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The First-Person Perspective Is Not a Defining Feature of Consciousness

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Abstract

Philosophers and scientists generally assume that consciousness is characterized by a 'first-person perspective.' On one interpretation of this claim, experiences are defined, at least in part, by representations that encode a subject-centred 'point of view.' But claims about the defining features of consciousness must be sensitive to the possibility of dissociation: if a neurobiological structure or psychological function is neither necessary nor sufficient for consciousness, it cannot be a defining feature in any robust sense. I appeal to research on unconscious emotion, visually guided action, perceptual constancy, and psychiatric disorder to argue that first-personal representations dissociate from conscious experience.

Résumé

Les philosophes et les scientifiques présument en général que la conscience est caractérisée par « un point de vue à la première personne ». Selon une interprétation de cette revendication, les expériences sont définies, au moins en partie, par des représentations qui encodent un « point de vue » centré sur le sujet. Par contre, les revendications sur les caractéristiques déterminantes de la conscience doivent être attentives à la possibilité d'une dissociation : si une structure neurobiologique ou une fonction psychologique n'est pas nécessaire ni suffisante pour la conscience, elle ne peut pas être un attribut distinctif dans un sens robuste. Je fais appel à la recherche sur l'émotion inconsciente, l'action guidée par la perception, la constance perceptuelle et les troubles psychiques pour soutenir que les représentations à la première personne dissocient de l'expérience consciente.

Keywords: consciousness; philosophy of mind; first-person perspective; subjectivity; defining features

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1. Defining Features of Consciousness

The pursuit of a plausible, generalizable account of the nature of consciousness has been notoriously difficult. What seem like credible intuitions and theoretical commitments to some are taken to be hopeless conceptual confusions by others. Little consensus has emerged, even with regards to the basic features of conscious experience that require philosophical and scientific explanation. Progress on this definitional project likely requires a shift away from direct attempts to mount all-encompassing theories of what consciousness *is* towards the careful identification of some viable structural and functional markers of conscious experience.

On one familiar line of inquiry, research on the neural correlates of consciousness (NCCs) is concerned with identifying the neurobiological structures and processing dynamics that are involved in the generation of conscious experience — both in terms of general enabling conditions and in terms of particular experiences and their contents (e.g., Boly et al., 2017). Another recently developing line of research is concerned with identifying the psychological functions, representational properties, and behavioural capacities that are associated with consciousness (e.g., Cohen & Dennett, 2011; Dehaene et al., 2006; Lamme, 2020), or what I call the ‘functional contributions of consciousness’ (FCCs). The hope is that, through rigorous comparison with unconscious processing, these research programs will isolate structural and functional markers that can be used as operationalizable proxies to guide ongoing philosophical theorizing and scientific experimentation on conscious experience. Integrating the search for structural and functional markers in an interdisciplinary framework provides a particularly promising avenue for getting at consciousness’ characteristic features. Establishing viable psychobiological markers should help illuminate what it is that consciousness *does* in information processing systems, which ultimately contributes to our understanding of its underlying nature. For instance, if consciousness facilitates a particular kind of visual function carried out by a particular set of neural structures in the visual system, then this psychobiological marker and its role in visual processing can be used as a clue to the more general and difficult question of what consciousness is as a feature of psychological systems.

An important point that can remain underappreciated, however, is that this methodology is only viable if we can identify markers that do not ‘dissociate’ from conscious experience. In other words, we want to find markers a) that are truly *unique* to consciousness, and b) that can be *generalized* across as many different conscious processes as possible. The logic of necessary and sufficient conditions can be leveraged here. If a structural and/or functional marker is both necessary (i.e., present in every case) and sufficient (i.e., never associated with unconscious processes) for consciousness, there is a robust sense in which it is a defining characteristic: it will always and only be present when consciousness is also present. If a marker is sufficient but not necessary for consciousness — which is to be expected, given the variety of kinds of psychological processes that are conscious — its presence can still be used as a proxy because it is still unique to consciousness. Uniqueness here means that unconscious processes are never marked by this feature, and so there is still a relatively strong sense in which the feature is a defining characteristic of, or is closely associated with, consciousness, despite its lack of generalizability. If a marker is necessary but not sufficient for

consciousness — that is, if it is present in all conscious experiences and yet some unconscious processes also have this feature — then more work is needed to qualify how or under what conditions that feature is related specifically to conscious experience. As such, the marker dissociates, and is therefore a defining characteristic only in a weak, promissory sense. Finally, if a neural structure and/or psychological function is neither necessary (i.e., not all conscious processes have this feature) nor sufficient (i.e., unconscious processes also have this feature), there is a strong sense in which it dissociates from, and therefore cannot be a defining feature of, consciousness. Essentially, the more a feature dissociates from consciousness, the less reliably it can be used to distinguish conscious and unconscious processing.

