

Moral Status and Consciousness

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MORAL STATUS AND CONSCIOUSNESS¹

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Abstract

There are three views on the relation between moral status and consciousness: the sentientist, the existentialist, and the fundamentalist views. The sentientist view focuses on the fact that an entity becomes sentient by virtue of being conscious. The existentialist view emphasizes the sense in which an entity becomes irreplaceable by having consciousness. The fundamentalist view focuses on the role of consciousness in grounding morally relevant cognitive abilities. This paper aims to make the detailed lines of thought underlying these three views explicit, and to point out the ethical contexts in which each view matters. Since the existentialist view has been discussed much less than the other two views, this paper also aims to clearly explicate the existentialist view.

Keywords: consciousness, moral status, robot ethics, animal ethics, disorders of consciousness.

1. Introduction

This article discusses the relation between moral status and consciousness. There are some contexts in which we have an intuition that there is

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moral status of the sort that is grounded in the possession of consciousness. One such context is animal ethics. When we consider why we should treat non-human animals as an end rather than a mere means, many of us would think that it is because such animals also have consciousness. Another context is robot ethics. When we consider why we do not have to take care of animal-like robots (such as AIBO) in the same way as we ought to of animals, some of us would think that it is because animal-like robots are not conscious. The specific context in which we most directly discuss the moral significance of consciousness is that of ethical issues over disorders of consciousness. When we consider how we should treat a patient in a permanent vegetative state, the answer would depend on whether the patient is conscious.

Although this shows that we typically think that the possession of consciousness confers some sort of moral status on its subject, it is far from clear *why* we think so. Perhaps, the reason may differ depending on the context and, accordingly, there may be different reasons to think that consciousness gives its possessor a moral status. Furthermore, it is also unclear *what sort* of moral status we think the possession of consciousness confers on its subject. The answer to this question may also change depending on the context. This lack of clarity may give rise to confusions or unnecessary conflicts in practical ethical debates. Thus, it is important to make clear why we think that the possession of consciousness leads to the possession of moral status, what sorts of moral status it is supposed to confer on its subject, and in what context each sort of moral status matters.

In this paper, I present three distinct views about the moral significance of consciousness, namely the *sentientist*, the *existentialist*, and the *fundamentalist* views. The sentientist and existentialist views address why the possession of consciousness confers a certain sort of moral status on its subject. Roughly speaking, the sentientist view focuses on the fact that an entity becomes sentient by virtue of being conscious. The existentialist view emphasizes the sense in which an entity starts to exist as being irreplaceable by having consciousness. The fundamentalist view, on the other hand, focuses on the role of consciousness in grounding morally relevant cognitive abilities. As we will see, the three views focus on distinct sorts of moral status.

This paper has two aims. The primary aim is to make the detailed line of thought underlying each view explicit, as well as identifying the ethical context in which each view matter. This enables us to avoid unnecessary confusions and conflicts in (practical) ethical debates based on misunderstandings of what the issue is. The secondary aim is to develop the existentialist view. Since the existentialist view has been much less discussed compared with the other two views, it is important to clearly characterize it as being distinct from the other views and to present potential implications of and challenges to it.

The structure of this paper is as follows: In Section 1, I clarify what I mean by consciousness and moral status. In Section 2, I discuss the sentientist view in relation to animal ethics and ethical issues over disorders of consciousness. In Section 3, I present the existentialist view as capturing a moral intuition about disorders of consciousness that is beyond the scope of the sentientist view, and make clear the implications of the view in relation to integrated information theory of consciousness and panpsychism. In Section 4, I discuss the fundamentalist view in relation to robot ethics.

2. Consciousness and Moral Status

The initial, most basic characterization of consciousness would be that it is something that we have when being awake and we lose when sleeping without dreaming. In addition to this, I emphasize two essential features of consciousness, that is, *unobservability* and *contentfulness*. Consciousness is unobservable, in the sense that we cannot observe another person's consciousness in the same way we observe environmental items. For instance, we cannot judge whether a patient in a vegetative state is conscious by directly observing the presence or absence of consciousness of the subject. Consciousness is contentful, in the sense that it can contain various phenomenal elements; for example, when we look at and bite a ripe apple, various phenomenal elements, such as redness and sweetness, are presented in our consciousness.

