Nicolas Baumard & Dan Sperber (2010)

Weird people, yes, but also weird experiments (Behavioral and Brain Sciences. 33, 80-81.)

(Commentary on: Joseph Henrich, Steven J. Heine, Ara Norenzayan (2010) The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61–135)

Abstract: While we agree that the cultural imbalance in the recruitment of participants in psychology experiments is highly detrimental, we emphasize the need to complement this criticism with a warning about the "weirdness" of some cross-cultural studies showing seemingly deep cultural differences. We take the example of economic games and suggest that the variety of results observed in these games may not be due to deep psychological differences per se, but rather due to different interpretations of the situation.

Henrich et al.'s article fleshes out in a very useful and timely manner comments often heard but rarely published about the extraordinary cultural imbalance in the recruitment of participants in psychology experiments and the doubt this casts on generalization of findings from these "weird" samples to humans in general. The authors mention that one of the concerns they have met in defending their views has been of a methodological nature: "the observed variation across populations may be due to various methodological artifacts that arise from translating experiments across contexts" (sect. 7.2, para. 1). Here we want to express a less sweeping methodological concern. While accepting the general conclusions and recommendations of the article, we believe they should be complemented with a warning about the "weirdness" of some experimental designs that have been used across cultures and seem to show deep cultural differences. In fact, they may just show quite different interpretations of the experimental situation by the participants. This is not to deny, of course, that these differences in interpretations are themselves both psychological and cultural and are worth studying in their own right. In fact, unless one pays attention to them, it unclear what the experimental evidence is really about.

Let us illustrate our point with the case of economic games (discussed in sections 3.2, 4.1, and 6.1 of the target article). In these experiments, people are given a sum of money for free (which never happens in the real life) and have to share it with someone about whom they have no information (which also never happens in real life). Many researchers, including one of the article's authors (see Henrich et al. 2005), have pointed out that cultural variations in economic games may have more to do with methodological problems than with actual cultural differences (Ensminger 2002; Heintz 2005; Lesorogol 2007). In particular, participants in these games have no information about the rights of each player over the stake and are asked to make a "blind" decision. But who owns the money? Is the money a gift? Is the money a payment in exchange for my participation? Who is the other participant? Is he or she someone I know? Does he or she have rights over the money? And so on.

This leaves open the possibility that behavioural differences observed in economic games are not due to deep psychological differences per se, but rather due to different interpretations of the situation (for a similar point, see Hagen & Hammerstein 2006; Heintz

2005). For example, Henrich et al.'s (2005) study in 15 small-scale societies reveals a striking difference between the Lamalera, who make very generous offers in the Ultimatum Game, and the Tsimane and the Machigenga, who make very low offers in the very same game. But the game is likely to be construed very differently within these societies. The Lamalera, being collective hunters, may indeed see the money as jointly owned by the proposer and the recipient. By contrast, the Tsimane and the Machigenga, who are solitary horticulturalists, may see the money as their own property and therefore feel entitled to keep it. In the same way, Westerners may appear as outliers not because they have a different moral psychology, but rather because, living in very large, democratic and capitalist societies, they make different assumptions in economic games (e.g., that, not knowing the other participant – a situation of anonymity that is common in large-scale urban societies – they have no particular duty to share the stake with her).

In line with this idea, economic games framed within a more detailed context tend to show that people's decisions are based on property rights (Oxoby & Spraggon 2008), past contributions to collective actions (Cappelen et al. 2007; Frohlich et al. 2004), or a personal link of solidarity (Cronk 2007). One possible interpretation is that participants try to be fair with others when they distribute the money: If the other player has produced the money, she has more right over it; if she has been more productive or has invested more money, she deserves a bigger part of it; if both players are friends, they have special duties toward each other; and so forth. Such a "sense of fairness" combined with contextual differences might well explain the variety of results observed around the world. When confronted with cultural differences in experimental result, we should therefore ask: Are they the product of deep differences in the psychological dispositions and processes these experiments are intended to illuminate, or do they reflect differences in the interpretation of the experimental situation? One way to help answer this question would be, for instance, to present the Lamalera and the Machigenga with, as much as possible, the same rich context (e.g., clarifying the source of the money and the relationships between the participants) and assess whether they use the parameters at stake (i.e., rights, past contributions, social links) in the same way.

The importance of the way participants interpret a task – which may differ from the way the experimenter intended them to interpret it – has been often stressed in experimental psychology (e.g., Sperber et al. 1995). The more the experiment is artificial and devoid of "ecological validity" – in other terms, the weirder it is – the greater the risk of misinterpreting the differences between societies. When it comes to cross-cultural comparisons, ignoring this pragmatic dimension of participants' performance may cause one to exaggerate or to miss genuine psychological differences.

References

- Gardner, W., Gabriel, S., & Lee, A. (1999). "I" Value Freedom, But We" Value Relationships: Self-Construal Priming Mirrors Cultural Differences in Judgment. *Psychological Science*, *10*(4), 321-326.
- Hagen, E. H., & Hammerstein, P. (2006). Game theory and human evolution: A critique of some recent interpretations of experimental games. *Theorical Popululation Biology*, 69(3), 339-348.

- Heintz, C. (2005). The ecological rationality of strategic cognition. *Behavioral and Brain Science*, 28(6), 825-826.
- Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H., et al. (2005). "Economic man" in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. *Behavioral and Brain Science*, *28*(6), 795-815; discussion 815-755.
- Malinowski, B. (1926/1985). *Crime and custom in savage society*. New York: Rowman & Littlefield.
- Neff, K. (2003). Understanding How Universal Goals of Independence and Interdependence Are Manifested within Particular Cultural Contexts. *Human Development, 46*(5), 312-318.