



# The cross-cultural study of mind and behaviour: a word of caution

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## Abstract

Nobody doubts that culture plays a decisive role in understanding human forms of life. But it is unclear how this decisive role should be integrated into a comprehensive explanatory model of human behaviour that brings together naturalistic and social-scientific perspectives. Cultural difference, cultural learning, cultural determination do not mix well with the factors that are normally given full explanatory value in the more naturalistic approaches to the study of human behaviour. My purpose in this paper is to alert to some of the theoretical vulnerabilities or concerns that the cross-cultural study of mind and behaviour might entail. I classify these theoretical concerns into three, loosely defined, categories: epistemological, ontological and ethical. The first have to do with what in anthropology was once labelled as ‘butterfly collecting’. What kind of supplementary, or additional, general theoretical knowledge do we produce when we add to the research different, particularistic, culturally determined, ways of knowing? Ontological concerns refer to the underlying reality that those ways of knowing are meant to disclose. If there are so many ways of knowing the world, where is the reality to be known? Ethical concerns are those entailed in the forms of ‘othering’ that unqualified cross-cultural research is likely to produce in research participants.

**Keywords** Cognition · Cross-cultural research · Cultural difference · Cultural psychology · Ethics · Theory of mind

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## 1 Introduction

The ants studied by entomologists are probably just a little fraction of all the existing ants and even less of all those that have existed since the origin of the species. And yet none asks entomologists to extend their researches so that they shall include the whole of ‘ant’ experience. But in the study of humans the situation is radically different. Ever since the publication of Henrich et al.’s seminal paper on the ‘weirdest people in the world’ (2010), there has been an increasing awareness among behavioural scientists that no science of the human can proceed without taking into consideration the whole span of human experience. Of course, the need to include a much wider sample of population in the studies of human behaviour comes from the incontrovertible fact that humans are different, very different indeed, from each other, much more so than the members of any other species. And these pivotal differences seem to be, overwhelmingly, the inescapable consequence of cultural learning and evolution.

In this paper, I would like to explore the meaning of cultural difference for a science of human behaviour specifically concerned with human cognition. In what sense or to what extent is cultural difference relevant, or irrelevant, to such an endeavour? Nobody doubts that culture plays a decisive role in understanding the human. But it is unclear how this decisive role should be integrated into a comprehensive explanatory model. The result has been for a long time the characteristic split between the social sciences and the humanities, on the one hand, and the so-called natural sciences of human behaviour, on the other. The first have taken culture as their main object of analysis – which not always entails a sensitivity to cultural difference as such – while the latter would concern themselves with the pre- or non-cultural side. Despite the pervasiveness of this time-honoured intellectual division of labour, there have also been courageous attempts coming from both sides of the divide to build bridges, connections and synergies between the two traditions.

The problem is, however, that there is no obvious way in which this long-established acultural ethnocentrism of the naturalistic behavioural sciences could be properly dealt with and, eventually, revoked. Undoubtedly, it should entail the recruitment of non-WEIRD populations as research participants (and researchers, obviously). However, it is not just a matter of adding a bit of non-WEIRD populations, a bit of ‘culture’, into the mixture to get the appropriate blend. Cultural difference, cultural learning and cultural determination of human behaviour, do not mix well with factors that are normally given full explanatory value in the more naturalistic approaches (Salazar 2018). The purpose of this paper is to alert readers to some of the theoretical risks that this laudable enterprise might entail. I classify these theoretical risks or concerns into three, loosely defined, categories: epistemological, ontological and ethical. Epistemological concerns have to do with what in anthropology was once labelled as ‘butterfly collecting’ (Leach 1961). What kind of supplementary, or additional, general theoretical knowledge do we produce when we add to the research different, particularistic, culturally determined, ways of knowing? Ontological concerns refer to the underlying reality that those ways of knowing are meant to disclose. If there are so many ways of knowing the world, where is the reality to be known? Ethical concerns are those entailed in the forms of ‘othering’ that unqualified cross-cultural research is likely to produce in research participants.

## 2 Epistemological concerns: theories of mind

Cross-cultural research is likely to throw into relief ways of knowing the world significantly different from the way of knowing that the researchers themselves are implementing or, in one way or another, simply endorsing. This raises the question of how these different ways of knowing should be dealt with. A possible answer to this question would be to argue that different ways of knowing result from variations in basic cognitive processes. These include variation in attention and covariation detection (Nisbett and Masuda 2003), spatial reasoning (Levinson 2003; Majid et al. 2004), categorization (Atran and Medin 2008), and emotion processing (Masuda et al. 2008). Furthermore, there is neuroscience work comparing brains exposed to literacy to brains that are not (see Dehaene et al. 2015), which shows how cognitive variation can originate in particular cultural practices. This is a perfectly legitimate form of research that does not raise any epistemological concern per se. However, it is my contention that cognitive variation does not necessarily supervene upon the existence of those diverse forms of knowing.

To show how the existence of these diverse epistemologies cannot be easily, or necessarily, correlated with variation in cognitive processes, I will focus my attention on the research carried out by anthropologist Tanya Luhrmann and her associates on the cultural variation in models of the mind or theories of mind (Luhrmann 2011, 2020; Weisman and Luhrmann 2020). I do not take Luhrmann's research as representative in any way of cross-cultural research on human cognition, but simply as representative of some of the dangers – what I call 'epistemological concerns' – that this type of research might pose. Psychologists have been arguing for a long time that all humans need to have a 'theory of mind' (ToM). By this they do not refer to an explicit set of propositions about the mind but to the capacity to infer mental states from other human beings or, a fortiori, from any entity that can be defined as an agent of sorts (see Carruthers and Smith 1996), a capacity sometimes referred to as 'mentalization' (Fonagy et al. 2004). Discussions have taken place right from the beginning as to the extent to which non-human animals, particularly non-human primates, also have a ToM (Call and Tomasello 2008; Premack and Woodruff 1978). But none doubted that among humans it was a universal capacity, for only those suffering from some neuropsychological disorder, such as autism and related dysfunctions included in the Autism Spectrum Disorder, could be defined as having a defective ToM (Baron-Cohen et al. 2000). There might be differences concerning the time at which children in different cultural settings acquire a fully-fledged mentalizing capacity (Barrett et al. 2013; Lillard 1998), but nobody doubts that ToM must be a pan-human, probably pre-cultural, capability.<sup>1</sup>

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<sup>1</sup> Psychologist Cecilia Heyes has ardently defended the view according to which what she defines as 'mindreading' should be seen as the product of cultural learning and not as an innate, 'instinctual', faculty or, in any case, as a domain-general, socially developed, mental capacity and not as domain-specific cognitive module. However, her understanding of cultural learning does not seem to leave much room for diversity in the acquisition of this capability. Rather, she sees mindreading as resulting from a cultural evolutionary process that, in essence, is or should be common to all human societies (see Heyes 2018; Heyes et al. 2020).