It is also important, for the purpose of this paper, to distinguish between phenomenal consciousness and access consciousness.³ Phenomenal consciousness is typically characterized in terms of the “what it is like” locution (Nagel 1974). At a *creature level*, phenomenal consciousness can be characterized by saying that an entity E has phenomenal consciousness if and only if there is something that it is like to be E. At a *state level*, it can be characterized by saying that a mental state M of E is phenomenally conscious if and only if there is something that it is like for E to be in M.^{4,5} In contrast, access consciousness is typically characterized in terms of the availability for use and guidance by its subject. This paper focuses exclusively on the moral implications of phenomenal consciousness.⁶ From here on, when the term “consciousness” is not qualified with “access” or some others, it means phenomenal consciousness (though I sometimes use “phenomenal consciousness” for clarity).

What I mean by moral status is a property that an entity has in virtue of which it deserves or has the right to certain kinds of treatment (Shepherd and Levy forthcoming). I will make a few clarifying remarks on the notion of moral status.

First, it is important to distinguish moral status from *moral responsibility* and *moral sensitivity*. Moral responsibility is, roughly speaking, the status of deserving praise, blame or something akin to these, for an act or omission; this is clearly distinct from moral status in the above sense. Moral sensitivity is the capacity to perceive or recognize a morally relevant feature of an act or event, such as the moral badness of harming an animal just for fun. This is also clearly distinguished from moral status. Although there are likely to be connections between consciousness and moral responsibility and sensitivity (see Shepherd and Levy forthcoming, Section 4 and 5), this paper focuses only on the relation between consciousness and moral status.

³ This distinction was presented by Block (1995).

⁴ For a more detailed characterization of phenomenal consciousness, see Siewert (2012).

⁵ For the distinction between creature consciousness and state consciousness (and how we can characterize them), see Gulick (2004, sec. 2).

⁶ While the notion of phenomenal consciousness seems to fit with unobservability, it may be disputable whether access consciousness is unobservable in the relevant sense.

Second, this paper assumes that (1) there can be differing kinds of moral status and that (2) it makes sense to say that a kind of moral status is *higher (or lower)* than another one in the sense that a higher moral status requires us to take better care of its possessor than a lower moral status. The sense of “better care” changes depending on contexts. It can mean that if an entity E_1 has higher moral status than another entity E_2 , then we ought to prioritize E_1 over E_2 in giving care; however, it can also mean that E_1 ought to be given better quality of care than E_2 . Furthermore, this paper also assumes that most human beings have the highest (full) moral status.⁷

In relation to this, I assume that a kind of moral status is determined by its *source or ground*.⁸ For instance, if one’s moral status is grounded in having sophisticated cognitive capacities and another’s moral status is grounded in having the capacity for voluntarily moving, these moral statuses differ in kind. Furthermore, I also assume that the sort of treatment that an entity deserves in virtue of having a moral status of a certain kind is (at least in part) determined by the source or ground of this kind of moral status.⁹ In addition, this paper accepts the widely held view that full moral status is grounded in the possession of

⁷ One may claim that this is controversial, emphasizing the possibility that some kind of non-human entity has higher moral status than human beings. For this issue, see Buchanan (2009).

⁸ The main reason why I introduce the “kinds” or “sorts” of moral status is to adequately capture the difference in the source or ground of moral status. This seems difficult to capture by only using the “amount” or “level” of moral status. I appreciate a referee’s suggestion to make this point clear.

⁹ The characterization of moral status that I have provided is neutral to the debate as to whether the concept of moral status is a gradient concept or a threshold concept. Let us consider moral status of the sort that is grounded in the capacity for practical reasoning. If the concept of moral status is a gradient concept, the (high-low) level of moral status of the sort correlates with the level of the capacity for practical reasoning. On this view, if a subject S_1 can engage in practical reasoning better than another subject S_2 , S_1 has higher moral status than S_2 . In contrast, if the concept of moral status is a threshold concept, the level of the capacity for practical reasoning does not make a difference to the level of moral status of the sort. On this view, there is no difference in level of moral status between S_1 and S_2 . For the practical issues relevant to this debate, see Buchanan (2009).

highly sophisticated cognitive abilities, such as “an ability to conceive of oneself as a being persisting through time, to recall one’s past, to plan and to have preferences for how one’s life goes” (Levy and Savulescu 2009, 367).¹⁰ Thus, I use the term “HSCA-based moral status” to refer to full moral status in some contexts.

I have so far clarified what I mean by consciousness and moral status. In the next section, I will discuss the sentientist view about the relation between moral status and consciousness.

