

Pure Experience and Disorders of Consciousness

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Abstract (204 words):

The presence or absence of consciousness is the linchpin of taxonomy for disorders of consciousness (DOCs) as well as a focal point for end-of-life decision-making for patients with DOCs. Focus on consciousness in this latter context has been criticised for a number of reasons, including the uncertainty of the diagnostic criteria for consciousness, the irrelevance of some forms of consciousness for determining a patient's interests, and the ambiguous distinction between consciousness and unconsciousness. As a result, there have been recent suggestions that perhaps consciousness ought not to play the focal role that it does in decision-making for persons with DOCs, and that other considerations, such as patient and family values, ought to take center stage. In this paper, I take a step back and reexamine the meaning of consciousness in the DOC taxonomy. I propose that, while consciousness in DOC taxonomy is defined as "wakeful awareness," this definition, while clinically expedient, occasions ethical misunderstanding. Using resources from non-Western philosophy of mind, I argue that the form of consciousness that is ethically relevant in DOCs is intransitive, or pure. I contrast this pure experience with transitive consciousness to highlight why ethical conclusions ought not define consciousness solely as "wakeful awareness," even if clinical criteria do.

(Body of text: 5085 words)

I. Introduction

Consciousness, and mental capacities more broadly, are central to moral decisions in medicine. Informed consent is premised on decisional capacity (understanding, reasoning, and appraising options) and the determination of death is dependent on the material substrate for cognitive function, with most states utilizing a brain death definition of death (with death by cardiovascular criteria also used, where appropriate). With the centrality of consciousness has come increasing attention to the means of detecting it and its attendant capacities. Communication and interactive behavior are key in most diagnoses, although advances in neuroimaging offer additional means of assessment in the absence of external indicators (Owen et al. 2006).

The presence or absence of consciousness is used as both a moral and clinical threshold. Morally, the presence of consciousness is generally understood as conferring moral status, either intrinsically, as valuable in itself, or instrumentally, due to the relationship with interests (Kahane and Savulescu 2009). Clinically, consciousness is used to distinguish between an increasingly diverse set of disorders of consciousness (DOCs) including coma, vegetative state (VS) or unresponsive wakefulness syndrome (UWS), locked-in syndrome (LIS), the post-traumatic or acute confusional state, and the minimally conscious state (MCS) (Giacino et al. 2002; Fins et al. 2007; Giacino et al. 2014).

Where a brain-injured patient falls along this spectrum from MCS to coma and beyond is not insignificant; each step along the DOC pathway has implications for treatment and care. While DOCs are sometimes presented as a series of diagnoses that vary by degrees, with each step corresponding to a quantitative reduction in a consistent mode of consciousness, the line from MCS to coma is not necessarily linear. Rather, each diagnosis likely reflects *qualitative*

differences (perhaps within a multidimensional space; Peterson and Bayne 2017) in consciousness that affect prognosis, treatment, and care.

This diversity of consciousness in DOCs poses ontological, epistemic, and ethical challenges (Fischer and Truog 2017a). Ontologically, what *is* consciousness? Epistemically, how do we *detect* consciousness or *know* whether someone is conscious? Ethically, what does consciousness imply about how we *ought* to treat and respond to a patient? While traditionally consciousness has been understood as ontologically binary (it is present or absent) and our means of assessing consciousness epistemically has been limited to external communication or interactive behavior, fMRI and other forms of neuroimaging have introduced complexity to this picture (Owen et al. 2006; Kahane and Savulescu 2009). This complexity has important ethical implications, as our beliefs about what consciousness is and our means of detecting or measuring it will affect what treatment is available and when it is offered, withheld, or withdrawn.

Recently, David Fischer and Robert Truog have argued against using consciousness as the focal point for decision-making for patients with DOCs. Based on their observations, they conclude that consciousness, measured behaviorally, is non-binary and cannot be reliably measured. Rather, consciousness exists along a dynamic “continuum of consciousness” (Fischer and Truog 2017a: 136). They argue that, due to this uncertainty and unreliability, consciousness ought to be deemphasized in decision-making, and that observable behaviors and physiological measurements ought to be discussed alongside particular patient and family values, including the neurological outcomes that would have mattered to the patient and which prognoses would have been acceptable.