In so far as researches that show the emergence and development of this faculty in children have been overwhelmingly conducted among WEIRD populations, one could legitimately wonder if those claims to universality were actually justified. This was Luhrmann's point of departure. She accepts that in all likelihood the capacity to infer other people's mental states is universal. However, she points out, the ToM model built by Western psychologists is not a universal model: 'the standard psychological theory of mind carries with it a series of assumptions that may be culturally particular to a Euro-American context' (Luhrmann 2011: 6). Consequently, the 'models of the mind' to be derived from it are likely to be shaped by cultural specificity. From here she contends that, if we take a much broader sample of population than what is usually the case in conventional psychological research, there is not one but six 'theories of mind' to be found worldwide: The Euro-American modern secular, the Euro-American modern supernaturalist, the opacity-of-mind theory, the transparency-of-language theory, the mind-control theory, and the perspectivist theory. And these are likely to be prominent in different places around the world: the first two in Europe and North-America, the opacity-of-mind theory in Melanesia and the South Pacific, in Central America we shall find the transparency-of-language theory, the mind-control theory is to be found throughout Asia, and the perspectivist theory would prevail among Amazonian peoples (Luhrmann 2011: 6–5).

The problem is, however, that Luhrmann's 'models' or 'theories of mind' and ToM as has been defined by developmental psychologists are not the same thing. As argued above, ToM is not properly speaking a 'theory' of the mind but a psychological faculty or ability. Luhrmann is certainly aware of that difference, and yet in her 2011 paper she presents her models of the mind as if they were particular cultural manifestations of the ToM faculty or, in any case, as something closely related to it. Clearly, the fact that all humans are supposed to have a ToM does not entail in any way that they should have a 'theory', i.e. an explicit set of propositions, about what the mind is like.<sup>2</sup> In all probability, the majority of humans do not have such a theory – the English word 'mind' cannot even be directly translated into many languages (European languages included). Therefore, the existence of different culturally constructed models of the mind in different cultures cannot be taken as a consequence of different mentalizing capacities, i.e. different ToM. Otherwise stated, if, against the claims of culturally insensitive developmental psychologists, ToM turns out not to be a universal pre-cultural, instinctive perhaps, faculty but it is culturally constituted, the existence of different cultural understandings of what the mind is cannot be taken as an index or consequence, much less a proof, of that cultural constitution.

What should we make of these different models of the mind that Luhrmann has been so adamantly disclosing and revealing to us? If it is not differences in mentalization or mindreading abilities, what do they show? And more crucially perhaps: why should anyone bother in looking at these different models? In her view, this is not the mere butterfly collecting that anthropologists are so afraid of (or prone to, sometimes). Important consequences as regards human behaviour and forms of thought can be derived from those different understandings of the mind. Specifically,

<sup>2</sup> The possible confusion between ToM and actual 'theories' of the mind has let some authors to use a different concept to refer to ToM, such as 'intentional stance' (Dennett 1987).

the perennial question in the scientific study of religion as to why some particular peoples or cultures are more religious than others might find a solution in it.

Perspectivist views on the mind enable us to understand how Amazonian peoples can attribute agency to non-human animals, and even to non-living things, supposed to be endowed with fully anthropomorphic qualities (Vilaça 2011). The opacity-of-mind theory, on the other hand, makes sense of the way Melanesians engage in social relationships without having to ‘share’ mental states (Robbins 2011). Luhrmann and her collaborators also draw on Charles Taylor’s concepts of the ‘porous’ and ‘buffered’ selves (Taylor 2007) to derive a parallel classification of theories of mind that, in their view, happens to be directly relevant to the problem of the assimilation of religious beliefs or, at least, of certain kinds of religious beliefs (Luhrmann 2020). Porous minds that are more likely to be found in non-Western settings such as Ghana (Dzokoto 2020) or Vanuatu (Smith 2020) turn out to be more amenable to entertain particular kinds of religious beliefs such as witchcraft, shamanism and spirit possession or any kind of belief that entails the sensory presence of spiritual beings. The central claim of their project, Weisman and Luhrmann proclaim (2020: 7), is ‘that people who conceptualize the mind as more “porous” tend to have more frequent and more vivid spiritual experiences than people who conceptualize the mind as more “bounded”.’

One bit of culture accounts for another bit of culture. If religious experience or religious belief is accounted for by a ‘religious-prone mind’, is this not a somewhat Panglossian argument? Some might contend that a porous or buffered mind does not logically entail any form of religiosity, so the argument is not properly Panglossian or circular. Still, its explanatory value does not seem to take us too far. It would have been different if Luhrmann’s models of the mind had been indicative of real differences in ToM. In that event, her ‘anthropological theory of mind’ could have been used to debunk the ethnocentric psychological claim that ToM is really a pan-human, pre-cultural, faculty. But that is very far from being the case. As stated, ToM does not entail the existence of actual ‘theories’ of the mind. So what is the use of piling up different culturally determinate theories about what the mind is and how it works? Humans entertain different theories about the mind and these seem to be somewhat related with aspects of their behaviour and beliefs. Admittedly, there might be nothing circular or tautological in explaining one bit of culture by another bit of culture. Many social scientists have been doing just that for a very long time;<sup>3</sup> besides, relevant insights on the causes of human behaviour can be derived from there. For example, different folk conceptions of the mind could result in life and death decisions between murder or manslaughter verdicts in courts of law, or whether someone who experiences a misfortune is believed to have been a victim of witchcraft or of just an accident. I concede that these are important implications; but the point I wish to make is quite different and somewhat more far-reaching.