3. The Sentientist View

It has been widely accepted that moral status is grounded in the possession of certain sophisticated cognitive abilities, such as the capacity for setting ends via practical reasoning or for engaging in practices of mutual accountability. There is, however, a well-known challenge to this view in the context of animal ethics. Although some non-human animals may not have such sophisticated cognitive abilities, we would feel that it is morally wrong to torture such animals for fun. This suggests that these non-human animals may have some sort of moral status. Even though such non-human animals do not have the full moral status that human beings would have by virtue of having certain sophisticated cognitive abilities, they would have lower moral status. How can we account for the moral status of such non-human animals?

One influential idea is that the moral status of non-human animals is grounded in their possession of *sentience*, namely *the capacity for suffering and pleasure* (Singer 2009)¹¹. Sebo (2015) describes the line of thought underlying this idea in an argumentative form, which is as follows: (1) if an entity is sentient, then it is in subjective motivational states. (2) If the entity is in subjective motivational states, then it is capable of being harmed (being treated in a way that conflicts with the motivational states). (3) If the entity is capable of being harmed, then

¹⁰ See also McMahan (2002). For the survey about the ground of the full moral status, see Jaworska and Tannenbaum (2013, sec. 4).

¹¹ For the general debate over the moral status of non-human animals, see Gruen (2014).

moral agents have *prima facie* moral duty not to harm it. (4) If moral agents have a *prima facie* moral duty not to harm the entity, then it has a *prima facie* moral right not to be harmed. (5) Therefore, if an entity is sentient, the entity has a *prima facie* moral right not to be harmed. Since the possession of the *prima facie* moral right not to be harmed marks the presence of moral status, we can say that non-human animals have moral status of the sort that is grounded in the possession of sentience. I call this sort of moral status the “sentience-based moral status”.

To see how sentience is related to consciousness, let us consider in what sense “suffering” and “pleasure” should be understood. Even if an entity *behaves* as if it suffers or gets pleasure, this is not enough to say that the entity suffers or gets pleasure in the sense relevant here; it is necessary for the entity to actually *experience* the suffering or pleasure. We can say that an entity suffers or gets pleasure in the relevant sense only if the entity has *intrinsically disvaluable or valuable experiences*, such as painful experiences and pleasant experiences. This indicates that the senses of “suffering” and “pleasure” should be characterized not in behavioural but experiential terms. It is here that we can see the connection between sentience and consciousness. It is clear that an entity needs to be *conscious* in order to possess the capacity for suffering and pleasure in the *experiential* sense. Simply put, the notion of sentience relevant in this context is *conscious sentience*.¹²

This consideration leads us to the view that *an entity has the sentience-based moral status by virtue of being consciously sentient*. This is what I call the sentientist view.

We can appeal to the sentientist view to explain the moral status of conscious entities that do not have sophisticated cognitive abilities. Such

¹² Levy (2014, 135) claims that “pain asymbolia seems to demonstrate that the badness of pain does not lie in its phenomenal character”. However, this does not seem to be correct. Certainly, pain asymbolia suggests that a normal pain experience consists of a “painish” part and an aversive part and that they can be disassociated. However, this does not mean that only the painish part is phenomenal and the aversive part is non-phenomenal. It seems more natural and plausible to think that a normal pain experience consists of “painish” phenomenal character and aversive phenomenal character.

conscious entities include not only most non-human animals but also human beings with disorders of consciousness, such as being in a vegetative state (VS) or minimally conscious state (MCS). According to Johnson (2016), VS and MCS are characterized as follows: a patient in VS “exhibits arousal or wakefulness and has sleep/wake cycles, but is unresponsive to stimuli, showing no behavioural evidence of conscious awareness of the self or the external world” (p. 34); while patients in MCS “exhibit inconsistent and minimal but definite, reproducible behavioral evidence of awareness” (p. 34).¹³ It is plausible to think that some (but not all) patients in VS and MCS do not have the capacities for setting ends via practical reasoning or for engaging in practices of mutual accountability. However, there is empirical evidence suggesting that some such VS and MCS patients still have conscious sentience (Antonino Naro et al. 2015; A. Naro et al. 2016; Riganello et al. 2016). As Kahane and Savulescu state, “it is [...] plausible to assume that such patients do feel pleasure and pain – that they do have experiential interests” (2009, 18). The sentientist view can explain the moral status of such patients.¹⁴

That said, it may not be the case that the sentientist view can explain the moral status of *all kinds* of conscious entities that do not have sophisticated cognitive capacities. It is important to note that there may be entities that (1) do not have sophisticated cognitive abilities and that (2) can only have a *primitive form of consciousness*,¹⁵ which *lacks* intrinsically valuable and disvaluable phenomenal elements.¹⁶ If such entities have some

¹³ For detailed discussion of the moral status of such patients, see Hawkins (2016); Johnson (2016); Laureys et al. (2005); Levy and Savulescu (2009); Shepherd (2016).