Fischer and Truog’s attention to the ontological and epistemological difficulties with consciousness is admirable, and their sensitivity to patient and family values is laudable. Yet their proposals are symptomatic of and premised on a broader issue in the literature: a blurring between the consideration of consciousness as a clinically useful, measurable phenomenon and an ethically valuable characteristic of an individual. While the ethical debate about the use of consciousness in decision-making for persons with DOCs assumes consciousness fits the clinical definition as “wakeful awareness,” this is not necessarily the meaning of consciousness that is most significant for ethical discussions.

I propose that, before consciousness is jettisoned as an unreliable, uncertain, and restrictive variable within DOCs, broader reflection on what consciousness means in these contexts and why it is valuable is required. As I explain below, the discussion on consciousness in DOCs thus far has relied on a rather narrow conception of consciousness: “wakeful awareness.” Yet there are further ways to think about consciousness that are currently not represented in the debate on the moral significance of consciousness in DOCs. Here I offer a perspective on consciousness from Japanese philosophy and Buddhist thought more broadly. This problematizes the definition of consciousness as “wakeful awareness” and provokes reflection on just what it is about consciousness that is ethically significant. While this perspective is not unique to Buddhist traditions, it has been developed, debated, and refined over centuries of individual practice and theoretical debate and thus presents a robust complement to the current biomedical model. Indeed, it is in part due to this robustness that the Buddhist study of consciousness is gaining traction within North American philosophy and cognitive science as well (Thompson 2014; Varela, Thompson, and Rosch 2017).

While the approach to consciousness presented here does not avoid all of Fischer and Truog’s concerns about the use of consciousness in making ethical decisions for and about patients with DOCs, it does introduce a way of thinking about consciousness that might advance the discussion. Further, given the religious and cultural pluralism of the United States, this

perspective may serve to make intelligible the attitudes of some patients, families, and caregivers that do not align with the current American approach to consciousness in DOCs.

Before turning to this perspective, the next sections describe the landscape of disorders of consciousness, paying special attention to how consciousness is conceptualized.

II. Disorders of Consciousness

Recognition of the clinical significance of consciousness was formalized by Jennett and Plum in 1972 with their description of the persistent vegetative state (PVS). In their paper, they observe that new methods of treatment that prolong human life in intensive care units have introduced new ways of living through injuries. They write that their interest in defining PVS is to facilitate communication about the implications of the clinical state of patients who are neither in a coma nor conscious.

In their description of the persistent vegetative state (PVS), they conceive of consciousness as “awareness,” and PVS as “wakefulness without awareness” (Jennett and Plum, 1972: 734). Wakefulness might also be described as arousal. As Joseph Fins explains, this was brought vividly to life when the mother of Karen Anne Quinlan saw her daughter’s eyes open spontaneously, but without tracking moving objects or responding to anything in the room. Karen Anne was awake, but she did not seem to be *aware* – she did not acknowledge or recognize the things around her (Quinlan cited in Fins, 2015: p. 36-37).

After the definition of PVS in 1972, the next landmark diagnostic category emerged in 1997 with the description of the minimally conscious state (MCS). MCS is defined as “a condition of severely altered consciousness in which minimal but definite behavioral evidence of self or environmental awareness is demonstrated” (Giacino et al. 2002: 350-51). The language of “self or environmental awareness” suggests a broad understanding of consciousness, and is actually taken from the American philosopher William James: “a serially, time-ordered, organized, restricted and reflective awareness of self and the environment... it is an experience of graded complexity and quantity” (James quoted in Giacino et al. 2014).

