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On the controversy over non-human culture: The reasons for disagreement and possible directions toward consensus

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ABSTRACT

In recent decades, animal behaviorists have been using the term culture in relation to non-human animals, starting a controversy with social scientists that is still far from cooling down. I investigated the meanings of the term culture as used by social and cultural anthropologists, and also its recent use by ethologists, in order to better understand this controversy and identify possible paths that might lead to a consensus. I argue that disagreements in the level of theories involve definitions of culture and theories of behavioral development, while disagreements in the level of worldviews include the acceptance or rejection of the idea of a radical distinction between humans and other animals. Reaching a synthetic approach to (human and non-human) animal behavior depends on constructing a consensus in both levels. It is also necessary to discuss how to include symbolic communication in a comparative perspective. I conclude that this might lead to the abandonment or reconstruction of the related dichotomies of nature–culture, innate–acquired and gene–environment.

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1. Introduction

In this article, I will look at the attribution of culture to non-human animals. My main objective is to clarify the differences between what anthropologists (specially social and cultural anthropologists) and animal behaviorists (including biologists and psychologists, regardless of their department association, henceforth simply ethologists) mean when they say culture, and indicate where a consensus might be constructed. First, I will stick to the academic distinction and overlook many differences between specific authors, so as to establish two deliberately course-grained statements about culture that will allow us to identify what is a central point of disagreement between ethologists and anthropologists – namely, the symbolic question. Next, I will analyze the controversy in terms of different levels of disagreement, and this analytical strategy will help us identify possible directions for collectively constructing a synthetic approach to behavior that includes humans and other animals.

One of the epistemological foundations of Modernity (roughly, the historical period after the Middle Ages) has been the belief that the human condition corresponds to a radical separation from the rest of nature, often described as due to culture. The term culture itself has been used in a variety of different contexts and there is no consensual definition (e.g., compare Geertz, 1973; Ingold, 2000; Kroeber, 1917; Lévi-Strauss, 1963; Tylor, 1874). Nevertheless, it had generally been uncontentious that, whatever it is that makes humans unique, we could say that it belonged to the cultural (or social) domain. This is reflected in the historical separation between natural and social scientists.

Natural and social scientists might agree that humans are animals, and that it is epistemologically legitimate to study human morphology, physiology, and even some aspects of human behavior (some might say instincts) using the same methods, concepts and philosophical commitments that have proven so useful in the study of other biological phenomena. But, according to the still dominant (but not unquestioned) view in the social sciences, there always remains something – namely culture – that, perhaps because of its emergent properties (Kroeber, 1917), or because of its symbolic foundation (White, 1949), escapes, in a sense, the biological realm. Hence, humans would not just be unique, as any other species is, but unique in a special way, something more than just another unique animal species. The difference lies, one could assume, in how our development is influenced by the social environment we grow into, and in the (exclusively human?) cognitive abilities that underlie this individual development as well as collective phenomena such as culture and history.

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However, it is now clear to ethologists that other animal species also exhibit behavioral diversity between populations that must be explained in terms of learning in a social context. For decades now, many ethologists have been using the word culture to describe this phenomenon (e.g. Boesch and Tomasello, 1998; Kawamura, 1959; Laland and Galef, 2009a; McGrew and Tutin, 1978; Nishida, 1987; Whiten et al., 1999). If we accept these claims, and culture is not a golden barrier any more (Boesch, 2003), human behavior would be even closer to the epistemological framework used to study animal behavior in general. And also, at least some non-human behavior would be closer to the epistemological framework used in the social sciences to study human behavior. But, if culture is used to describe the *difference* between humans and other animals, what could it possibly mean to say that chimpanzees (Whiten et al., 1999), bonobos (Hohmann and Fruth, 2003), orangutans (Van Schaik et al., 2003), whales (Rendell and Whitehead, 2001) or birds (Grant and Grant, 1996) have culture? How are we to distinguish human uniqueness, while acknowledging our animal condition? Should we deliberately abandon the concept of culture, or maybe reconstruct the old academic separation? Is it possible to find a common ground for the social and natural sciences?

Instead of arguing that natural scientists should conquer the territory of the social sciences, or to insist on the absolute separation of humanity from animality, I consider that the dialog and the active search for consensus are more desirable and productive. According to this third-way view, both social and natural scientists might indeed have interesting and important contributions to make to the understanding of human behavior. A consensual framework would have to offer a solid base for investigation both of things of nature and of things of society and culture without even assuming such dichotomy as a given.