¹⁴ Although I claimed that consciousness is unobservable, it does not mean that we cannot infer the existence of certain phenomenal elements in other’s consciousness from behavioural or neural features. I appreciate a referee’s suggestion to make this point clear.

¹⁵ Hohwy and Bayne (2016) analyse the notion of form of consciousness (though they call it “mode” of consciousness).

¹⁶ Kahane and Savulescu (2009) also mention the possibility of such primitive form of consciousness in the context of discussing moral significance of consciousness. They claim: “consciousness might still be present when cognition and motivation are entirely absent or present only in minimal form. Indeed, it is doubtful that a

sort of moral status by virtue of having the primitive form of consciousness, this cannot be explained by appealing to the sentientist view.

Are there such entities in reality? It may indeed be the case that *many* patients in MCS and VS have the capacity for suffering and pleasure, and, thus, we can provide a sentience-based account of the moral status of *these* patients. However, there seems to be no empirical reason to rule out the possibility that *some* patients in VS and MCS only have the primitive form of consciousness, which lacks intrinsically valuable and disvaluable phenomenal elements.

Furthermore, a scientific theory of *phenomenal consciousness* that has recently become influential, namely the integrated information theory of consciousness (IIT), may have a significant consequence for considering entities with a primitive form of consciousness (Tononi 2008, 2015; Oizumi, Albantakis, and Tononi 2014; Tononi and Koch 2015; Tononi et al. 2016).¹⁷ IIT states that “at the fundamental level, consciousness is integrated information” (Tononi 2008, 217). Importantly, IIT implies that any system with integrated information has consciousness, whatever its size and function is. According to Tononi, who is the leading advocate of IIT,

“IIT claims that consciousness is not an all-or-none property, but is graded: [...]. Strictly speaking, then, the IIT implies that even a binary photodiode is not completely unconscious, but rather enjoys exactly 1 bit of consciousness. Moreover, the photodiode’s consciousness has a certain quality to it — the simplest possible quality — [...].” (Tononi 2008, 236)

According to IIT, therefore, even a small physical system such as a thermostat can have a primitive form of consciousness. Based on a

mental life consisting only of a bare stream of consciousness—a sequence of random and hedonically neutral sensations—could be said to involve interests of any kind” (p. 13). That said, they do not consider the positive moral significance of such a primitive form of consciousness.

¹⁷ It is explicitly stated that IIT is a theory of *phenomenal consciousness*. For instance, “IIT starts from fundamental properties of the *phenomenology* of consciousness.” (Oizumi, Albantakis, and Tononi 2014, 1, emphasis added) and “Integrated information theory starts from the essential properties of *phenomenal experience*, from which it derives the requirements for the physical substrate of consciousness” (Tononi et al. 2016, 450, emphasis added).

common-sense conception of intrinsically valuable and disvaluable experiences, using painful and pleasant ones as a paradigm case, it is plausible to think that such a primitive form of consciousness cannot contain intrinsically valuable and disvaluable phenomenal elements. If IIT is correct, it is plausible to think that there are *conscious* physical entities that cannot have intrinsically valuable and disvaluable experiences.¹⁸

Likewise, a metaphysical theory of consciousness, namely panpsychism (of a certain sort), states that microphysical entities, such as particles, have consciousness (Chalmers 2016). Even if there is a form of consciousness that such microphysical entities can have, it seems plausible to think that they cannot have intrinsically valuable and disvaluable experiences, such as pain or pleasure. Despite seeming somewhat far-fetched at face value, panpsychism has recently been regarded as a viable option in debates about the metaphysical nature of consciousness.¹⁹

This consideration shows that we should not ignore as being unrealistic the possibility that there exist conscious entities that cannot have intrinsically valuable and disvaluable experiences.²⁰ It is, thus, worth discussing the moral status of such conscious entities. This is particularly important if some patients in VS and MSC have such a primitive form of consciousness, as it is practically urgent to estimate the moral status of such patients.