Yet the diagnostic criteria for MCS are relatively narrow. According to the 2002 definition and diagnostic criteria, one or more of the following behaviors suffice: “following simple commands; gestural or verbal yes/no responses; intelligible verbalization; purposeful behavior (e.g., appropriate smiling or crying in response to linguistic or visual content, reaching for objects accurately, or eye pursuit or sustained fixation)” (Giacino et al. 2002: 351). Thus “self or environmental awareness” reduces to behavior that has a meaning comprehensible to a clinical observer. Importantly, to be interpretable as meaningful, this behavior must be consistent (as in eye tracking) and voluntary (as in movement). That is, diagnostic criteria rely on the ability to distinguish between random or inconsistent eye opening and movement, and voluntary or spastic bodily movement. Because “the hallmark feature of MCS is response inconsistency” (Giacino et al 2014: 100), “consistency” here indicates some regularity across serial assessment.

As Jennett and Plum emphasized, the diagnostic criteria for what was then PVS was created in order to facilitate communication about a distinct clinical state and to discuss the implications of that clinical state – not necessarily to capture the ethical significance of consciousness writ large. MCS is similar: as a diagnosis, it is a “testable construct” that serves as a marker from which to “project outcomes and recommend approaches to treatment” (Giacino et al. 2014: 99). Joseph Fins has taken a stronger position, arguing that diagnoses such as PVS/UWS and MCS are critical to overcoming what he calls “neuronal segregation” and to

ensure that patients who are conscious have access to human companionship and community.¹ This is part of what he describes as consciousness as a civil right (Fins 2015:289-292). Indeed, whether a person is in UWS versus MCS is assumed to mark the line between unconsciousness and consciousness – whereas Karen Ann Quinlan was described as being awake but not aware, patients in MCS are both awake and aware. As Fins demonstrates, awareness is the component of consciousness that is thought to bear moral significance.

To be sure, the capacity for consciousness seems to be a core aspect of being human, as I discuss below. Further, the criteria for UWS and MCS may be clinically useful and play an important role in conversations about goals of care (Lewis 2017). Yet it is the equality of the two – the capacity for consciousness and clinical criteria for MCS – that ought to be called into question. Indeed, criteria for UWS and MCS have been criticized both in terms of their clinical viability (Shewmon 2004) and their functionality as an ethical threshold (Fischer and Truog 2017ab).

In the following section, I reflect on this definition of consciousness in the taxonomy of DOCs in clinical medicine, and I problematize the equation of consciousness with wakeful awareness.

III. Consciousness as a Clinical State and as an Ethical Criterion

Consciousness as “wakeful awareness” was first introduced as an expedient way to describe what appears to be a clinical state (MCS) distinct from the mere wakefulness, or arousal, of UWS. Thus the development of the term was largely practical and comparative: MCS patients are in a different clinical state than UWS patients.

In some ways, this definition of consciousness fits well with everyday experience. Consciousness as wakeful awareness represents one of the easiest ways for a human being to ascertain or confirm the consciousness of another human being. In other words, if I am trying to determine whether you are conscious (aware) of your self and the world, the means to this determination is your behavior, i.e., your physical movement or your speech. Can you communicate in a way that I can understand? Can you make physical movements that either transmit some meaning or carry out some intention? This is the sense in which neuroimaging has proved useful in the assessment of consciousness as wakeful awareness. If an individual can intentionally imagine different types of motor activities - walking through their house and playing tennis - while being imaged by an fMRI, then they fit this definition of consciousness, even if the neural connections required for physically completing this activity are no longer there. Thus we can use the fMRI as a stand-in for the physical body – as a tool to convey awareness.

This clinical measure of what is called “consciousness” makes intuitive sense and matches with specific aspects of our waking experience. Yet it does not necessarily capture what makes consciousness ethically significant. While the ethical significance of consciousness is disputed, most agree that if it is valuable, this value is either intrinsic or instrumental. If it is intrinsically valuable, then this means that the capacity for consciousness marks a being as a

¹ PVS has most recently been revised as unresponsive wakefulness syndrome (UWS) in order to avoid the pejorative connotations of “vegetative” (Laureys et al. 2010). Accordingly, I use the language of UWS in the remainder of this article.