There is another way in which ethnographic research can differ from the futile butterfly collecting. Luhrmann and her colleagues could have been looking for patterns in those models of the mind, in the same way as, for instance, anthropologist

<sup>3</sup> Those who were faithful to the old Durkheimian dictum according to which social facts should be explained by other social facts.

were able to find patterns in the way in which kinship relationships are organized in different societies all over the world – forming kinship *systems* – or, as I have already pointed out, and more appropriately perhaps, in the same way as cognitive scientists have been searching for patterns in different ways of knowing as indicative of variation in basic cognitive processes, which remain invisible until those different ways of knowing are properly documented – this is a key point. Maybe here we can find the long-term objective of Luhrmann’s project. But so far, the models that she has postulated are still closer to ‘butterfly’ end of the spectrum than to the ‘system’ end.

To sum up, the danger of butterfly collecting, which much cross-cultural research on human cognition is bound to come close to, can be exorcized if that cross-cultural research does really question the alleged universality of forms of human behaviour and thought that so far had been observed among WEIRD populations, or, in addition or alternatively to it, if cross-cultural research makes manifest the existence of universal patterns of human behaviour and thought that could never be properly ascertained when research was done exclusively on WEIRD populations. For example, as Norenzayan and Heine (2005) have cogently argued, there are different levels of ‘universals’ (existential, functional and accessibility universals), likely to generate or be associated with different forms of cultural variation, which only an exhaustive and detailed cross-cultural research can reveal. Let me emphasise that much of the studies carried out by comparative cognitive psychologists and anthropologists falls neatly into this class. Furthermore, this does not entail that cross-cultural research cannot be meaningful by itself (i.e. irrespective of its association with exogenous theoretical aims). The emerging field of cultural evolutionary studies can be taken as a case in point, with its sophisticated mathematical models, large empirical projects, and unifying explanatory frameworks that account for stability, diversity and change in language, social complexity, religion, and technology (see Richerson and Christiansen 2013).

However, what I want to say is that it is not a necessary entailment of the mere inclusion of diverse epistemologies into a research on human cognition, as I believe Luhrmann’s work clearly shows.

### 3 Ontological concerns: what is real?

What about the real world that those ways of knowing are supposed to refer to? Note that the ‘reality’ that presumably underlies the different ways of knowing that we have been looking at is neither cast into doubt nor thrown into relief. Of course, it could very well be the case that that reality does not exist. This is what happens when we are confronted with ‘pure’ social constructs. The institution of marriage can be taken as a good example. There is no reality of marriage that underlies the different ideas or theories about marriage that people might entertain in different societies. And this is so because marriage is nothing *but* those sets of ideas and theories – and the kinds of behaviours that those ideas give rise to, or are associated with; but in any case ideas and behaviours are not two different things but components of one single entity.

What about minds? Are these pure social constructs or do they exist irrespective of the models, theories or ideas that people might have about them? The anthropological analysis of kinship systems provides us with an interesting counter-example. Underneath all those kinship systems as social constructs there was the ‘reality’ of kinship biogenetic relationships, which those kinship systems referred to, or were associated with, in one way or another (though many anthropologists obstinately denied that). Do those models of the mind similarly refer to some underlying ‘real’ mind? Or maybe there is only some kind of family resemblance between all of them and, consequently, they have nothing, or nothing particularly relevant, in common?

It has become fashionable in certain quarters of cutting-edge anthropological theorising to deny that there is such a thing as a ‘real’ world underneath other people’s worldviews or cultural formations. It is as if what has just been claimed about pure social constructs – that they do not refer to or signify an underlying reality but they themselves are the reality they refer to or signify – could be extended to everything else: bodies, minds, spirits, gods, animals, humans, landscapes... Nothing exists irrespective of the way in which particular peoples determine that existence. This is not the place to criticise this trendy approach in academic anthropology (see Holbraad and Pedersen 2017), a sort of quantum physics many-worlds or multiverse version for the humanities that, according to some critics, might not gain many adepts outside departments of social and cultural anthropology. But it must be conceded that it certainly points to a contentious theoretical issue brought about by cross-cultural research specifically concerned with human cognition: what sort of reality or ‘ontology’ underlies, or is referred to, by the different ways of knowing that that research brings to the open?

Nineteenth century evolutionist anthropologist did not have much trouble in ascertaining the unreality of other people’s worldviews, specifically the so-called ‘savage’ or ‘primitive’ worldviews, which were seen as resulting from their characteristic illiteracy or simply ignorance. By contrast, for much of the twentieth century, especially in its second half, a sort of ontological agnosticism became the dominant position in the profession, ontological agnosticism that verged towards relativism in its most radical manifestations (see Hollis and Lukes 1982). Thus, cross-cultural research on human cognition was not supposed to probe on the ignorance of the primitives in comparison with the knowledgeable moderns. Far from it, its purpose should be merely to make sense, according to different theoretical strategies, of the beliefs about the world prevalent in different societies, without adjudicating on the truth or falsity of those beliefs.

But is this ontological agnosticism really possible? What kind of truth, if any, can be found in other people’s beliefs and what can, or should, we do with it? Are ethnocentrism and relativism the only alternatives? Psychologists Bethany Ojalehto and Douglas Medin and anthropologist Rebecca Seligman have carried out an interesting, if controversial, comparative research on agency attribution among US students and the Ngöbe indigenous community of Panama (Ojalehto, Medin and Seligman 2020) that brings to the fore in a very explicit way the issue of the value of alien ontologies. According to Ojalehto and her associates, US college students attribute agency on the basis of presumed mental states. This is what they label ‘folk-psychology’. For the Ngöbe, by contrast, mental states do not determine agency but it originates

in what they call ‘folk-communication’ (see also Bird-David 1999). Agents are not those who have ‘mental states’, but those with whom one can establish some form of communication.