How do we think about the moral status of conscious entities that cannot have intrinsically valuable and disvaluable experiences? *Some of*

¹⁸ Because IIT is a bold and ambitious theory, there are many objections to it from various perspectives (Barrett 2014; Cerullo 2015; Schwitzgebel 2015). Although I agree with the critics that IIT must be further developed in many respects, it is fair to say that IIT is one scientific (mathematical) theory of phenomenal consciousness worthy examining carefully. In addition, there is even a research project of making an artificial consciousness based on IIT (for this project, see the following website: <http://conscious-machine.org/en/>).

¹⁹ For recent debate over panpsychism, see Bruntrup and Jaskolla (2016).

²⁰ Although I claim that accepting IIT or panpsychism implies accepting some primitive form of consciousness, I do not commit myself to the reverse claim that accepting a primitive form of consciousness implies accepting IIT or panpsychism. I do not claim that we need to understand a primitive form of consciousness in terms of *either* IIT *or* panpsychism; there may be other theories of the conditions in which a primitive form of consciousness arises.

us would have an intuition that such conscious entities differ in moral status from entities that lack any form of consciousness. Put differently, some of us would have an intuition that there is a kind of (positive) moral status that is grounded in the primitive form of consciousness. (Indeed, I have such an intuition.) However, the sentientist view is not available to explain this sort of moral status.

Note that I do not want to claim that we should respect this intuition; nor do I want to claim that the majority of us has it. Rather, I want to clarify the detailed line of thought underlying this intuition. Why do some of us think that there is a kind of moral status that is grounded in the primitive form of consciousness? Why do some of us think that something that is incapable of intrinsically valuable and disvaluable experiences, such as suffering and pleasure, should be granted any kind of moral status? If they are asked to justify the intuition, what can they say? In the next section, I will address these questions and therein present the *existentialist view* about the relation between moral status and consciousness.

4. The existentialist view

Is there a kind of moral status that is grounded in the possession of a primitive form of consciousness that lacks intrinsically valuable and disvaluable phenomenal elements? My answer to this question is positive. My intuition underlying this answer is based on the *existential* import of consciousness, that is: to have consciousness is to exist in the sense of *having a point of view* (or *having an inner world*). Although I cannot further conceptually analyse the sense of having a point of view, it seems that we have an intuitive grip on this sense of existence. I call the existence in this sense the “minimal conscious existence”.

What is the *value* of minimal conscious existence? There are three positions regarding its value, namely, *positive*, *negative*, and *neutral*. The positive view states that it is intrinsically valuable to have a point of view; the negative view states that it is intrinsically disvaluable to have a

point of view; the neutral view states that it is intrinsically neither valuable nor disvaluable to have a point of view.²¹

If one takes the positive view about the value of minimal conscious existence, it opens the way for *the existentialist view* about the relation between moral status and consciousness, which can be described as follows: (1) to have consciousness is to exist in the sense of having a point of view; (2) it is intrinsically valuable to have a point of view; (3) if the minimal conscious existence of an entity is intrinsically valuable, the entity has a *prima facie* moral right *not to be eliminated*; (4) therefore, if an entity has consciousness, the entity has a *prima facie* moral right not to be eliminated. Since the possession of the *prima facie* moral right not to be eliminated marks the presence of moral status, there is a kind of moral status that is grounded in minimal conscious existence. This is what I call the existentialist view about the relation between moral status and consciousness. We can explain the moral status of conscious entities that cannot have intrinsically valuable and disvaluable experiences by appealing to the existentialist view.

Resisting the existentialist view, however, one may cast doubt on the positive view about the value of minimal conscious existence. Why should we think that it is intrinsically valuable to have a point of view? One might think that the positive view implicitly depends on the optimistic assumption that the world is valuable to live in as a conscious subject. Objecting to this assumption, one may emphasize numerous tragic events that have occurred through the world history and posit the opposed assumption that the world is disvaluable to live in as a conscious subject.²² Alternatively, one may adopt the neutral view that the minimal conscious existence has neither positive nor negative value intrinsically, claiming that the value of having an inner world is totally determined by the calculation of the positive and negative values *instantiated in* the inner world.

I cannot directly argue against the negative and neutral views about the value of minimal conscious existence. Rather, I will explicate

²¹ I owe these labels to Lee (2018).

²² For a related criticism, see Lee (2018, sec. 3).

the positive view and show that it can be motivated without relying on the optimistic assumption that the world is valuable to live in as a conscious subject.

