

# Review of: "Social context of the brain and law: Is consciousness social?"

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You have a very interesting topic for this article and throughout you raise many interesting and stimulating ideas. Unfortunately, as the paper stands, many of these interesting ideas are buried underneath a poorly structured argument and the article is centred on a topic that is not clearly defined.

After reading the introduction, where you contrast ideas of the mind and consciousness as centred on the individual devoid of social context with the ideas of constructionists like Geertz and Vygotsky, for whom consciousness is cultural and historical, I thought we would then have an exposition of this debate and perhaps a broader, more socially focused explanation of consciousness. Instead, the article goes straight into issues of the law without outlining what the problematic is in this context. Why are ideas of about the brain and consciousness in both neuroscience and philosophy a critical issue when it comes to the law? What is the central issue that this article is seeking to address? This needs to be established in the title of your piece and in the introduction so your readers know where they are going and the direction you are taking them in.

Forgive me if I am wrong in my interpretation, for at times your argument is convoluted and unclear, but I feel your central issue in terms of the law is that consciousness is important in the legal domain because culpability for a crime is based on notions about the intentions behind a person's actions and to what degree they were conscious and thus responsible for those actions. Expert knowledge in cases, which can be based on neuroscience or in some way informed by this, can help to decipher the causes of behaviour. But what if the model of consciousness used in most mainstream neuroscience is limited by its individualistic and biologicistic stance and can be used unequally against social groups that have less power and yet are often more subject to the law?

Here, you need to be clearer about the arguments you are putting forward, especially about the nature of consciousness. From my perspective, based on a cultural-historical approach informed by Vygotsky (1987) and others in that school such as Leontyev (1981), consciousness is historical in that it is based on social activity within a specific cultural context, and that the brain itself is shaped by activity throughout a person's development. Neurological functions are shaped by activity mediated by language, so that language comes to play a central, organising role in consciousness (Luria, 1973). The brain is then a tool that enables activity in the social world (see also Gergen, 2010), allowing us to achieve social goals and functions and to think in ways that are relatively independent of our social circumstances. Humans therefore have agency, but this is always bounded in some way by the social and historical limits on their actions and thoughts, limits that will also vary according to social position and power.

I think exploring ideas along these lines, ones that are pointed to throughout your article, would then strengthen your conclusion about the decolonization of the brain and how the new technologies employed in the neurosciences must be seen in the context of power and neoliberalism. You make the excellent argument in your conclusion that the increasing power and use of neuroscience and its various technologies need to be checked through a critical lens so that they do not simply become used for the increased oppression of the poor and socially marginalised. But I think the foundations are already there on the fringes of psychology – in the cultural-historical school and in social constructionism – for us to build a critical science of the individualistic and biologicistic approach in much, although not all, neuroscience. Is consciousness social? I would answer yes. Do you support that stance and, if so, what theories would you use to create your own approach? And what would be the consequences of this for the law if it were to employ a critical use of neuroscience? I would be interested in your answer to that as there are excellent points made in your article that need strengthening through a properly structured and clarified argument.

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