21 continued

representations as phenomenal. However, I don’t think that a being needs to possess introspective abilities to be in quasi-phenomenal states. Instead, it might be sufficient to be in types of affective, motivational and perceptual states that—in beings which are able to introspect—are actually misrepresented as phenomenally conscious. That being said, the relationship between introspection and the possession of quasi-phenomenal experiences deserves further examination.

motivational and attentional features. If the possession of those features is necessary to count as quasi-phenomenal, then we would expect to encounter some borderline cases when an animal has experiences which possess some but not all of those features.

Via this route, illusionism might lend support to the view that consciousness is widespread. This idea initially seemed paradoxical: If consciousness does not exist, how could it be present in many animal species? However, since we established that—given illusionism—the distribution question concerns the distribution of quasi-phenomenal properties, the appearance of a contradiction vanishes. If quasi-phenomenal properties are as diverse as suggested, then gradualism even supports a view according to which consciousness is widespread. For it is plausible that some functional features are associated with consciousness which possess very primitive, phylogenetically ancient forms. Think, for instance, about the affective reactions consciousness can elicit. Since some kinds of affective reactions are phylogenetically ancient, an illusionist who identifies consciousness with a plethora of functional features might conclude that simple forms of consciousness are phylogenetically ancient, too. Thus, illusionism can motivate a belief in degrees of consciousness where almost any animal possesses consciousness to *some* degree.

I see two ways to block this argument from illusionism and gradualism to the view that consciousness is nearly ubiquitous in the animal kingdom. First, one can reject the pluralism about consciousness that is implicit in the preceding argument. I take pluralism to be the view that consciousness is not a single uniform property but consists in a plurality of heterogeneous features. Pluralism is a natural, although not obligatory, companion of illusionism. Let me explain. Without illusionist presuppositions, the distribution question as well as controversies surrounding the relation between consciousness and value concern one single type of mental property: phenomenal consciousness. Given an illusionist stance, this unifying element is gone. The basic idea underlying the orthogonality view is that one should interpret the distribution question as the q-distribution question, that is, in terms of the property that actually distinguishes beings typically regarded as phenomenally conscious from beings that are not typically regarded as phenomenally conscious. However, this quasi-phenomenal property, which is glossed as ‘subjective inner life’, ‘illusion of consciousness’ or ‘self-awareness’ among others, is most likely not uniform. There might be a vast heterogeneous conglomerate of physical-functional properties which jointly are tracked by our notion of phenomenal consciousness.

There is plurality on several counts. For one thing, it’s debatable which of the above glosses—if any—best captures what makes us care about phenomenal consciousness. Is the q-distribution question best conceived of as addressing self-awareness, some notion of subjective inner life or something else? Moreover, many cognitive capacities, e.g. abilities to introspect and express experiences, to behave flexibly or to respond to pain, are arguably connected to any one of these notions. Finally, different cognitive capacities can differ in their fine-grained functional role, e.g. how they relate to introspection and which detailed cognitive, emotional and motivational reactions they trigger.

That being said, even illusionists should treat it as an open empirical question whether pluralism is indeed true. It may as well be the case that there is a single core mechanism—perhaps a precisely delineated mechanism of global broadcasting

or meta-cognition—which is responsible for most functional features of consciousness such that it is reasonable to identify consciousness with that mechanism. In this case, it may turn out that many animals lack this mechanism and should thus be considered not conscious. This shows that, if one rejects pluralism, gradualism is a less compelling rationale for believing in widespread consciousness.

Second, one may resist the notion that *all* functional features actually tracked by our notion of phenomenal consciousness should count as quasi-phenomenal. Instead, one may take the repudiation of phenomenal consciousness as invitation to engage in a project of conceptual engineering: We can modify our concept of quasi-phenomenality such that it is better suited to fulfill the functions implicit in the concept. This paper has discussed one of these functions: Given illusionism, quasi-phenomenal properties ground intrinsic value. For this reason, we need attributions of quasi-phenomenal properties to inform our ethical decision-making. We should understand the term (quasi-phenomenal) ‘consciousness’ to pick out those kinds of functional features of experiences which ground intrinsic value. Therefore, the ethical considerations we discussed will take center stage in the assessment of how we should constrain the use of the term ‘consciousness’. I call the claim that our notion of consciousness should be revised such that it can better perform its functions, especially its function in respect to ethical decision-making, ‘normativism’.

At the same time, our notion of consciousness is sensitive to non-normative demands as well. Crucially, it plays a role in the scientific explanation of behavior. For example, we need to explain why subjects can remember or verbally report stimuli which they perceive normally, but cannot report stimuli which are briefly presented and masked. The explanation is that the perception of masked stimuli is not quasi-phenomenally conscious. There may well be states which can serve this explanatory function but do not ground intrinsic value. For instance, experiences which do not possess a valence, i.e., which do not feel good or bad, arguably do not ground intrinsic value, yet their quasi-phenomenal properties can explain behavior.

What is called for is a diligent, critical discussion on how we best—assuming the demise of phenomenal consciousness—legislate the use of the term ‘consciousness’. The upshot of this may be that not all functional features that were tracked by our notion of phenomenal consciousness will count as (quasi-phenomenally) conscious. Some may have no or only an incidental role in science and ethics. For this reason, it may turn out that the possession of quasi-phenomenality is more demanding than other gradualists suppose such that consciousness does not need to be widespread, even if one commits to illusionism and gradualism.

To summarize, illusionism impacts our conception of consciousness in far-reaching and profound ways. This is the reason why illusionism has indirect bearing on the distribution question. First, quasi-phenomenal properties are likely not all-or-nothing which makes views according to which an extremely wide range of animals has (quasi-phenomenal) consciousness more plausible. It may also suggest that moral status is graded as well. Second, quasi-phenomenology may be pluralistic. This pluralism raises the question which of the many functional features one may associate which consciousness actually play important normative and scientific roles. When illusionism reveals that our concept of consciousness does not have a unified referent, we are free

to revise our notion of consciousness such that it can serve well in contributing to ethical decision-making and scientific explanation.

7 Conclusion

While illusionism seems to constitute an independent metaphysical argument for a skeptical view on the distribution question, illusionism and skepticism of animal consciousness are actually orthogonal to each other. If illusionism is true, then phenomenal consciousness does not ground intrinsic value. In this case, the adequate reaction is to reformulate the distribution question in terms of the functional features associated with the illusion of phenomenal consciousness which do ground intrinsic value. Illusionism does not tell us the answer to this q-distribution question, so it leaves the stage to empirical research on the distribution of consciousness. Nevertheless, illusionism may indirectly affect how we should approach investigating the distribution of consciousness.

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