These methodological points can be put to work by subjecting candidate markers to comparative tests of necessity and sufficiency. In what follows, I contend that the ‘First-Person Perspective’ (FPP), understood as a representational feature of experience, is a candidate marker that dissociates in the sense that it is neither necessary nor sufficient for conscious experience. This means that FPP is not a genuine defining feature of consciousness. Clearing up this misconception is one important step towards rendering consciousness a viable object of philosophical and scientific inquiry.

2. The First-Person Perspective and Conscious Experience

The philosophy and science of consciousness typically proceed by adopting simple and uncontroversial working definitions of their target of inquiry. Stipulative definitions of this sort have generally converged on the idea that consciousness is “the subjective, phenomenal ‘what it is like’ to see an image, hear a sound, think a thought or feel an emotion” (Koch et al., 2016, p. 307). While definitions that centre around ‘what it is like’ (e.g., Block, 1995; Nagel, 1974) aim to capture the basic notion of ‘experience’ that is at its conceptual core, there remains ambiguity surrounding the notion of ‘subjectivity’ and the purported first-person perspectival nature of phenomenal consciousness. This conceptual unclarity can hinder attempts to find stable markers that can ground ongoing neurobiological and psychological research on consciousness.

There are certainly different ways of spelling out the notion of FPP more precisely. There is, for example, a metaphysical interpretation, according to which conscious experiences are marked by some metaphysical sense of ownership, such that conscious processes always ‘belong’ to a particular individual subject (e.g., Chalmers, 1996; James, 1890; Schraube, 2014). There is also a related epistemological interpretation, according to which FPP refers to a certain privileged epistemic relation that subjects have to the contents of their experiences (e.g., Lycan, 1996; Nagel, 1974; Velmans, 2009). But another way to understand FPP, which is at least implicit in many prominent accounts, is that it picks out a particular content encoded in conscious representations and meta-representations. The idea here is that conscious experiences are representationally centred around subjects as their ‘point of origin’; the subject ‘appears’ at the perspectival core of our experiences (Block, 1995; Choifer, 2018; Schlicht, 2018; Searle, 1992). On higher-order views, this seems to amount to a second-order self-representation at the core of all phenomenal contents (e.g., Gallagher, 2010; Gennaro, 2012; Kriegel, 2009).

Dan Zahavi and Uriah Kriegel (2015) argue explicitly that the self-oriented ‘for-me-ness’ of FPP that is taken to be a central feature of consciousness is properly understood as a constituent element of the phenomenal content of all types of experiences. This is similar to the ‘me-ish-ness’ proposed by Ned Block (1995), which is also construed as a feature of the representations that comprise phenomenal contents. Christof Koch clearly articulates both the subject-centred and the perspectival aspects of FPP, arguing that “each experience comes with a unique point of view — the subject’s perspective ... as it is obviously important that what I see, what I hear, and what I feel all refer to a common space, ‘I’ am located at this singular point, the origin of my own space” (Koch, 2019, p. 9). Thomas Metzinger also develops a detailed account, according to which the FPP is explicitly defined as a representational phenomenon (Metzinger, 2003, p. 1), such that “during the ongoing process of conscious experience characterizing waking and dreaming life, *a self is present*” (Metzinger, 2003, p. 5). Metzinger goes on to clarify that this ‘self’ that forms the core of FPP is a representational model generated by the cognitive system, which combines bodily, emotional and cognitive self-representations holistically in order to ultimately “represent itself as being *directed* at some aspects of the world” (Metzinger, 2003, p. 545). Finally, Robert Van Gulick’s (2018) contribution to *The Stanford Encyclopedia of Philosophy* states that the general consensus is that “at least some degree of perspectively self-like organization seems essential for the existence of anything that might count as conscious experience.” On this construal, the idea that FPP is a defining feature of consciousness is a claim about the informational structure of conscious processes and the representations they employ, and not simply about a particular metaphysical or epistemic relation to the contents of one’s experiences. We might call this the ‘Representational Interpretation’ of FPP:

Representational Interpretation: a non-reflexive self and its perspectival orientation are encoded in the contents of conscious representations and meta-representations

FPP is therefore a candidate marker of consciousness, because it picks out a particular kind of functional-representational feature, presumably carried out by particular neurobiological mechanisms, that is thought to be importantly associated with consciousness. If these phenomena do turn out to be strongly associated, evidence of the FPP representational structure could be used as objective evidence of conscious experience. However, although it might seem initially counterintuitive, each specific formulation of FPP, like any other theoretical construct, still needs to pass tests of necessity and sufficiency if it is to be granted status as a defining feature of consciousness. Depending on the degree of dissociation, we might need to rethink the relationship between experience and the subject-centred perspectival orientation that is encoded in some representations.