special kind of entity, perhaps an entity with dignity or bearing certain rights.³ If instrumentally valuable, then the capacity for consciousness is valuable because it suggests an interest in favor of positive experiences of self and environment (happiness and self-fulfillment) and against negative experiences (pain and distress).³

Whether defined in terms of higher cognitive capacities (i.e., sapience) or the ability to feel pleasure or pain (i.e., sentience), different accounts of the ethical significance of consciousness agree that at its most basic level, being conscious implies having subjective experience. In other words, there is something that it is like to be you (Nagel 1974, Hardcastle 2016: 207). While sapience might exist apart from subjectivity – think of a computer – it is hard to imagine that sentience can exist without subjective experience. And, just as most people do not imbue computers with moral status but do understand sentient animals to be morally considerable, there is widespread agreement that what matters ethically is subjectivity, even if there is disagreement about which types of subjective experience matter in which ways. As Valerie Gray Hardcastle critically observes, “the idea that we should hold being conscious fundamental to imbuing a creature with inherent value... is widespread in contemporary Western society. Many people (perhaps most people) believe that being conscious elevates one’s moral status in the world... this is, in fact, a deeply held premise in most folks’ moral reasoning – so deep, in fact, that we do not bother to defend that premise in moral discussions, science policy briefs, or medical texts. Indeed, we rarely even acknowledge its existence” (Hardcastle 2016: 211).

Based on these observations, it seems safe to assume that consciousness as *subjective experience* is ethically valuable (disregarding for now what types of subjective experience are valuable, and whether this value is instrumental or intrinsic), and is significant in medical decision-making, especially around the end-of-life.⁴ Yet does consciousness understood clinically as wakeful awareness capture what seems to be ethically significant about subjective experience? Note here that the clinical convenience of measuring consciousness does not necessarily map onto the ethical reasons for using consciousness in decision-making. In other words, consciousness conceived of as awareness has, up until now, been the only way to measure the likelihood that an individual (absent the ability for communication) experiences the world. Thus when individuals with MCS are able to utilize certain areas of the brain by imagining playing tennis or walking through their house, we infer that they are currently having the experience of playing tennis or walking through their house.

These tests for consciousness as wakeful awareness do not necessarily map onto the ethical significance that seems to attach to subjective experience. Many animals and plants exhibit wakeful behavior demonstrating awareness of selves and environments, but many think that this does not give them the same type of ethical status as a human being with these

³ The philosopher Immanuel Kant influentially argued in favor of “respect for persons,” the idea that persons are owed respect because they are free, rational beings and thus “ends in themselves” (Dillon 2014). This idea that personhood confers a special moral status has structured arguments about abortion and end of life. Most significant for the present paper, personhood has also been used to argue for or against the moral status of persons with severe cognitive disabilities, in which it is assumed that having the capacities for “self consciousness, the ability to act on the basis of reasons, and so on...” or “high cognitive capacities” mark an individual as morally inviolable in a special kind of way (McMahan 2009).

⁴ This approach can be traced back to Jeremy Bentham, who famously wrote, “The question is not, can they reason? Nor, can they talk? But, can they suffer?” (Bentham 1823).

⁵ Many arguments have been advanced about why sentience is a better moral baseline than sapience, and vice versa. Here the assumption that, at the most basic level, subjective experience is morally significant is meant to circumvent these arguments.

capacities.⁵ Likewise, computers exhibit sapient behavior, but because we doubt that there is anything *it is like* to be a computer, this sapience is not ethically significant. In short: what matters, ethically, is subjective conscious experience. But when we test for wakeful awareness, we are not testing for subjective experience *per se*, but responsiveness to external stimuli and/or evidence for the imagination of motor experiences. This may support the inference of subjective experience (i.e., it may be sufficient), but as I will argue, it may not be necessary for this inference. If wakeful awareness is not identical with the type of consciousness that is ethically significant, this has implications for decision-making in DOCs.