My point is that the positive view about the value of the minimal conscious existence is based on the *irreplaceability* of conscious beings. Siewert (2014) claims that an entity's life has "an *irreplaceable personal value*" for them, only insofar as it is phenomenal (p. 214). In order to see this idea, consider a case in which you will be replaced with your duplicate, who is exactly the same as you in physical and psychological respects.²³ Even if you are painlessly destroyed and secretly replaced with the duplicate by a demon, there will be no dramatic change from the third person perspective, since your duplicate will live exactly as you do. However, there will be a dramatic change from *your* perspective. If you are destroyed and replaced, there is a sense in which you cease to exist. It seems to be the most important difference for *you* as to whether you exist or not in this sense. In the very sense, you are irreplaceable with your duplicate. In contrast, suppose that you are originally a philosophical zombie, who lacks phenomenal consciousness. In this case, even if you are destroyed and replaced with the duplicate, this does not mean that you cease to exist in the relevant sense, because you do not exist in the sense at issue *in the first place*. In this sense, your zombie twin is not irreplaceable.

Importantly, the irreplaceability cannot be explained in terms of your memory or relevant psychological capacities, since the memory and psychological capacities are shared by your duplicate and the zombie twin. Rather, the irreplaceability can only be explained in terms of the minimal conscious existence. You are irreplaceable with your duplicate *because* you have a point of view from or in which *only* you can have experiences; your zombie twin is not irreplaceable with its duplicate *because* it does not have such a point of view. This

²³ For more detailed scientific-fictional scenarios as to how such a duplicate is produced, see Dennett (1978) and Parfit (1984, 199-200).

consideration suggests that the minimal conscious existence confers irreplaceability on the subject.²⁴

This irreplaceability seems to serve to explain why it is intrinsically valuable to have a point of view. Suppose that an entity is isolated from any other (cognitively sophisticated) subjects who can potentially value the entity based on their relation to it. If the entity does not have any intrinsic value, there is nothing valuable lost by replacing the entity with its duplicate. If there is nothing valuable lost by replacing an entity with its duplicate, there is no relevant sense in which the entity is irreplaceable. Therefore, if such an isolated entity is irreplaceable in the relevant sense, the entity has an intrinsic value. Given that an isolated entity becomes irreplaceable in virtue of having a point of view, we can conclude that an entity has an intrinsic value in virtue of having a point of view. I call this intrinsic value of minimal conscious existence the “basic value of conscious existence”. Accordingly, the moral status that the existentialist view points out is grounded in the basic value of conscious existence. I call this kind of moral status the “existence-based moral status”.

If this above reasoning is correct, the positive view about the value of minimal conscious existence does not depend on the optimistic assumption that the world is valuable to live in as a conscious subject. Rather, it reflects the basic value of conscious existence. If the world is miserable, we will have more intrinsically disvaluable experiences than intrinsically valuable experiences through our whole life. This means that our conscious life is disvaluable as a whole because of the bitterness of the world. However, this does not mean that there is no intrinsic value instantiated by the minimal conscious existence itself.

There is, however, one severe challenge to the existence-based moral status. Lee (2018, sec. 5.2) suggests that if the basic value of conscious existence is *trivially small*, then it is negligible and perhaps

²⁴ I do not claim that the possession of consciousness is necessary for an entity to be irreplaceable in every morally relevant sense. For example, the importance of my watch for me would be lost if it is replaced with a duplicate, since the importance comes in part from the historical fact that the watch was given by my grandfather. Although this sense of irreplaceability would also be morally relevant, it does not depend on the possession of consciousness by the watch.

insignificant. Lee's suggestion sheds light on one fundamental worry about the existence-based moral status: Is the basic value of conscious existence high enough to explain why we ought not to eliminate an entity having a point of view? Put differently, is an entity's intrinsic value given by its being irreplaceable high enough to ground its possession of *prima facie* right not to be eliminated? If we answer this question in the negative, then the existence of the existence-based moral status must be denied. Although I have an intuition that the basic value of conscious existence is high enough, I do not see for now how I can explicate the intuition in a more convincing manner. I leave it for further research and instead I focus here on the implications of the existentialist view.