3. FPP Is Insufficient for Consciousness

There are reasons to think that FPP, in this representational sense, is not sufficient for consciousness; that is, unconscious processes are also sometimes marked by this

feature. This means that the presence of this feature does not entail the presence of conscious experience. Another way of saying this is to say that FPP is not unique to consciousness, and so the presence of FPP cannot be used to distinguish conscious from unconscious processing. Two research programs in particular illustrate this point: the study of unconscious emotional processing, and the study of visually guided action.

3.1 Unconscious Emotional Processing

A significant amount of empirical research has revealed the extent to which emotional processing occurs in the absence of awareness (e.g., Diano et al., 2017; Smith & Lane, 2015). On one common experimental paradigm, masked or suppressed emotionally laden visual images reliably elicit neural, physiological, and behavioural reactions indicative of emotional processing (e.g., Morris et al., 1998; Rohr et al., 2012). And although Freudian psychoanalysis has been replaced by more theoretically and empirically refined frameworks, many therapeutic interventions in psychology, like Cognitive Behavioural Therapy, still aim to access and modulate emotional processing that occurs outside of conscious experience (e.g., Ginot, 2015). Take generalized anxiety, for example, where it can require quite a lot of therapeutic effort in order to uncover the underlying threats posited by the subject of the emotional episode.

There are a range of different theories of emotion, most notably: a) cognitive accounts that assume that emotions are a product of the activity of higher-level psychological mechanisms like appraisal or judgement (e.g., Lazarus, 1984), b) perceptual/affective accounts that assume that emotions are embodied responses to perceived stimuli (e.g., Damasio, 2004), and c) accounts that try to bridge the divide between cognitive and perceptual schools of thought by appealing to some aspect of representation (e.g., a particular ubiquitous kind of content) as the common denominator (Charland, 1997; Nussbaum, 2001; Solomon, 2004). One thing that all of these theoretical frameworks have in common, which is supported by recent psychological and neurobiological research (e.g., Beyeler et al., 2018), is the idea that emotions generally function in some way to encode the positive and negative value that an object or event has *for the organism itself* (e.g., their goals, motivations, desires, etc.). That is, emotional processing is generally agreed to involve representational valencing (Barrett, 2006), which encodes the evaluative properties that objects and events have for the evaluating subject. In terms of the processing underlying generalized anxiety, for example, perceptual and conceptual information becomes negatively valenced in the sense that it is marked as a potential threat to subjects and their underlying motivations.

Taken together, these points suggest that unconscious emotional processes employ representations that involve FPP: evaluative emotional content is representationally organized around the subject as a point of origin, because the evaluations that generate representational valence must take the system as a whole (i.e., the self) into consideration. The evaluating subject must be explicitly represented in the content of emotionally laden unconscious processing because valenced representational content is necessarily relational, in that the underlying evaluations occur in the meeting of

evaluating subjects and emotionally relevant objects and events. In other words, unconscious emotional processing cannot be understood subpersonally. In this vein, Peter Carruthers has recently argued that “all affective states result from assessments of the relevance of environmental or bodily events, either to previously formed goals, or to one’s underlying values stored subcortically as dispositional properties of reward-systems in the basal ganglia” (Carruthers, 2018, p. 659). Crucially, the goals and values that generate emotional representational content must be subjective regardless of the hierarchical ‘level’ at which they are processed (Carruthers, 2018, p. 659); that is, they depend upon the complex, nested motivational aims of the *organism*. Because the valencing of representational content necessarily signals the evaluative significance of the represented object or event to the subject of the evaluation, valence-laden representations centre the subject in a way that fits the sense of FPP under consideration: the subject is encoded at the perspectival core of valence-generating processes that are often unconscious. This ultimately means that unconscious emotional processing is a counterexample to the claim that FPP is sufficient for consciousness, because representations can encode a subject-centred perspective, despite the absence of conscious experience.