Ngöbe informants predominantly explained their agency attributions by referring to observable interactions and relationships, consistent with interpreting agency as a communicative capacity. Many explanations interpreted agency as a direct capacity for relating (e.g., “The sun communicates with water in the moment of rising”) and cited observable interactions as a criterion for inferring agency (e.g., “Plants can think because they grow toward sunlight”). (Ojalehto et al. 2020: 10)

Ngöbe attributions of agency are not very different from US students as regards humans and animals, but they are more likely to attribute agency to plants and abiotic kinds than US students, and less likely to attribute it to complex artefacts (computers, etc.) than US students. This goes hand in hand with their attribution of animacy. Ngöbe are more likely to think that the sun and the ocean are ‘alive’, than US students, though they are not unanimous in that (Ojalehto et al. 2020: 11).

But agency, and animacy by implication, Ojalehto and her associates contend, is a property of the relationship not a property of the ‘mind’, as it is normally understood by Westerners. From here they put forward what they call an ‘ecocentric’ view of animism instead of the conventional anthropocentric viewpoint, according to which animism consists in seeing non-human things as humans or human like (Guthrie 1993). Ojalehto and her collaborators flatly oppose the approach to animism prevalent in cognitive anthropology, and in what is known as the cognitive science of religion, for being Western biased. Animism should not be seen from the point of view of folk-psychology (attribution of mental states to other, non-human or non-living, entities), but from the point of view of what they call ‘folk-communication’: ‘folkcommunication provides a broad framework for conceptualizing agency as a capacity to relate with others and the environment, linked to inferences about life and vitality’ (Ojalehto et al. 2020: 17).

Ojalehto and her collaborators accept that the Ngöbe have ‘supernatural’ and counterintuitive beliefs, but they claim that animism has more to do with this ecocentric view of communication than with the supernatural or counterintuitive. For instance, some Westerners might entertain the supernatural or counterintuitive belief in the existence of an immortal soul. This should be seen as a consequence or by-product of their belief in the existence of minds or mental states as separate from their bodies (which is neither a counterintuitive nor supernatural belief). Similarly, the Ngöbe may believe that human souls can disguise themselves in animal bodies, or that plants have souls, but this does not originate in a misguided anthropomorphism but in their ecocentric general viewpoint:

The essential difference between Ngöbe and US stances on agency lies in their conceptual prototypes (using humans rather than ecological actors as the reference point for agency) and grounding principles (psychology or communication) rather than a difference in anthropomorphism, counterintuitive-ness, scientific compatibility, or supernaturalism (Ojalehto et al. 2020: 19).

Furthermore, they also claim that this way of relating with the world might be more in accordance with recent scientific discoveries that regard plant behaviour as ‘agential’ in some way. In other words, Ngöbe ontologies are not only as real as West-



ern ones but they could even be more 'real', in so far as they come closer to scientific understandings of certain life processes than Western folk models.

What can we make of this different way of understanding agency and what are its implications for a general theory of human social cognition? In a way, one could argue that both anthropomorphism and ecocentrism are equally fallacious ways of agency attribution. If we go back to our discussion of ToM in the previous section, we may infer that a distinction should be drawn between the folk-psychology to be derived from this psychological capacity (this individual, object, animal, etc. have a 'mind', etc.) and the capacity in itself. Clearly, the first is culturally constrained in a way in which the second is not. I am not arguing that ToM should be seen as in any way innate or instinctive. It could very well be the case, as Cecilia Heyes has claimed (see note 1), that it all originates in some form of cultural learning. But there seems to be a noticeable difference in the way humans acquire the capacity to attribute agency or minds and the definition of certain entities as objects of that attribution.

If all this is accepted, we may conclude (tentatively) that not all agency attributions can be placed on an equal footing and, by implication, that not all those attributions are equally valid in some ontological sense. Do plants have 'agency', as Ojaletho and her colleagues were somehow hinting at? In what sense is this a legitimate question to ask in a research on cross-cultural cognition? One may argue that this question can only be answered once philosophers and/or neuroscientists agree upon a definition of what agency and, by implication, mind are. This should be a universally valid definition that should not be contingent upon any culturally over-determined folk-psychology or folk-communication, as universally valid as the definition of quantum particles or electromagnetic fields. However, from another point of view, it could be argued as well that even though different cultures, and different individuals within particular cultures, might see minds in very different entities, agency attribution, ToM or mindreading is a capacity that all humans have, that all humans are able to develop (with the exception of autistic individuals) thanks to a combination of naturally selected innate proclivities (be these domain-general or domain-specific) and some form of social (or cultural) learning, and that non-human animals are also likely to possess in different degrees (Dawkins and Krebs 1984).

Consequently, it is not only that plants, oceans and heavenly bodies do not have minds, and the Ngöbe would probably agree with this, but there is no way in which communication can be entertained with these inanimate entities, despite Ngöbe's views to the contrary. In other words, the Ngöbe make a *mistake* when they attribute agency to those entities, in the same way as Westerners (and many others) were mistaken when they thought that the sun went around the earth, or that acquired characteristics could be inherited, or when some of them think that computers have minds and consciousness. Someone might be tempted to say that the identification of such mistakes is not the job of cross-cultural research on human cognition, that we should be happy with the identification and description of other minds, other worlds or other worldviews, without adjudicating on the veracity of their truth-claims, as late twentieth-century anthropologists used to do. Perhaps this adjudication is not the main job of cross-cultural research in so far as we do not undertake it in the same way as we do research in the history of science, or in the different alternative explanations that

different scientific theories might provide on the same phenomena at any one time. However, I do not see how these ontological issues can be satisfactorily avoided.

We can address these issues by looking at two different ways in which alien ways of knowing and being may be seen: either as *explanans* or as *explanandum*. If we consider them as explanans, i.e. as equally valid ways of accounting for the world, specifically when we include human behaviour and thinking within this ‘world’, we should clarify the extent to which the documentation of these alternate ontologies improves upon our own way of explaining, and being in, this very same world. By contrast, if we take them as explanandum, our aim should be to account for the fact that, being the world the way it is (according to, say, accepted scientific descriptions of it), how could anyone see it, and be in it, in this or that particular way? These two ways of understanding cross-cultural research do not have to be mutually exclusive, they can even complement and enrich each other if we take them both into consideration, as long as they are clearly demarcated.