Because of the historical division of labor between the natural and the social sciences, and the immense amount of cumulative theoretical elaborations within different disciplines and their multiple subfields, the search for a synthesis demands wide collaboration between scholars holding different and often incompatible theories and worldviews. In other words, this might as well demand a radical reconstruction of long established, individually and collectively held beliefs, commitments, prejudices and motivations.

Here I review the meanings of the notion of culture for social/cultural anthropologists and for ethologists (as defined above). I had two starting points. On one hand I reviewed the works of classical and contemporary authors in the history of Anthropology that might help us understand the debate on which I am focusing. On the other hand I reviewed the history of the attribution of culture to non-human animals from pioneers such as Kinji Imanishi to the present. I will present my findings and then clarify the main reasons for disagreement between them and point to possible directions toward consensus.

2. The meanings of culture for anthropologists

In 1896, Edward Burnett Tylor became the first Professor of Anthropology at Oxford University, in a time where evolutionary ideas still dominated the newborn discipline. Culture was used in the singular, indicating the *télos* of a universal development with its most advanced stage to be found in, not surprisingly, the Europeans (or maybe just the Victorian Englishman). In the beginning of his *Primitive Culture*, published in 1871, Tylor established the first formal or explicit anthropological definition of culture as "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1874, p. 1). According to Washburn and Benedict (1979), the purpose of this kind of definition is not to propose a testable hypothesis (as ethologists would like to find), but "to define a field for investigation by a positive listing of the behaviors that are of interest" (163).

Franz Boas, intellectually raised in the German academic environment, developed on the idea of the humanist Johann Gottfried von Herder, who had used the term culture somewhat differently, to indicate the particular way of life of a people, including the spiritual values that unite them and distinguish them from other peoples. In this sense the term was to be used in the plural (the cultures of different people), in opposition to its use in the singular (the Culture), and with no claims of superiority. It is this use of the term that constitutes the foundation of its modern meaning in Anthropology. According to Boas, "Culture embraces all the manifestations of social habits of a community, the reactions of the individual as affected by the habits of the group in which he lives, and the products of human activities as determined by these habits." (Boas, 1930, p. 79)

In 1952, when Alfred L. Kroeber and Clyde Kluckhohn reviewed 164 definitions and hundreds of propositions about culture, they concluded that, even if anthropologists still had "no full theory of culture. . . [there was at least a] fairly-well delineated concept, and it is possible to enumerate conceptual elements embraced within that master concept" (Kroeber and Kluckhohn, 1952, p. 181).

One of these conceptual elements was the idea that culture is exclusively human, and this privilege was said to be granted by our equally exclusive capacity to use symbols. Many anthropologists also supported the idea that cultural phenomena are emergent, thus corresponding to a level of analysis on their own right, beyond Biology and Psychology – e.g., that they are "superorganic" (Kroeber, 1917), or "exosomatic" (White, 1949). This was not supposed to mean that Biology and Psychology are not important in the study of human behavior. What was implied was the idea that human populations do not show fundamental biological or psychological differences, and that the (cultural) behavioral diversity must be explained in terms of learning and history.

Another conceptual element in Kroeber and Kluckhohn's (1952) review was the idea that culture is not individual behavior, but patterns of behavior abstracted from them. A culture could be understood in a descriptive sense (it is what people do), and also in a normative sense (it is what people are expected to do). It was manifested in material objects, ideas, attitudes and especially values, which "provide the only basis for the fully intelligible comprehension of culture, because the actual organization of all cultures is primarily in terms of their values" (Kroeber and Kluckhohn, 1952, p. 173).

Despite its influence, from then on many anthropologists reacted to this culture paradigm, reevaluating the whole nature/culture distinction. In the 1950s, Claude Lévi-Strauss, the founder of Structural Anthropology, argued that, although the separation between nature and culture had had "the force almost of dogma" (Lévi-Strauss, 1992, p. 28) within Anthropology, culture should be taken as a heuristic tool and a relational concept – i.e., one that does not point to some concrete thing but to a differential relation between two ethnographic groups:

> What is called a 'culture' is a fragment of humanity which, from the point of view of the research at hand and of the scale on which the latter is carried out, presents significant discontinuities in relation to the rest of humanity. [. . .] Accordingly, the same set of individuals may be considered to be parts of many different cultural contexts: universal, continental, national, regional, local, etc., as well as familial, occupational, religious, political, etc. (Lévi-Strauss, 1963, p. 295)

Another reaction in the 1950s was the rise of Symbolic Anthropology. Clifford Geertz, one of its exponents, argued against what he called a "'stratigraphic' conception of the relations between biological, psychological, social and cultural factors"(Geertz, 1973, p. 37),