3.2 Visually Guided Action

Another area of research that suggests that unconscious processes encode FPP is the study of the dynamics of visually guided action. Historically, a division was proposed in the visual system between ventral and dorsal streams (Goodale & Milner, 1992), and it was argued that the latter facilitates unconscious vision for action. While any strict segregation of this kind has been called into question (e.g., Wu, 2014), there has been much continued research on the extent to which visuomotor processing relies on unconscious perceptual and motor representations, where the properties of objects and events are encoded in egocentric (i.e., subject-oriented) space (for discussion, see Brogaard, 2011). Egocentric representation has long been posited by psychologists and neuroscientists to explain capacities for spatial processing in human and non-human animals (e.g., Wang & Spelke, 2002). This construct is thought to be characterized by the representational encoding of landmarks from the vantage point of (or centred on) the navigating organism. Whereas perception requires representations of objects and events that are stable despite changes in retinal input due to variation in the observer’s precise orientation to the environment, action requires that the visual system precisely encodes the viewpoint-dependent features of objects and events.

The processes underlying visually guided action have been shown to be immensely complex (e.g., Crawford et al., 2011). The visual system constructs, maintains, and updates detailed spatial and temporal maps of the body and the environment in preparation for visually guided action. It also compares them to maps of bodily position that are constructed elsewhere, like in the proprioceptive and vestibular systems. These representations are employed in order to plan, predict, and guide even the most elementary bodily movements (e.g., reaching for and grasping objects). More importantly, these kinds of egocentric maps are made available to motor and decision-making systems despite the fact that they often fail to enter into awareness

(Ro, 2008; Wuethrich et al., 2018). This is especially evident both in low-complexity cases of reflexive action and in high-complexity cases of prolonged skilled performance (i.e., flow), where a majority of the action planning and execution involved occurs unconsciously.

During visually guided action, the egocentric or subject-oriented perspective is crucial for facilitating effective interaction with the environment (Milner & Goodale, 2008), and it requires subjects and their particular orientation to the environment to be representationally encoded. Further, it would be quite computationally taxing to have to consciously update all of these dynamically shifting egocentric maps in order to carry out simple motor sequences, like reaching for a glass of water, and so much of this work is pawned off on unconscious mechanisms. The idea that unconscious representations of objects and events encoded in egocentric space are employed in visually guided action suggests yet another counterexample to the claim that FPP is sufficient for consciousness: FPP is not a unique representational feature of conscious psychological processes, because many unconscious psychological processes are also marked by this functional-representational feature.

4. FPP Is Unnecessary for Consciousness

A case can also be made that FPP is not necessary for consciousness; that is, there is a subclass of conscious experiences that lack this functional-representational feature. I'll discuss both a non-pathological case (perceptual constancy) and a pathological case (psychiatric disorder) as paradigm examples of conscious experiences that lack FPP.

4.1 Perceptual Constancy

There is a wealth of interdisciplinary research on the visual system's ability to sustain relatively stable representations of the properties of objects (e.g., size) despite changes in the location and orientation of the eyes, which ultimately determine the nature of the specific proximal input to the retina (e.g., Combe & Wexler, 2010). This phenomenon of perceptual constancy has been of great interest to philosophers and cognitive scientists (e.g., Burge, 2010), and it provides an interesting case of conscious representation that ignores or cancels out the precise orientation of the subject relative to the object or event being perceived.

Take size constancy in vision, for example. Psychophysical and neuroscientific research have converged on the idea that the visual system employs mechanisms that combine retinal input with a range of multisensory, contextual, and predictive information in order to produce visual experiences of objects that remain stable in size (Sperandio & Chouinard, 2015). These sorts of 'extra-retinal' clues — say about the presumed distance of an object in the environment, for example — modulate and literally reshape the retinotopic maps that are constructed in the primary visual cortex. The result is a dynamic updating of size information in order to produce conscious visual representations that are relatively unaffected by the precise orientation of the subject in space. This means that the same retinal stimulation will produce different representations of size as a consequence of ignoring the subject's particular perspectival relation to the world. Indeed, viewpoint invariant

representations are central to psychological capacities like object recognition, which are achieved by cancelling out the observer-dependent features of proximal stimuli. Conversely, precisely encoding the subject's particular orientation to the environment can be detrimental to these fundamental perceptual processes.

Here we have a fairly ubiquitous case of conscious representation that specifically ignores, cancels out, and fails to encode information about subjects and their particular perspectival orientation to objects and events. There is much practical value in constructing observer-independent representations of objects and events that abstract away from the precise modality specific features of stimuli, so much so that the requisite mechanisms are a ubiquitous feature of perceptual systems. In this way, perceptual constancy provides a counterexample to the claim that FPP is a necessary feature of conscious experience: many mundane conscious (i.e., visual) experiences actively suppress information required to encode FPP.

