# Self-localisation without Property Dualism

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#### **Abstract**

In this journal, Bucci (2022) has argued that two famous experiments in the neuroscientific literature can be used to support property dualism about the mind. In what follows, I attempt to illustrate that those experiments are completely compatible with a naive identity mind-brain/body identity theory.

Key Words: mind-body problem, philosophy of mind, neurophilosophy, out-of-the-body experience, dualism

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330

## Introduction

Bucci (2022) states that the philosophical background of neuroscientific research is important since, whatever theory regarding the composition of the mind we have in the background, the object and methodology of that scientific research will differ.<sup>2</sup> He brings up three main positions about the composition of the mind: substance dualism, property dualism and materialistic reductionism. Substance dualism maintains that 'the mind and the brain are two completely different things' but can interact with one another (Bucci, 2022, p. 125). Property dualism holds that whatever constitutes the mind is partly material and partly non-material (Bucci 2022, p. 125). Materialistic reductionism says there is only one thing about the mind, the material reality (Bucci, 2022, p. 125).

Bucci (2022) at the start begins by discarding substance dualism on the grounds that it is logically contradictory. Roughly, the

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 $<sup>^2</sup>$  Some might contest this point that the theories of the mind, as they are metaphysical, can be made compatible with any possible observation. I won't contest the point here.

reasoning is this; since the immaterial substance of the mind interacts with the material reality of the brain, the immaterial substance must be something material. But, this is incorrect. One could coherently argue that immaterial entities can enter into causal relations with material entities, consider the view of theists that believe God 'created' the physical universe. Whilst it might be a confusing view, it is not as Bucci (2022) argues, 'contradictory', at least, not shown in his paper.

Nevertheless, the aim of his paper is to discuss two neuroscientific experiments to argue in favour of property dualism, and that materialist reductionism won't succeed in explaining the phenomena. Here, I demonstrate that the experiments do not do anything with respect to favouring property dualism over a materialistic reductionist theory of consciousness, the theory I will be invoking for consideration is a very naive mind-brain/body identity theory. On this theory of consciousness, each mental state is quantitatively identical to some state(s) in the body.

# The Experiments

The experiments in question are those that attempt to induce conditions similar to or identical to out of body experiences. These are experiences in which 'a person who is awake sees his or her body from a location outside the physical body' (Ehrsson, 2007). Ehrsson's (2007) attempt to induce this in healthy patients begins by setting up a camera two metres behind a subject. The camera is pointed looking at the back of the subject and there is a transmission of the left image of the camera to the left eye of the subject and the right image of the camera to the right eve. What the subject now has in their visual field is themselves from a point of view that is identical to the camera's positioning. Then, Ehrsson (2007) stimulates the experience by touching the subject's body with an object and showing the same action to the camera: 'the participants reported the experience of sitting behind their physical bodies and looking at them from this location'. Ehrsson (2007) 'hurts' the patients by using a hammer on the illusory body of the subjects and checks for the experience as if the patient was really in that illusory position.

The next experiment Bucci (2022) cites is a similar one: Lengenhagger et al (2007). In this one, the subject has an out of body experience in virtual reality, the bodies are captured by a camera and then reproduced in a different position from the actual body. The results are the same, the subjects experience the illusory body perceived by the virtual reality as their actual one. Bucci (2022) argues these experiments have philosophical outcomes, namely that these experiments favour a property dualist theory regarding the composition of the mind.

### Dualism from where?

Bucci (2022) asks 'where is the body experienced in the experimented out of body experience?'. Then, he claims that 'the body experienced in the out of body experience is not where the body is but is not elsewhere in the experimental set'. But, nothing is provided to justify this assertion. For all the phenomena, specifically the out of body experiences induced in the experiments, we can accommodate the experiences being identical to the subject's actual physical states. He puts his hypothesis formally:

W1(n) = W2(obe); [the working hypothesis] - the where of the normal experience and the where of the out of body experience are of the same kind.

 $W3(b) \neq W2(obe)$ ; - the where of the body is of a different kind respect to the where of the out of body experience.

W3(b)  $\neq$  W1(n); [from W1(n) = W2(obe) & W3(b)  $\neq$  W2(obe)] - the where of the body is not of the same kind as the where of the normal experience (Bucci, 2022, p. 128).

But, why should one think that the experiments can't be modelled by a naive mind-brain identity theory? Here is a brief way to model it:

H1(n) = H2(obe); - the where of the normal bodily experience and the where of the out of body experience are of the same kind [namely neural states].

H3(b) = H1(n); - the where of the physical body and the where of normal bodily experiences are identical in kind [both physical locations determined by neural processing].

H3(b) = H2(obe); - [from H1(n) = H2(obe)] - the where of the physical body can be identified with the where of the out of body experience [as a product of neural states].

Bucci (2007, p. 129) anticipates this sort of response stating: 'Now a reductionist might say that the experiment shows explicitly that the electrochemical level is the same of experience. In this case, we could answer that, as seen, the where of the experience is not the where of the brain and that the where of experience is not the where of the electrochemical processes inside the brain'. But, that's what is in question! The experience the subject has, say in the virtual reality case, they have their own back in their visual field, and a point of view from the camera, but that experience is identical to the neural states in the brain.

## Conclusion

In conclusion, then, I have briefly argued, contra Bucci (2022), that the findings of Henrik Ehrsson and Bigna Legenhagger can not be shown to validate the property dualist theory regarding the composition of the mind. Everything modelled, can equally be done under a naive identity theory of the mind, and until there's been shown further results from neuroscientific literature, we should remain with the (ontologically) simplest theory regarding the mind, a theory of materialistic reductionism, that Bucci (2022) has failed to argue against.

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