In the following section, I describe a perspective on consciousness that gets at the root of the ethical significance of consciousness as subjective experience. While this perspective comes from a non-Western tradition, it has global significance for the understanding of the ethics of consciousness. Just as William James was influenced by non-Western perspectives through colleagues such as Josiah Royce, George Santayana, and Charles Peirce (Scott 2000), and himself influenced Japanese thinkers such as Nishida Kitaro (Dilworth 1969, Osaki 2015), I propose that such a perspective can help to make sense of the range of meanings for consciousness in DOCs.

IV. Consciousness as Pure Experience

There is a wide variety of perspectives on consciousness that differs depending on discipline. For pragmatic reasons, I am interested in the intersection of clinical and ethical approaches. As described above, consciousness is clinically understood as wakeful awareness (Hohwy and Fox 2012). Ethically, consciousness has splintered into even more categories, including access consciousness (the processing of cognitive content, such as planning one's day) and phenomenal consciousness (the qualitative experience of *what it is like* to be conscious of an experience like pain, or seeing a sunset, or a taste, often described in terms of *qualia*) (Block 2002; Hohwy and Reutens 2009). This difference can also be parsed as transitive consciousness (consciousness *of* something) and intransitive consciousness (consciousness as a state of being) (Dretske 2002).⁶

Ethical discussions on consciousness in DOCs generally understand consciousness as wakeful awareness, thus using transitive consciousness to infer intransitive consciousness, or using access consciousness to imply phenomenal consciousness. In other words, consciousness is not considered apart from consciousness *of* something, in part due to the constraints of the clinical encounter. Consciousness is generally tested by presenting a stimulus (a pen, a pin prick, a loved one) and determining a patient's response. Even in the case of neuroimaging, the consciousness that is assessed is transitive – it is consciousness of something, in this case, the conscious experience of *imagining* physical movement: walking through one's house or playing tennis.

Yet can consciousness be assessed apart from its content? That is to say, is there a way to understand consciousness as pure presence of mind, without an object? An affirmative answer to

⁵ Their sentience is taken into account, at least in the context of research methods that minimize animal suffering (McMahan 2009; although some would argue in favor of broader conclusions about animal consciousness: Chamovitz 2013, Marder 2013, Dawkins 2014, Godfrey-Smith 2016).

⁶ There is a further distinction between creature consciousness and state consciousness, in which the first is a descriptor of a conscious entity (i.e., she is conscious) and the latter is a condition of a conscious state (i.e., her perception of the pen is conscious). Some describe access/phenomenal consciousness as variants of state consciousness and transitive/intransitive consciousness as aspects of creature consciousness. To avoid unnecessary complication, I do not use these terms in the body of this discussion. However, readers are referred to Carruthers 2016.

this question would posit that there is a fundamental ground of experience at the basis of mental content that is neither the experience of something in particular nor a self-reflective mental state.

Many non-Western traditions – especially those with Buddhist roots – would support this affirmative answer. The twentieth century Japanese philosopher Nishida Kitaro is well known for his theory of “pure experience” (*kyunsui keiken*, 純粹經驗), according to which there is a basic level of conscious experience that precedes the separation of subject and object (Nishida 1990, Specker Sullivan 2014). While Nishida was heavily influenced by German idealism and American transcendentalism – especially William James, from whom he adopted the language of pure experience – his idea of “pure experience” was novel, and was informed by his experience as a Zen practitioner (Yusa 45-102, Dilworth 94, 101).⁷ The theoretical basis for Nishida’s conception of consciousness is Japanese Buddhist thought, tracing back to the Soto Zen tradition of Eihei Dogen (who wrote in the thirteenth century and lyrically describes a non-dualistic state of consciousness; Specker Sullivan 2013). Nishida’s ideas were hugely influential: he is credited as the founder of the Kyoto School of Japanese philosophy, and the passage of an *An Inquiry Into the Good* where he first introduces the idea of pure experience has been described as “the most often read paragraph of modern Japanese philosophy in the past half century” (Dilworth 96).

