

In the last Nature Reviews Neuroscience, a [paper](#) reviewing the work showing cultural differences in brain activation. I'm afraid there's no non-gated version, but here's the abstract:

Our brains and minds are shaped by our experiences, which mainly occur in the context of the culture in which we develop and live. Although psychologists have provided abundant evidence for diversity of human cognition and behaviour across cultures, the question of whether the neural correlates of human cognition are also culture-dependent is often not considered by neuroscientists. However, recent transcultural neuroimaging studies have demonstrated that one's cultural background can influence the neural activity that underlies both high- and low-level cognitive functions. The findings provide a novel approach by which to distinguish culture-sensitive from culture-invariant neural mechanisms of human cognition.

A caveat though. The authors seem to be resolutely tilted towards the view that the differences are very important, and only mention the commonalities in passing (see this [paper](#) for a counterpoint).

And I cannot help always being a bit puzzled by the fact that people seem to find so much comfort in the findings of such differences. I'm not quite sure what they bring: we know that there are behavioral (and cognitive) differences, and we know that these differences have to be reflected, in some manner, in the brain. So what's all the fuss about? To quote the abstract: "Although psychologists have provided abundant evidence for diversity of human cognition and behaviour across cultures, the question of whether the neural correlates of human cognition are also culture-dependent is often not considered by neuroscientists." Given that we have the behavioral differences, how could there not be any underlying differences in brain activation??

Likewise, when they find that the brains of expert piano players are different, with more space for the areas responsible for finger movements, are we really supposed to be surprised?

Given that we [know](#) that pretty brain images have a tendency to be persuasive for no good reason (or beyond any good reasons they may have to be), there is a danger lurking of making more of the behavioral differences simply because it's been shown that there was an underlying difference in brain activation (or shape, or structure, or whatever). Unless we're dualists, we already knew that! So if the differences in brain activation do not allow, for instance, disentangling between concurrent cognitive models, they are not only quite useless, but they can even be positively misleading.