According to the existentialist view, conscious entities have the existence-based moral status, even though they do not have conscious sentience. This implies that if a patient in VS and MSC has a primitive form of consciousness, then the patient has the *prima facie* right not to be eliminated. While this consequence seems intuitively acceptable, one might worry that *the combinational view of IIT and the existentialist view* leads to an unpalatable consequence that we should radically change the ethical system of our society. If IIT is correct, numerous kinds of entities likely including insects, plants and perhaps even thermostats would have a primitive form of consciousness and thereby acquire the existence-based moral status. Assuming that IIT is correct, thus, we have *prima facie* duty not to eliminate such entities. However, our society has not been designed to take non-sentient entities into moral consideration. Does this mean that we should change our society in a way that takes into moral consideration various kinds of non-sentient entities?²⁵

The answer would be a negative one. We do not have to radically change our society even though we take seriously the existence-based moral status of non-sentient entities such as insects and plants. Human beings have not only the existence-based moral status but also the

²⁵ Although the same argument can be constructed on the basis of panpsychism, I do not discuss it. The reason is that, in order to see when and how a microphysical entity ceases to exist, we need to consider the identity condition and the persistent condition of it in the framework of quantum mechanics. This is beyond the scope of this paper.

sentience-based and HSCA-based moral statuses. Cognitively unsophisticated sentient animals have not only the existence-based moral status but also the sentience-based moral status. Hence, human beings have higher moral status than cognitively unsophisticated sentient animals, which have higher moral status than non-sentient conscious entities. Although we take seriously the existence-based moral status of various non-sentient entities, it does not change the *moral order* in our society. We can continue to justify taking advantage of non-sentient conscious entities for our well-beings.

Nevertheless, there may be a sense in which we should change our way of living. If an insect has the existence-based moral status, we are obliged not to eliminate it unless eliminating it contributes to our well-beings. If it does not matter for our interest whether we kill an insect, then the existentialist view obliges us not to kill it. This consequence of the combinational position of the existentialist view and IIT is palatable

5. The fundamentalist view

I have so far discussed the moral significance of consciousness in relation to animal ethics and ethical issues regarding patients in VS and MCS. I have also mentioned the moral implications of IIT. In this section, I discuss the moral significance of phenomenal consciousness in relation to *robot ethics*. In doing so, I will present the fundamentalist view about the relation between moral status and consciousness.

Recent developments in Artificial Intelligence and robotics have drawn much attention to ethical issues over robots. It seems to be being gradually accepted that sophisticated robots can be moral agents, and also have moral status.²⁶

“Robots are moral agents when there is a reasonable level of abstraction under which we must grant that the machine has autonomous intentions and responsibilities. If the robot can be seen as autonomous from many points of view,

²⁶ For discussion of moral status of robots (machines), see Gunkel (2012).

then the machine is a robust moral agent, possibly approaching or exceeding the moral status of human beings [emphasis added].”

Thus it is certain that if we pursue this technology, then future highly complex interactive robots will be moral agents with the corresponding rights and responsibilities, but even the modest robots of today can be seen to be moral agents of a sort under certain, but not all, levels of abstraction and *are deserving of moral consideration* [emphasis added]. (Sullins 2006, 29)

However, some of us would have an intuition that, even if a robot is as functionally sophisticated as human beings, the moral status of such a robot, if any, is or must be lower than that of human beings. Put differently, a robot cannot have full moral status no matter how functionally sophisticated it is. If they are asked to justify this moral intuition, some of them would appeal to another intuition about consciousness, that robots cannot have a *conscious mind*, even though they are functionally sophisticated. This suggests that there is supposed to be a certain connection between phenomenal consciousness and moral status in a way relevant to the moral status of robots.

In this section, I do not argue that these intuitions are correct; nor do I want to demonstrate how many or which people actually hold these intuitions. Rather, I aim at clarifying what connection between consciousness and moral status there is supposed to be in this context.

My suggestion is that the underlying idea would be that *consciousness is essential to cognition*. As I have mentioned in Section 1, it is widely accepted that full moral status is grounded in the possession of highly sophisticated cognitive abilities. If the possession of consciousness is a necessary condition for an entity to have such sophisticated cognitive abilities, then it follows that non-conscious entities cannot have full moral status. Hence, we can conclude that consciousness is essential to possessing full moral status. This is what I call the fundamentalist view.

The question to be asked is, why do (should) we think that consciousness is essential to the cognition? Siewert (2014) provides an argument for this view. He first argues that phenomenal consciousness

enables the subject to acquire perceptual knowledge and introspective knowledge (Siewert 2014, 207-211)²⁷. More importantly in this context, Siewert goes on to argue that, without phenomenal consciousness, (1) we cannot “understand words to express spatial concepts” such as “circle”, “this size” and “that location”, and, therefore, (2) without phenomenal consciousness “we cannot understand any ordinary concepts” (Siewert 2014, 213). Based on this, he concludes that “without consciousness nothing would mean anything to us, and we would, in a nontrivial sense, be literally mindless” (Siewert 2014, 214). If Siewert is correct, then consciousness is essential to cognitive mind.²⁸

