Theory of Mind in the Pacific: Reasoning Across Cultures. Jürg Wassman, Birgit Träuble, and Joachim Funke. Heidelberg, Germany: Universitätsverlag Winter. 2013. ix-277 pp.

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"Our experience shows how important it is to choose appropriate methods and paradigms when doing cross-cultural research." This quote from von Poser and Ubl (p. 320) nicely sums up *Theory of Mind in the Pacific*, an edited volume addressing the interaction of culture and theory of mind (ToM). Theory of mind (ToM) is the ability to understand others' behavior in terms of mental states and is widely thought to be a core competency (e.g., Callaghan et al., 2005), but its cultural dimensions remain underexplored outside Western populations.

This volume presents five distinct research projects exploring children's mental-state understanding in Micronesian cultures—Yap and Fais (Oberle & Resch); Tonga (Tietz & Völkel); Samoa (Meyer & Riese); Yupno (Hölzel & Keck); and Bosmun (von Poser & Ubl). The projects, introduction, and summary chapters are, without exception, collaborative efforts between psychologists and anthropologists. Their results contribute important empirical and ethnographic insights to ToM literature, and point to the need for alternative perspectives on social cognition.

The very idea of psychologists and anthropologists working together seems unlikely on many grounds. Here is a simulated but typical description of the study population for a Western ToM study: "Participants were 120 preschool-age children (Mean age = 3 years, 11 months), sixty 3-year-olds (M = 3;8; 34 boys and 28 girls) and sixty 4-year-olds (M = 4;5; 17 boys and 28 girls). Children were recruited by telephoning parents included in a database derived from birth announcements. The sample was predominantly White, reflecting the demographics of the community from which it was drawn." What anthropologist could live with this description? (Each of the five empirical chapters is an exemplary counter-example to this skimpishness about study populations).

And psychologists are most happy with experimental control and rigor, so the idea of adapting methods and procedures to local cultural circumstances would tend to make them uncomfortable. Anthropologists, in turn, may worry that no matter how much care goes into cultural adaptation and translation, they still may be guilty of what Price (1967) called "imposed etic" research practices.

Nonetheless, five cross-disciplinary dyads did work together very effectively in Micronesian cultural communities that display a striking range of social structures,

attitudes about the opacity of others' minds, and cultural practices. Researchers drew on their joint anthropological and psychological expertise to adapt standard false-belief tasks (unexpected contents and change-in-location) to each study community (Wellman, Cross, & Watson, 2001). In one such task, the child observes a character putting an object inside one of (at least) two containers. While he or she is away, the object is moved to another container. At test, children are asked to predict where the ignorant character will look for their object. If the child correctly answers that the character will look in the first container, not knowing that the object has been moved to the second container, this is taken as evidence for the understanding that mental representations can diverge from reality—a hallmark of ToM development. These tasks were adapted in almost every imaginable way for use with Micronesian children, ranging from culturally appropriate stimuli (e.g., betel nuts, soap) to interview location (e.g., public or private settings) and structure (e.g., whether the child is asked to trick another child or an experimenter).

The critical question was whether children in these diverse Micronesian communities would exhibit a transition in ToM understanding between the ages of three to five years, as do children in Western societies. Had the results in each case matched those obtained in the West, this would represent a universal developmental phenomenon that would be nothing short of astonishing.

But of course, that is not what happened. Although Oberle and Resch find the classic Western pattern of 5-year olds succeeding the false-belief task and 3-year olds failing among Micronesian Yapese and Fais children, the other four teams report much lower rates of success, sometimes with 5-year olds performing above chance, sometimes not, and sometimes there is not even a reliable age effect.

Interpreting their results, the authors are careful to stress that these findings derive from standard Western tasks that, despite ethnographically informed adaptations, still pose challenges to cultural translation. For instance, although known answer probes from parents are common in Western middle-class families ("What does the cow say?" "Moo!" "Right!"), they may be rare in other cultures and the context of an adult asking young children questions may evoke nervousness, shyness, and confusion. These many performance factors may mask underlying competence. The five sets of researcher-authors do a fascinating and effective job of describing methodological considerations, situational factors and the like that might facilitate or undermine successful performance on the false belief tasks. Psychology tends to assume that experimenters are invisible and irrelevant; these analyses are compelling evidence that this assumption cannot stand up to questioning.

So effective are these analyses that they might seem to work to undermine the entire project. The cynical view would be something like the following: "Well, either these scholars produce the classic pattern of 5-year old success and 3-year old failure, supporting universal theory of mind development, or they don't observe it and dismiss the significance of the findings by appealing to performance factors. They can't lose (or win)."

Countering the cynical view, we would argue that one lesson from these studies is that the comprehension-performance distinction is itself too convenient. Factors inherent to Western psychological methods—such as individual interrogation in a private setting—are themselves cultural phenomena. Adapting methods to new cultural settings may not so much "correct for bias" as reveal cultural factors germane to social cognition. In this sense, the methodological insights from these Micronesian studies double as a theoretical commentary on culture as a system of interdependent variables that both create and reflect social cognitive competencies.

They also reveal the truth of the axiom that method is theory. Ethnographic introductions to each Micronesian community raise questions concerning the relevance of mental-state attribution to other individuals in cultures where personhood is profoundly socially structured. Here people seem to focus more on observable behaviors and social relationships than private mentation. If mental-state understanding is indeed a core cognitive skill, these research projects successfully reposition it as one factor among many. With their focus on individual mental-states, false-belief tasks are not capable of revealing these forms of cultural variation. It now seems important to consider alternative tasks focused on relational dimensions of social cognition. As these researchers argue, ethnographic expertise is critical to designing research methods—and they could equally argue for its key role in (re)shaping research questions themselves.

The overall success of these projects may depend on the next steps taken. Our view is that the present volume is a bold and successful first step, one that is rich in possibility for new directions. For example, the ethnographic descriptions note that children's games are often important and a closer examination of them may uncover clear examples where instilling false belief in other players is desirable. Similarly, the study of children's lying seems relevant to ToM. Even in the West the near monopoly of just a few paradigms for assessing ToM is being undermined by, for example, studies of false beliefs in infancy (Onishi & Baillargeon, 2005). We also wonder if the 3-year-old ToM can be analyzed without assuming a deficit model—presumably 3-year olds are trying to be successful 3-year olds and not necessarily waiting to be 5-year olds when the false belief insight will arrive.

Perhaps the best way to summarize this effort is to quote from the concluding chapter: "The cooperation of anthropology and psychology is not the division of the object of research but the joint developing—at best together in the field as presented in this volume—of a deep understanding of phenomena which occur in cross-cultural contexts. This kind of research takes its time, and it may be strenuous, but it pays off in the end." (Wassman & Funke, p. 250). We agree.

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