#### 4 Ethical concerns: the cultural psychology of alien human beings

Let me clarify right from the beginning that my purpose in this section is not to decide upon the moral value of cross-cultural research as such, but only to throw into relief some of its possible ethical implications. The problem, as far as I can see, is not so much that this kind of research may produce unethical results (which it certainly can), but that researchers themselves very often seem to be unaware of the (un)ethical implications of their work. Much ink has already been spilled on the excessive politicisation of the social sciences and the humanities of the late twentieth century. Many would say that that politicisation was responsible for a conspicuous lack of scientific rigour and even of free intellectual debate (see Pluckrose et al. 2018). But from another point of view, setting partisan hostilities apart, it is hard to eschew the ethical reverberations that any research on human behaviour is likely to generate. The question is certainly not to turn this kind of research into a political manifesto of sorts. But it is important to be aware of, at least, the moral significance generated by research on human beings in general and, specifically, cross-cultural research (cf. Broesch et al. 2020).

A priori, one would have thought that this kind of research has a sort of inherent moral value in so far as it has the charitable aim of making known and comprehensible different ways of life and ways of thinking. But underneath this meritorious objective there is a somewhat subtler problem that is very often glossed over or simply ignored. This has to do with the whole delicate issue of alienation or ‘othering’. What do we exactly mean when we talk about differences between human beings? What is it for someone to be classified as ‘different’? It is by no means obvious the deep political and moral significance that such classifications bring with them. The old times of racial essentialization and discriminations may be gone and for good in the scientific study of human behaviour. However, sorting out humans in terms of ‘cultures’, which turn out to be almost as hermetic and definitive as the old races were supposed to be, might end up producing very similar effects from an ethical and political point of view. I am positively sure, on the other hand, that the overwhelming

majority of cross-cultural researchers would resolutely abhor any racist or supremacist implication that might be associated with their work. All the more reason, therefore, to show and be explicit about what those political and moral implications could possibly be. Again, what I want to point out are the ethical risks that this type of research might entail, not the unethical corollaries that this research might have actually brought about in a representative sample.

First, we should draw a distinction between, on the one hand, the simplistic use of the concept of culture and, on the other, the unethical implications to be derived from it. Anthropologists have been for a long time warning against the unsophisticated concept of culture that is quite often used in cross-cultural research carried out (mainly) by non-anthropologists. Two apparently different concepts of culture became visible in those researches. One is the culture-nation-state equivalence, according to which human beings are supposed to have ‘cultures’ practically in the same way as they have passports or identity cards. The other is the crude dichotomization between West-and-the-rest culture areas and the somewhat loose and sketchy dualities with which it is characterised, such as individualism/collectivism, egalitarianism/hierarchy, rationality/irrationality, etc. None of these views of culture endures any serious scientific scrutiny and they have little to do with the way the concept of culture is being used by the majority of anthropologists. In both of them, cultures are seen as ‘constraints’ that predispose or push individuals towards certain forms of behaviour, almost against their will, and practically in the same way as in olden times the alleged racial instincts were supposed to make individuals conduct themselves in particular ways. There is an epistemological, and to some extent empirical, question behind this misuse of the culture concept. But there is also an ethical question closely associated with it, as the reiterative parallelism between race and culture – i.e. between racism and cultural fundamentalism (Stolke 1995) – clearly suggests.

Edward Said’s wise words in what surely is his most famous text happen to be particularly perceptive in this regard:

Can one divide human reality, as indeed human reality seems to be genuinely divided, into clearly different cultures, histories, traditions, societies, even races, and survive the consequences humanly? By surviving the consequences humanly, I mean to ask whether there is any way of avoiding the hostility expressed by the division, say, of men into “us” (Westerners) and “they” (Orientals). For such divisions are generalities whose use historically and actually has been to press the importance of the distinction between some men and some other men, usually towards not especially admirable ends. (Said 1979: 45)

Said was warning against the dangers of this dreadful form of intellectual othering brought about by the Orientalist perspective in the study of non-Western peoples, which turned out to be the pseudo-scientific justification for colonialism and exploitation – very often, as Said took pains to show, wrapped up with patronizing ideologies of respect or recognition of alleged cultural difference. Following the trail opened up by Said’s observations, the example I would like to discuss illustrates quite accurately, it seems to me, how an unflinching emphasis on cultural alterity can have, at best, a rather ambivalent moral effect. This is the research carried out by American anthropologist Richard Shweder and his associates on the genital mutilation of young girls in some African countries (Ahmadu 2017; Shweder 2003). This is

not a cross-cultural research on human cognition *sensu stricto*, but it is interestingly defined by Shweder and his collaborators as part of the discipline of ‘cultural psychology’, whose purpose is the study of the ways in which basic human emotions and psychological dispositions are experienced differently in different cultural settings.

Very tellingly, one of the main objectives of this school of thought is to debunk the time-honoured principle in anthropology of the so-called ‘psychic unity of mankind’ (Menon and Cassaniti 2017: 11–12). Nineteenth century evolutionist anthropologists can hardly be taken as a model of political and moral correctness by our current standards. But there was one thing that they all seemed to agree with: human differences should be accounted for in terms of culture, by which they meant, not the existence of different ‘cultures’ – for the term culture was hardly ever used in the plural (Stocking 1982) – but the different amounts of culture (only one and the same for all mankind) that moderns and primitives did possess at any one time. But under no circumstances those differences should be explained as resulting from different psychological characteristics, from different ‘psyches’, in the way in which those terms were understood at that time, namely, as referring to more or less instinctive, innate, biologically determined unchangeable aspects of human thought and behaviour. This was the principle of the psychic unity of mankind, and this is the principle that Shweder and his collaborators wish to call into question.