His step from the claim (1) to (2) seems plausible. If we cannot understand any spatial concepts, we seem unable to understand what “dog” and “trolley” mean. It is also plausible to think that, if we cannot understand any ordinary concepts, we cannot have cognitive capacities for making a plan and engaging in practical reasoning. However, how does he justify (1)? His argument for (1) depends on the assumption that, even if a philosophical zombie looks at an object and forms demonstrative spatial concepts, such as “this shape”, about the object, the zombie cannot understand what such spatial concepts mean. However, this is controversial. Resisting this assumption, one may claim that a philosophical zombie can process visual shape information coming from the object and form a visual representation using the information, and that the zombie can understand what “this shape” means based on the visual representation.²⁹

It is important to note that this disagreement lies fundamentally in *where to start* to explain our mental cognitive capacities. Siewert starts with *his own case*; that is to say, he first tries to consider how *he himself* acquires perceptual and introspective knowledge and understandings of

²⁷ This idea is not particularly unique; Johnston (2006) endorses a similar view for perceptual knowledge, and Smithies (2012) gives a different argument for a similar view for introspective knowledge.

²⁸ This view would also be endorsed by phenomenal intentionalists. For phenomenal intentionality, see Kriegel (2013).

²⁹ Visual representation can be *unconscious*. The notion of unconscious visual representations are sometimes invoked to explain unconscious priming or blindsight phenomena in psychological literature (Breitmeyer et al. 2005; Brogaard 2011). I appreciate a referee’s suggestion to make this point clear.

various concepts. Considering this, he finds that phenomenal consciousness plays an indispensable role in these cognitive activities/achievements. From this, he draws the conclusion that phenomenal consciousness is essential to mental cognitive capacities.

In contrast, one may start with *another person's case*; that is to say, one first tries to explain how *other people* can acquire perceptual knowledge, introspective knowledge, and understanding of various concepts.³⁰ Since we cannot directly observe another person's consciousness, one would not be able to refer to phenomenal consciousness to explain their cognitive activities/achievements. Rather, one would appeal to mechanistic factors, such as neural and physiological structures and processes, to account for the cognitive activities/achievements in question. The same explanation holds for philosophical zombies, who are exactly the same as us in physical properties but lack phenomenal consciousness. From this, one may draw the conclusion that phenomenal consciousness is not essential to mental cognitive capacities.

I do not further discuss where we should start when we try to explain our cognitive capacities. What I emphasize here is, rather, that, if one starts with one's own case, Siewert's argument for the view that consciousness is essential to cognition looks plausible. Given that full moral status is grounded in the highly sophisticated cognitive abilities, his argument is counted as a case for the fundamentalist view.

The fundamentalist view implies that, if a robot does not have consciousness, it cannot have full moral status, no matter how functionally sophisticated it is. In order to answer the question of whether a robot can have full moral status, advocates of the fundamentalist view need to know whether it is possible for a robot to have consciousness. If the answer is in the affirmative, we need to ask what conditions a robot needs to satisfy to have consciousness. These questions are about theories of phenomenal consciousness. Given the fundamentalist view, moral philosophers who are working on robot ethics also need to deeply engage in philosophy of consciousness.

³⁰ In arguing that a philosophical zombie may not significantly differ from a conscious being in morally relevant features, Levy (2014) seems to take this stand.

5. Conclusion

I have discussed three views about the moral significance of consciousness, namely the sentientist, the existentialist, and the fundamentalist perspectives. The sentientist view states that an entity has a sentience-based moral status in virtue of being consciously sentient. The existentialist view states that an entity has an existence-based moral status in virtue of having a point of view. The fundamentalist view states that consciousness is essential to full moral status. These views are not mutually exclusive. While the sentientist view matters in relation to animal ethics and ethical issues over disorders of consciousness, the existentialist view matters in considering the moral status of non-sentient conscious beings, possibly including patients in VS and MCS. If IIT or panpsychism is correct, the existentialist view would have significant moral implications. The fundamentalist view matters in relation to robot ethics. (The other two views may also have some implications for robot ethics.)

I conclude my inquiry by emphasizing that there are *several* manners in which the possession of consciousness contributes to the moral status of its possessor; the manner of contribution differs depending on which kind of moral status we take up, namely, the existence-based, the sentience-based, or the HSCA-based. When mentioning the moral significance of consciousness in ethical debates, we should be aware of *what kind of moral status* we have in mind to avoid potential confusions or unnecessary conflicts.

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