Pure experience can be thought of as similar to the experience of meditation, when one quiets the mind without fixating on particular objects of thought (such as to-do lists, worries, flies buzzing, pins and needles in one’s feet, and so on).⁸ Nishida describes this pure experience as immediate, without any cognition, deliberation or judgment; it is the direct experience of a color or sound, without thinking “this is red” or “this sounds pleasant to me” (Nishida 3, Dilworth 95). The absence of ownership of the experience and cognition concerning the content of the experience signifies that this is a level of consciousness that precedes the differentiation of subject and object; it is an objectless experience, but it is also a subjectless experience. This account of experience is not necessarily unique to Zen Buddhism, although this was Nishida’s particular area of practice; other traditions of Buddhism might describe pure experience as “subtle consciousness” (Thompson 2014: xxi-xxiv, 67-106). Importantly, pure experience is not thought to be an elevated state achieved through dedicated practice of meditation. It is an aspect of our mind that we all possess, but that our excessive, everyday thoughts often obstruct or mask.

Nishida’s understanding of pure experience is most similar to the ideas of phenomenal and intransitive consciousness described above. Yet this does not quite capture what Nishida is working to convey. Recall that phenomenal consciousness is qualitative, what it feels like for you to be you (e.g., your qualia), while intransitive consciousness is a state of being (e.g., you *are* conscious). Pure experience is not solely a concept that captures how conscious experience feels, nor is it a descriptor of a being that is conscious. Rather, for Nishida pure experience is a consciousness that operates *in the background* of the conscious experiences with which we are more familiar. He relates this background consciousness to the immediate experience of a child, or aesthetic or religious experience. While there is not the space to do justice to the particularities of Nishida’s view in this essay, suffice to say that pure experience is akin to an intransitive or

⁷ William James’ article “Pure Experience” was published in 1904; *A Study of the Good* was published in 1911.

⁸ This short description of Nishida’s theory of pure experience is meant as a general introduction, and by necessity I am glossing over important details. For readers interested in learning more about Nishida and Kyoto School Philosophy, see Goto-Jones, Christopher S, 2005, *Political Philosophy in Japan: Nishida, the Kyoto School, and Co-Prosperity*, London and New York: Routledge; Heisig, James W., Thomas P. Kasulis, and John C. Maraldo (eds.), 2011, *Japanese Philosophy: A Sourcebook*, Honolulu: University of Hawai’i Press; Krummel, John W. M., 2012, *Basho , World, and Dialectics: An Introduction to the Philosophy of Nishida Kitarō*, in *Place & Dialectic: Two Essays by Nishida Kitarō*, Oxford and New York: Oxford University Press.

phenomenal consciousness that operates in the background of other conscious states. As such, pure experience is not currently reflected in the approach to DOCs. Nevertheless, it does seem to have implications for both DOC taxonomy and ethical decision-making.

IV. Pure Experience in DOCs

Consciousness as pure experience has implications for the discussion on consciousness in DOCs, because it is quite possible that persons in DOCs have this type of conscious experience, even if they do not evidence awareness of self or environment or even experience of pleasure or pain. In other words, consciousness as intransitive/phenomenal pure experience might exist without transitive experience of particular conscious states. The questions, then, are whether this type of consciousness might be clinically measurable, and how this form of consciousness could be ethically significant.

For the former question, Giulio Tononi and Christof Koch's hypothesis that consciousness might be measurable through particular neural correlates, such as the P300 wave, is a possible clinical tool (Tononi and Koch 2015). Tononi and Koch propose that consciousness, understood as an immediate subjective experience, might be determinable based on a comparison of the physical (neuronal) mechanisms present across different types of conscious experience. As they note, the neural correlates of consciousness are likely to differ across ages, species, and neuronal structures, but they nevertheless posit that there is a physical mechanism that exists as the condition for the possibility of consciousness in each conscious being.

Another possible neural correlate of pure experience is the default mode network (DMN), a brain system that underlies the baseline state of the human brain and that has received much attention since its first description in 2001 (Raichle et al. 2001; Raichle and Snyder 2007). The DMN represents the intrinsic activity of the brain – activity during rest with eyes closed or visual fixation – as opposed to the *evoked* activity in response to stimuli. It thus seems, at least theoretically, quite similar to the idea of pure experience. The connection with meditation also holds: a recent study has shown that as compared with beginner meditators, experienced meditators exhibit decreased functional connectivity between DMN areas thought to relate to self-referential processing and emotional appraisal, and increased connectivity between areas thought to relate to immediate awareness (Taylor et al. 2013).