The neat distinction between culture and psyche, upon which the principle of the psychic unity of mankind was predicated, can no longer be sustained, Shweder claims, for in all human beings culture and psychology are irretrievably enmeshed with each other. Attempts at extracting some sort of psychological core out of layers of cultural wrapping are surely bound to fail. This does not sound like a particularly controversial statement, since in all probability the majority of anthropologists and psychologist would agree with it, due qualifications notwithstanding. But the consequences to be derived from it turn out to be much more contentious.

If culture and psychology are more of a unitary entity or phenomenon than two separate domains, that could be either because humans are more *culturally* similar to each other than previously thought or, conversely, because humans are more *psychologically* different from each other, again, than previously thought. It is the second alternative that which Shweder favours, for it is the very idea of a ‘psychic unity’ that himself and his school of anthropology want to discredit. Culture does not only make us think and behave differently, but it also makes us feel, perceive and experience the world differently, in the deepest psychological sense that the words feeling, perception and experience might have. This is a very important matter with serious implications in several areas but, specifically, ethical implications. What happens when cultural difference becomes ‘psychological’ difference? Or when both differences become so entangled with each other that we can hardly tell them apart? Note that it is not just culture and psychology that become enmeshed, it is cultural and psychological *difference*. Nowhere can the ethical implications of this reformulation of human differences be more clearly seen than in the highly politically sensitive and polemical issue of female genital mutilation (FGM).

Western feminists (the main target of Shweder’s attack) have for a long time seen FGM as a paradigmatic practice of patriarchy and women’s sexual oppression. Nowhere could we find a more dreadful and humiliating manifestation of men’s

power over women's reproductive capacities and, by implication, over their sexuality. Very few people in the West would dare to support nor even tolerate such a repulsive custom. However, what about the African women themselves who go through it? Do they see and experience it in the same way as those conscientious Western observers? Apparently, not. That is an important question to be taken into consideration when we adjudicate on the moral worth of particular conducts: do those who undergo them freely accept their condition? Do they look at them in the same way as we do? There is no golden rule that may tell us when particular moral principles are likely to be universally endorsed, no matter how obvious and undeniable they might seem to some. However, it could be cogently argued that moral judgements are universal by definition (not by observation) and, consequently, they cannot be contingent on any one's views, not even on the views of those who suffer the consequences of the behaviour that is being judged. In other words, someone who accepts being tortured does not make torture any more legitimate. Otherwise, moral statements would become particularistic, they would depend on the opinions of particular individuals or communities, and that is a contradiction in terms – what is morally repulsive in one place has to be morally repulsive everywhere. This is the position known in the literature as 'moral universalism'. Certainly, although this is the position that I favour in this paper, I am aware that not all moral philosophers endorse this view (i.e. Harman and Thomson 1996; Harman 2012).

A second question that needs to be dealt with is the actual harm that the behaviour under consideration is bound to cause. This is clearly an empirical question. Shweder brings a considerable amount of evidence to show that FGM as it is practised in the majority of African societies is quite harmless from the biological point of view. It does not affect the health of the women who endure it, or it does not affect it more than any other treatment that they might go through in the ordinary conditions (poor hygiene, etc.) in which most of them live, and, more tellingly, it does not prevent them from enjoying sexual pleasure. The evidence seems to be, at best, inconclusive on both sides. But let us accept, for the sake of the argument, that the practice is less harmful than what Western feminists and other 'imperial liberals', as Shweder disparagingly labels them, have taken it to be. Should we accept cultural difference as a justification for practices that (perhaps unjustifiably) look abhorrent to us?

Shweder falls short of defending FGM exclusively, or even mainly, on those grounds. He claims that, in the end, it is more a matter of individual rights, of the right that all adults should have of causing major alterations to their bodies. Parents should be allowed to perform minor alterations to their children's genitals without their consent – he brings in the example of male circumcision among the Jews – as long as these turn out to be inconsequential with regard to their effects on basic biological functioning. And even more consequential changes into one's body should be also permitted if the person undergoing them is an adult and gives his or her free consent (Shweder 2003: 204–205). In a similar fashion, the Sierra-Leonean-American anthropologist Fuambai Ahmadu, who freely decided to undertake FGM, vilifies Western feminists for not allowing her to determine for herself 'as an American and as a Kono woman what is and what is not a patriarchal practice and what I can or cannot do with my own body' (Ahmadu 2017: 231).

Is that all? Is it just a matter of having the right to do with one's body whatever one wants? In contrast with the free decision that Ahmadu herself made when she decided to travel to Sierra Leona to have FGM, for the overwhelming majority of African women FGM is not the result of an individual decision taken by some individuals who wish to modify their bodies in a particular way. It is a *social* rule, part of the culture of particular societies and, as such, it puts pressure on the members of those societies towards its compliance. It could be the case that women in those societies have the possibility of refusing to undergo FGM, though that does not seem to be the situation they find themselves. But even if it were, their condition would still be notably different from that of someone who freely decides to alter his or her body in the absence of any social pressure or cultural prescription that obliges him or her to do so.

The fact that we are dealing with a cultural prescription, not with an individual decision, makes the issue of cultural difference almost inescapable. A particular practice that looks abhorrent 'out of context', might not look so bad 'in context'. But how could that be? How can 'context' change the moral value of particular actions? Only if that context offsets, eclipses, obfuscates or simply pushes to the background in one way or another the common humanity on the basis of which we can claim the existence of a universal morality. Of course, this is precisely what some moral relativists would be inclined to do since for them there is no such a thing as a universal morality. But that might not be the key issue as long as they are willing to accept the existence of 'moral universals'.<sup>4</sup>

This is precisely the nucleus of what I have defined as the ethical danger that cross-cultural research may entail. Needless to say, this does not mean that cross-cultural research should not be undertaken, or should only be undertaken under rigid ethical guidelines – more than those that apply to any other kind of research on humans. Let me emphasise on this particular point to dispel any possible misunderstanding. We need cross-cultural research, both for scientific and ethical reasons. My argument is that researchers should be fully cognizant of the ethical implications that this type of research on humans is likely to bring with it. Specifically, when cultural difference is so radically postulated that it becomes for all intents and purposes practically coextensive with the old and much discredited, and justly so, racial differences. It is unclear why those who are so eager in their rejection of the latter can be so tolerant and permissive in their uncritical acceptance of the former.