4.2 *Psychiatric Disorder*

Finally, there are several pathological conditions that challenge the relationship between FPP and conscious experience. There has been much debate, for example, about the phenomenon of thought-insertion: the pathological dispossession of one's thoughts typically as a result of disorders like schizophrenia (Frith, 1992). While the original research construed this merely as a loss of agency or control over one's otherwise subjectively experienced thoughts (Billon, 2013), several critics have argued that thought-insertion also involves a genuine loss of the sense of self (Martin & Pacherie, 2013; Metzinger, 2003). On this construal, the inserted thought is not experienced as arising within the 'boundaries of subjectivity' (Ratcliffe & Wilkinson, 2015). In these cases, one plausible interpretation is that patients' conscious experiences fail to representationally encode the subject as a perspectival point of origin.

Other well-documented disruptions to one's sense of self in thought and memory resulting from psychiatric disorders like schizophrenia provide supplementary evidence of conscious experiences that lack FPP (Davidson, 2020; Sass & Parnas, 2003). Many schizophrenic patients show symptoms of diminished and even lost "self-presence" (Sass & Parnas, 2003, p. 433), for example, which can produce general feelings of alienation from one's own conscious experiences. Here, the ability to construct representations that serve to place oneself appropriately in the present environmental context is disrupted, leading to disorienting experiences that are not organized around the subject as a point of origin. This self-encoding deficit also shows up in disturbances of memory, as there is mounting evidence that schizophrenics have impaired capacities for encoding and recalling episodic memories in particular. This type of memory is thought to be defined by a sort of auto-noetic qualitative content, which involves the capacity to simulate previously experienced representations that place the subject in a particular space and time (Klein et al., 2004). Impairments in episodic memory therefore supplement the claim that individuals with schizophrenia have a disrupted capacity for representationally encoding themselves as subjects at the perspectival core of their conscious experiences.

In addition, it has also been argued that psychedelic drugs — which are thought to mirror some of the symptoms of schizophrenia — and meditation (Millière et al.,

2018), as well as atypical circumstances like prolonged solitary confinement (Guenther, 2013), may all similarly produce conscious experiences in which one's representation of self-as-subject-of-experience is either dramatically distorted or lost altogether. There is therefore evidence of a number of cases involving conscious representations that lack FPP: schizophrenics often fail to properly encode the subject-oriented point of view in conscious thought and memory, and similar effects result from hallucinogenic drugs, meditation, and prolonged solitary confinement. In sum, although a single convincing counterexample to necessity and sufficiency should suffice, taken together, there is compelling evidence that FPP is neither necessary nor sufficient for, and so cannot be a defining feature of, consciousness.

5. Conclusions: Experience Without FPP

What does this mean for our overarching theoretical and empirical accounts of consciousness? Of course, the notion of FPP under consideration might still be a feature of many conscious representations. But if it dissociates from conscious experience, it cannot be a *defining* feature, and so cannot be employed as a robust marker of consciousness in future research.

It should be reiterated that there are certainly other senses in which FPP might be a defining feature of consciousness. Again, it might be that consciousness involves FPP in an epistemological sense; namely, subjects have a particular kind of access to the content of conscious representations. There are also metaphysical interpretations of FPP as a defining feature of consciousness; namely, that conscious representations merely 'belong' to subjects despite how they encode information. However, each of these distinct proposals must be subjected to similar tests of necessity and sufficiency in order to be granted the status of a defining feature. At first glance, both the metaphysical and epistemological sense of FPP might also dissociate from conscious experience in such a way that they cannot be used as markers in future research. Disruptions of the sense of ownership over one's conscious processes (e.g., Klein, 2015) and doubts about the extent of subjects' privileged epistemic access to the contents of their experiences (e.g., Pauen, 2010), give us preliminary reasons to be sceptical that any formulation of FPP will turn out to be a robust marker of consciousness.

The most significant upshot of this analysis is that theories of consciousness must provide an account of experience that is divorced from the functional-representational feature of FPP. This has broad implications, as it exempts us from the need to conceptualize and operationalize FPP in consciousness research. Once freed from the need to explain FPP as a feature of consciousness, philosophical and scientific research can focus on other structural and functional aspects of experience that can in fact serve as viable operationalizable proxies. At the same time, this conclusion ought to inspire researchers to uncover the role that FPP does in fact play in a variety of psychological processes, independent of whether they are conscious or unconscious. The methodological framework that is employed here — namely, testing for dissociation using the logic of necessity and sufficiency — will hopefully continue to help establish a stable ground on which to base interdisciplinary consciousness research moving forward.

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