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Unitary and dual models of phenomenal consciousness

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A B S T R A C T

There is almost unanimous consensus among the theorists of consciousness that the phenomenal character of a mental state cannot exist without consciousness. We argue for a reappraisal of this consensus. We distinguish two models of phenomenal consciousness: unitary and dual. Unitary model takes the production of a phenomenal quality and it's becoming conscious to be one and the same thing. The dual model, which we advocate in this paper, distinguishes the process in which the phenomenal quality is formed from the process that makes this quality conscious. We put forward a conceptual, methodological, neuropsychological and neural argument for the dual model. These arguments are independent but provide mutual support to each other. Together, they strongly support the dual model of phenomenal consciousness and the concomitant idea of unconscious mental qualities. The dual view is thus, we submit, a hypothesis worthy of further probing and development.

1. Introduction

There is almost unanimous consensus in the literature regarding consciousness that the phenomenal character of a mental state exists exclusively in its conscious form (see, e.g., Revonsuo, 2010, 39 and 72, Crick & Koch, 2003; Koch, 2004, 242 and 300, ffytche, 2000; Prinz, 2012). Pains, sounds and colours – phenomenal qualities constituting the phenomenal character of a mental state – can only occur at the level of consciousness. Sophisticated neural processing accompanies these mental states but this processing entirely lacks phenomenal character. We argue for a reappraisal of this consensus. We distinguish two models of phenomenal consciousness: *unitary* and *dual*. The unitary model takes the production of a phenomenal character, and its becoming conscious, to be one and the same thing. Most theories of consciousness advocated in the philosophy of mind and cognitive neuroscience of consciousness are unitary. The dual model, which we describe and defend in this paper, distinguishes the process in which the phenomenal quality is formed from the process that makes this quality become conscious. The dual model agrees with the unitary model in that conscious phenomenal states possess the experiential *what-it's-like-ness* and that unconscious mental states lack it. However, it allows that unconscious mental states possess phenomenal character (or phenomenality, as Ned Block calls it; see Block, 2001). On this view, the experiential *what-it's-like-ness* is simply a result of the combination of phenomenal character and consciousness.

It is important to realize that the widely held identification of the experiential *what-it's-like-ness* with phenomenal character, and the ensuing denial of unconscious phenomenality, is not a result of evidence-based argument. Rather, the notion of unconscious phenomenal quality seems to be a *contradictio in adjecto* because phenomenality seems to be *conceptually* linked with consciousness. We propose to sever this alleged conceptual link. The stubborn intuition that *only* conscious mental states can harbor phenomenal character is probably based on the fact that we come to know the phenomenal character of mental states from the instances of conscious perception and other kinds of conscious mental processes. But that does not necessarily imply that phenomenal character

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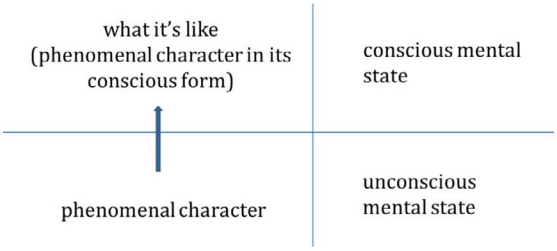

Fig. 1. The dual model of phenomenal consciousness distinguishes the process in which the phenomenal character of a mental state is formed from the process that makes this character conscious. Thus the phenomenal character can occur unconsciously and the *what-it's-like-ness* of a mental state is the phenomenal character *as experienced consciously* by a subject.

could not exist without consciousness. And neither does it imply that we can determine the presence of the phenomenal character of a mental state only by becoming conscious of that state. Our proposal, schematically depicted in Fig. 1, is revisionary but, as will become clear, supported by a number of compelling arguments.

Many authors claim that episodes of conscious and unconscious perception are of a very similar kind. According to Jesse Prinz, for example, unconscious vision is "very much like" conscious vision (Prinz, 2015, 381). Yet he rejects the notion of unconscious phenomenal qualities: the difference between conscious and unconscious perceptual states is, on his account, precisely that the first have phenomenal character whereas the latter don't (see also Prinz, 2012, esp. pp. 143–145). Phenomenal character, for him, is what distinguishes conscious and unconscious perception. We disagree: phenomenality can be unconscious and the episodes of conscious and unconscious perception are even more similar then Prinz is ready to admit. In the following sections, we state the case for unconscious phenomenality, adduce empirical evidence in its support and draw the consequences for the construction of empirically sound theories of consciousness. We argue for the possibility of unconscious phenomenal character – and for the associated dual model of phenomenal consciousness – by means of four distinct yet mutually supportive arguments: conceptual, methodological, neuropsychological and neural arguments.

2. Conscious and unconscious phenomenal qualities (I): Conceptual and methodological arguments

2.1. The conceptual argument

What we do in this paper can be seen as a reinforcement and expansion of the argument for unconscious phenomenality put forward by David Rosenthal (see esp. Rosenthal, 2005a, chs. 5–7, and Rosenthal, 2010). We should like to stress that we do not subscribe to his higher-order thought (HOT) theory of consciousness (for which see Rosenthal, 1997). According to the HOT theory of consciousness, a mental state is made conscious by a distinct thought with a suitable content directed towards it. The HOT theory has been subjected to what we tend to believe are fatal criticisms, both of a conceptual (see, e.g., Block, 2011; Byrne, 1997) and empirical nature (Kozuch, 2014). But Rosenthal's central insight that a mental state can retain its phenomenal character even when unconscious is independent of the HOT theoretical framework, as Rosenthal himself acknowledges (Rosenthal, 2011, 435n.7). When taken as separate from the HOT framework it is, we submit, a vital standalone hypothesis deserving of further probing and development.

Although we reject the HOT account of how mental states become conscious, we share Rosenthal's view that a mental state's being conscious is an *extrinsic* property of that state and that unconscious mental states can be intrinsically the same as their conscious counterparts. However, in contrast to Rosenthal, we propose a neural explanation of how a state becomes conscious (see Section 3.2). We are not persuaded that a psychological style of explanation is required, as Rosenthal (2012) insists. Instead, we propose a bottom-up account of phenomenal consciousness in which the relevant neural mechanisms do all the explanatory work; that is, they enable to explain the difference between conscious and unconscious mental states. According to the dual model, consciousness does not really modify the intrinsic phenomenal properties of a state. We can see, hear, smell, etc., without awareness. As Prinz (2017) remarks, we can do so many things without consciousness that the question "What is consciousness actually good for?" becomes difficult to answer. It seems that its proper function is to make perceptual contents available for flexible control of behaviour and for verbal reports. This fits well with the dual model of consciousness.

Now, many philosophers believe that it makes no sense to say that, for instance, a pain could occur unconsciously. The only way for a pain to exist is for it to be consciously felt. The distinction between appearance and reality seems to collapse in the case of pains. This prevailing view, endorsed, e.g., by Saul Kripke (1980) and Fred Dretske (2006), was expressed already at the beginning of the 20th century by the then significant philosopher Alexander Bain; he wrote of pleasure that it is no pleasure, if not conscious (Bain, 1894, 352). Rosenthal breaks free of this tradition. He suggests that consciousness is something that phenomenal states can but need not have.

Rosenthal (1986) illustrates the distinction between conscious and unconscious pain in the following way. Suppose we are in pain for a longer period of time, say the whole day. Although we are not conscious of the pain for all this time, being often distracted by other things, it is perfectly natural to say that we have been in pain the whole day. By the same token, someone may limp while