## Book Reviews/Comptes rendus

NORBERT ROSS, Culture and Cognition: Implications for Theory and Method. Thousand Oaks, CA: Sage. 203p.

My interest in Culture & Cognition stems from comparative and international education doctoral studies that focus on cultural processes and student learning. Norbert Ross does not disappoint: he integrates the traditions and tensions of anthropology and psychology to address innovatively human culture, cognition, and behaviour.

Ross opens by engaging the theories, assumptions, and methods of the two disciplines. In marshalling evidence to support a view of cultural studies as a scientific field, neither is spared Ross' discerning gaze. On one hand, he criticizes anthropology for neglecting cognition, using tools that undermine the replication of findings, and for relying on theoretical frameworks that "are too broad and nonspecific to provide us with a fine-grained understanding of specific cause and effect relationships, which should be at the heart of the anthropological sciences" (45). Psychologists, on the other hand, are excoriated for neglecting socio-cultural issues in their study of cognition, treating culture as an independent variable, and for basing claims on studies that rely mainly on US samples of college students.

To make his case, Ross negotiates instead a middle ground that uses examples from his anthropological fieldwork among Menominee Native Americans and Itza', Lacandon, and Tzotzil Maya of Guatemala and Mexico, and recasts the role of anthropology as "the study of human culture and its relation to thought and behaviour" (172). For Ross, culture encompasses: ?all the mental processes that are (or can be) subject to social transmission, as well as other elements of human behaviour (including material goods) that help to establish and form our mental processes. These different elements (mental, behavioural, and material) can often only be understood as a set of interrelated features, one causing and forming the other, and are in constant relation with the (social, historical, and natural) environment. (61) Although this processual view of culture may not be new to anthropologists, its link to human thought and behaviour may be. In this optic, "culture is treated as an emergent product located in individual cognitions?[rather than] as a quasi-objective set of meanings, rules, and norms that somehow affect human beings" (131)-"and its study should focus on the exploration of the distributive patterns and the processes involved in its creation" (68). This cognitive and distributive concept of culture is central to the book's two-part thesis: if culture is an important aspect of cognition, behaviour and the human mind, then "a clear understanding of cultural processes and their effect on thought processes has to be one of our priorities" (173). Ross spends the first three chapters assembling his argument's theoretical building blocks before returning to it in the book's final chapter, "Combining strengths: Toward a new science of culture."

In between, Ross operationalizes its methodological implications by discussing successful data gathering (chapter 4) and analysis (chapter 5) strategies. This requires injecting "formal [scientific] methods" in the context of anthropological fieldwork to enhance the validity of results. Specifically, Ross highlights the need to link sound ethnographic work with clear experimental designs for testing hypotheses. He spends much of chapter five discussing such a mixed-methods approach using the "cultural consensus model" (Romney et al., "Culture as consensus," A.A., 1986), a statistical model whose centerpiece is a principal component factor analysis that helps determine the underlying structure of informant responses. Ross applies it to several anthropological data sets to show how salient semantic patterns emerge that would have eluded the observer's exclusively qualitative eye.

Overall, Culture and Cognition has much to offer. Although chapter five might deter the quantitatively-phobic, those ready to heed the book's message will learn how combining ethnographic knowledge of a study population with clear, testable theoretical expectations can produce rigorous research designs. To meet Ross' challenge, however, a shift in anthropological teaching will be needed from the honing of participant observation strategies in fieldwork to the inclusion of some experimental methods and statistical models. It is such disciplinary border-crossing and attempts to reframe cultural studies as a scientific field that likely prompted Ross to assert that "[t]his book will have many opponents" (vii). I am not one of them. I welcome the interdisciplinary synergy of his argument and, as an educator, appreciate its relevance to the theorizing and investigating of children's development in increasingly culturally diverse school contexts.

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