## 5 Conclusions

As Barrett has recently pointed out (2020: 621), it is hard to understand how a survey of top developmental psychology journals from 2006 to 2010 found that over 90% of research participants belonged to WEIRD populations. It is hard to understand, needless to say, if we take as the object of developmental psychology the study of

<sup>4</sup> 'Moral relativism denies that there are nonrelational facts about what is right or wrong, although there might be certain universal facts about moralities of a certain sort in the way there are linguistic universals' (Harman 2012: 11).

the whole human species, and not just its ‘weirdest’ minority. And yet general claims about human behaviour appear prominently in the papers published in those journals despite the fact that more than 85% of the current world population (much more, if we take a broad historical perspective) are conspicuously absent from their researches.<sup>5</sup>

In this paper, I have tried to underscore the sense in which cross-cultural research on human behaviour and cognition might not always be relevant to a genuinely global science of the human. Let me clarify that I am not in any way proposing that monocultural research with WEIRD samples is a viable alternative for psychology. There cannot be any justification for this short-sighted ethnocentrism. However, the problem is that merely adding variety to our samples not only does not actually address the ethnocentric bias in a scientifically sound way, but it conjures up some theoretical dangers or risks, and this is what I have tried to throw into relief in this paper. From the epistemological point of view, the mere accumulation of ways of knowing the world, most of them clearly at odds with the standards of scientific enquiry accepted by researchers themselves, might lead to futile butterfly collecting unless any of the two following conditions are met. Either alternative ways of knowing are redolent of ways of mental functioning that cannot be visualised without taking them into consideration; or underneath the recorded diversity of ways of knowing patterns may be discerned that can equally disclose otherwise hidden, yet universal, features of human cognition. At the ontological level, on the other hand, there always remains the question of the ‘real’ world that those ways of knowing refer to. Epistemology or ways of knowing becomes ontology, or ways of being, when we look at things ‘from the native’s point of view’. But should we put all the truth claims of those different ontologies at the same level? And more crucially, what additional knowledge are we likely to gain if we proceed in like manner? If we accept as a premise that research in the human sciences, and in anthropology specifically, is at bottom epistemological rather than ontological – we are concerned with ways of knowing (and behaving in) the world rather than with what that world actually is like – then the ontology has to be held steady and, consequently, not all truth claims should be seen as equally valid, and the demand for ‘ontological self-determination’ (Viveiros de Castro 2009) of indigenous peoples becomes an empty motto.

Finally, as it is the case for all human sciences, ethical implications of cross-cultural research cannot be ignored nor simply set aside. There seems to be an uneasy trade-off between the necessary encounter with human cultural diversity and the common human nature, or humanity tout court, that presumably lies underneath. It is unclear what the alleged ‘radical alterity’ of some human ways of life might entail if all humans ought to be treated by the same ethical standards. Can an alleged psychological diversity be taken as a justification for actions that would be seen as utterly unjustifiable among ‘psychological equals’? If this cannot be accepted, it might be worth wondering, or rethinking, what the very notion of psychological diversity could possibly mean, let alone the diversity of ‘human natures’, so reminiscent of ominous racist essentialisms. The close association of cross cultural research on cognitive variation with the search for psychological universals (Norenzayan and Heine

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<sup>5</sup> It is even harder to understand it when we realise that the situation has not changed much in the last few years (see Apicella et al. 2020: 322).

2005), or the emerging field of cultural evolutionary theory, which brings together a concern with cultural diversity with an emphasis on the shared evolutionary heritage of all mankind (Henrich 2015; Richerdson and Boyd 2005), they are all steps in the right direction.

All in all, these are some of the issues that haunt cross-cultural research since its inception. As the human sciences move towards ‘population thinking’ and take the full spectrum of human diversity as their object of knowledge, we have to think about the ways in which researchers should conduct and disseminate their work to the general public without falling into some of the traps and dilemmas that are discussed in this paper. But the purpose of this paper was not to propose a set of recipes for how to deal with those issues. The fact that all of them are controversial and are unlikely to have a clear-cut response does not mean that they do not deserve a careful consideration.

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## Compliance with ethical standards

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## References

- Ahmadu, Fuambai. 2017. Equality, not special protection: Multiculturalism, feminism, and female circumcision in Western liberal democracies. In *Universalism without uniformity. Explorations in Mind and Culture*, eds. J. L. Cassaniti, and U. Mennon, 214–236. Chicago: University of Chicago Press.
- Apicella, Coren, Ara Norenzayan, and Joseph Henrich. 2020. Beyond WEIRD: A review of the last decade and a look ahead to the global laboratory of the future. *Evolution and Human Behavior* 41: 319–329.
- Baron-Cohen, S., H. Tager-flusberg, and D. J. Cohen. 2000. *Understanding other Minds: Perspectives from Developmental Cognitive Neuroscience*. Oxford: Oxford University.
- Barrett, H. C. 2020. Towards a Cognitive Science of the Human: Cross-Cultural Approaches and Their Urgency. *Trends in Cognitive Sciences* (24) 8: 620–638.
- Barrett, H. C., T. Broesch, R. M. Scott, Z. He, R. Baillargeon, D. Wu, M. Bolz, J. Henrich, P. Setoh, J. Wang, and S. Laurence. 2013. Early false-belief understanding in traditional non-Western societies. *Proceedings of the Royal Society B* 280: 20122654.