Of course, there is the possibility that even if the physical basis for consciousness could be scientifically theorized, it may not admit of being clinically operationalized. That is, consciousness understood as pure awareness may not be objectively verifiable.⁹ If this is the case, then something like “precautionary personhood” or “precautionary moral status” might apply (Braddock 2017). According to this principle, given uncertainty about whether some brain-injured individuals are conscious in a morally relevant sense, it is better to act *as if* they are conscious. Yet this might also have medical consequences that some find to be undesirable, such as mechanically sustaining many more individuals than is institutionally, financially, or socially feasible. Importantly, if this is the line of thought, then ethical decision-making will need to proceed irrespective of whether these individuals are conscious in a morally relevant sense or are not.

For the latter question, consciousness as pure experience seems to fit many intuitions about the ethical significance of consciousness. What seems to be ethically significant is the bare existence of subjective experience – *that* there is something it is like to be you – not the particular quality of *what* this experience is like nor the objective content of this experience.

⁹ This would also be the case if consciousness does not have a physical basis, an issue I do not take up here.

Thus, while our abilities to communicate about and behaviorally verify certain instances of transitive conscious experience – experiences with identifiable objects, such as a pen or the imagined situation of playing tennis – are valuable and sufficient to prove consciousness, they are not *necessary* for intransitive consciousness. The ethical demand is to determine whether there is a baseline level of conscious experience, not whether an individual is capable of any one of a set of particular experiences, such as seeing a pen, feeling pain, imagining movement, or even interacting with loved ones (Fischer and Truog 2017b: 326-331).¹⁰

This is not to say that transitive consciousness is not significant; if an individual shows behavioral evidence of transitive consciousness, the assumption that they are also intransitively conscious is warranted – transitive consciousness is sufficient for intransitive consciousness, even if it is not necessary. Further, if a patient exhibits “wakeful awareness,” a form of transitive consciousness, this is clearly significant for discussions about goals of care (Lewis 2017). Yet the converse is not true: if a patient does *not* show evidence of transitive consciousness, this does not mean that they are incapable of intransitive consciousness, or pure experience (Shewmon 2003, Johnson 2016, Fischer and Truog 2017b). This has implications for decision-making for patients with DOCs, especially when those decisions involve withdrawal of treatment and end-of-life care. If it is possible that a patient has a morally relevant form of consciousness that is nevertheless currently undetectable with clinical methods, then depending on whether or not this form of consciousness is thought to be valuable intrinsically or instrumentally and how this value interacts with other values (such as family well-being), this will affect the permissibility of withdrawal of care, among other decisions.

To return to the question of consciousness in DOCs: Must we transition from consciousness to values, as suggested by Fischer and Truog? I think not, at least not fully: consciousness still captures some dimension of what it means to be a morally considerable being. Consciousness as a baseline of experience seems to get at what is (intrinsically or instrumentally) valuable about consciousness: that it signifies first-personal or subjective experience, even if that experience is not awareness of one’s self *or* one’s environment. What is morally relevant about consciousness is not whether one can have the experience of playing tennis or walking through their house, but whether there is some conscious experience of having a mind, not necessarily with an object. Therefore, while studies showing that persons thought to be “awake but not aware” (in UWS) are actually “wakeful *and* aware” (in MCS) are important, transitive consciousness ought not be the final word in ethical decision-making in DOCs.

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¹⁰ There are many ethicists who would disagree with this distillation of consciousness into subjective experience, arguing that what is morally relevant about consciousness is higher level consciousness (McMahan 2009) or experiences of pleasure or pain (Savulescu and Kahane 2009). Nevertheless, as I have argued above, it seems to me that what these ethicists can agree on is consciousness as subjective experience.

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