- Bird-David, N. 1999. Animism revisited. Personhood, environment and relational epistemology. *Current Anthropology* 40: S67–S91.
- Broesch, T., et al. 2020. Navigating cross-cultural research: methodological and ethical considerations. *Proc. R. Soc. B* 287: 20201245.
- Call, Josep and Michael Tomasello. 2008. Does the chimpanzee have a theory of mind? 30 years later. *Trends in Cognitive Sciences* 12 (5): 187–192.
- Carruthers, P., and P. K. Smith, eds. 1996. *Theories of Theories of Mind*. Cambridge: Cambridge University Press.
- Cassaniti, Julia, and Usha Menon, eds. 2017. *Universalism without Uniformity. Explorations in mind and culture*. Chicago: University of Chicago Press.
- Dawkins, R., and J. R. Krebs. 1984. Animal signals: Mindreading and manipulation. In *behavioural ecology: an evolutionary approach*, eds. J. R. Krebs, and N. B. Davies, 380–402. Oxford: Blackwell Scientific Publications.
- Dehaene, S., L. Cohen, J. Morais, and R. Kolinsky. 2015. Illiterate to literate: behavioural and cerebral changes induced by reading acquisition. *Nature Reviews* 16: 234–244.
- Dennett, Daniel. 1987. *The intentional stance*. MIT Press.
- Dzokoto, V. A. 2020. *Adwenhoasem: An Akan theory of mind*. Journal of the Royal Anthropological Institute (N.S.) 26: 77–94.
- Fonagy, P., G. Gergely, E. Jurist, and M. Target. 2004. *Affect regulation, mentalization, and the development of the self*. London: Karnack (Books) Ltd.
- Guthrie, S. 1993. *Faces in the clouds. A new theory of religion*. New York: Oxford University Press.
- Harman, G., and J. Thomson. 1996. *Moral relativism and moral objectivity*. Oxford: Blackwell Publishers Inc.
- Harman, G. 2012. Moral relativism explained. Downloaded from [https://www.princeton.edu/~harman/Papers/Moral\\_Relativism.pdf](https://www.princeton.edu/~harman/Papers/Moral_Relativism.pdf).
- Henrich, J. 2015. *The secret of our success: how culture is driving human evolution, domesticating our species, and making us smarter*. Princeton: Princeton University Press.
- Henrich, J., S. J. Heine, and A. Norenzayan. 2010. The weirdest people in the world? *Behavioral and Brain Sciences* 33 (2–3): 61–83.
- Heyes, C. 2018. *Cognitive gadgets: The cultural evolution of thinking*. Harvard University Press.
- Heyes, C., D. Bang, N. Shea, C. D. Firth, and S. M. Fleming. 2020. Knowing ourselves together: The cultural origins of metacognition. *Trends in Cognitive Sciences* (24) 8: 349–362.
- Holbraad, M., and M. A. Pedersen. 2017. *The ontological turn: An anthropological exposition*. Cambridge: Cambridge University Press.
- Hollis, M., and S. Lukes, eds. 1982. *Rationality and relativism*. Oxford: Blackwell Publishers.
- Leach, E. 1961. *Rethinking anthropology*. London: Routledge.
- Levinson, S. C. 2003. *Space in language and cognition*. Cambridge: Cambridge University Press.
- Lillard, A. 1998. Ethnopsychologies: Cultural Variations in Theory of Mind. *Psychological Bulletin* 123 (1): 3–32.
- Luhrmann, T. 2011. Toward an anthropological theory of mind. *Suomen Antropologi: Journal of the Finnish Anthropological Society* 36 (4): 5–13.
- Luhrmann, T. 2020. Thinking about thinking: the mind's porosity and the presence of the gods. Journal of the Royal Anthropological Institute (N.S.) 26 (S1): 1–15.
- Majid, A., M. Bowerman, S. Kita, D. H. M. Haun, and S. C. Levinson. 2004. Can language restructure cognition. The case for space. *Trends in Cognitive Sciences* 8 (3): 108–114.
- Menon, U., and J. L. Cassaniti. 2017. Universalism without uniformity. In *Universalism without uniformity. Explorations in mind and culture*, eds. J. L. Cassaniti and U. Menon, 1–20. Chicago: University of Chicago Press.
- Nisbett, R. E., and T. Masuda. 2003. Culture and point of view. *PNAS* 100 (19): 11163–11170.
- Norenzayan, A., and S. J. Heine. 2005. Psychological universals: what are they and how can we know? *Psychological Bulletin* 131 (5): 763–784.
- Ojaaletho mays, B., R. Seligman, and D. L. Medin. 2020. Cognition beyond the human: Cognitive psychology and the New Animism. *Ethos*: 1–24.
- Pluckrose, H., J. A. Lindsay, and P. Boghossian. 2018. Academic grievance studies and the corruption of scholarship. *Areo*. <https://areomagazine.com/2018/10/02/academic-grievance-studies-and-the-corruption-of-scholarship/>.
- Premack, D., and G. Woodruff. 1978. Does the chimpanzee have a theory of mind? *Behavioral and Brain Sciences* 1: 515–526.

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- Richerdsen, R., and P. Boyd. 2005. *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.
- Richerson, P., and M. Christiansen. 2013. *Cultural evolution: Society, technology, language, and religion*. Cambridge, MA: MIT Press.
- Said, E. 1979. *Orientalism*. New York: Vintage Books.
- Salazar, C. 2018. *Explaining human diversity: Cultures, minds, evolution*. London: Routledge.
- Shweder, R. 2003. *Why do men barbecue? Recipes for cultural psychology*. Harvard University Press.
- Smith, R. E. 2020. Empowered imagination and mental vulnerability: local theory of mind and spiritual experience in Vanuatu. *Journal of the Royal Anthropological Institute (N.S.)*, 26 (S1): 1–17.
- Stocking, G. W. 1982. *Race, culture, and evolution. Essays in the history of anthropology*. Chicago: University of Chicago Press.
- Stolke, V. 1995. Talking culture. New boundaries, new rhetorics of exclusion in Europe. *Current Anthropology* 36 (1): 1–24.
- Taylor, C. 2007. *A secular age*. Cambridge, Mass.: Harvard University Press.
- Viveiros de Castro, E. 2009. *Métaphysiques cannibales*. Paris: Presses Universitaires de France.
- Weisman, K., and T. Luhmann. 2020. What anthropologists can learn from psychologists, and the other way around. *Journal of the Royal Anthropological Institute (N.S.)*, 26 (S1): 1–17.

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