## Must cognitive anthropology be mentalistic? Moving towards a relational ontology of social reality

Maurice Bloch's *Anthropology and the Cognitive Challenge* (Bloch 2012) is a luminous essay about the tumultuous relationships between cultural anthropology and disciplines more oriented towards the natural sciences. In a theoretical *tour-de-force*, Bloch's clear writing allows the reader to better understand why most anthropologists are so reluctant to take into account naturalistic attempts to specify what makes us human.

According to Bloch, one of the best ways to reduce the gap between anthropology and the cognitive sciences is to take the architecture of human cognition more seriously. This architecture is constituted by the deepest, universal level that is inherited 'from our very remote pre-mammalian ancestors' and the higher levels that are 'unique specializations of our species'. Bloch argues that such an architecture also underlies human identity, which he calls the 'blob' in order to avoid confusion with any relevant existing theories. The blob can be separated into several levels that are 'organically united' with each other. The 'core self' is characterised by the pre-reflective experience of one's body as an agent located in space and differentiated from other entities. The 'minimal self', which is particularly developed in social species, involves the sense of continuity of oneself and others in time and requires episodic, short-term memory in order to process information about past behaviours and to plan future behaviours. Last but not least, the 'narrative self' involves autobiographical memory that is more or less reflexively 'sustained' by narratives that create an identity, invariant over time and contexts. Because this narrative self is infused with language and metarepresentations, it is easily caught up in the public discourses on which anthropologists tend to focus. But, to Bloch, focusing on these 'public selves', so readily accessible to the anthropological gaze, might be misleading. The blob is a multilayered phenomenon that results from a two-way process, one going from the cultural settings to the core layers of the blob, the other going from natural neuro-psychological processes to high-level self-narratives.

While we applaud and admire Bloch's proposal to reconcile anthropology with cognitive sciences, we are more sceptical about the way he tends to take up the mentalistic framing of social cognition as theory of mind that most psychologists tend to favour. Indeed, after characterising the blobs as naturally differentiated entities, Bloch defines social interactions as the mutual process of reading, penetrating or colonising the minds or the 'blobs' of others. The social and cultural world is thus based on a process of 'interpenetration' that allows us to go in and out of each other's bodies and minds. Admittedly, this process of interpenetration has different scales of space

and time: it starts with the physiological processes of birth and sex, goes through the neuro-psychological processes of the synchronisation of minds that occurs in social exchange, and ends up with cultural tradition, that is, an enduring circuit of communication that allows individuals to defer and surrender their own intentionality to the minds of others (e.g. leaders, ancestors, gods, founding fathers, etc.). But, to Bloch, culture itself, namely the 'time-defying' roles, rights and duties that connect individuals in spite of their generational distance, is dependent on the theory of mind: they are tools 'that enable us to read the mind of each other and so decipher them' (p. 178).

As stimulating as this mind-dependent view of the social might be, it tends to problematically widen the gap between humans and other social species, such as non-human primates. Nowadays, many scholars argue that our close cousins can be only credited with very partial, limited theory of mind abilities (for a review, see Call and Tomasello 2008). And yet, they are very good at identifying complex social relationships such as dominance, exchange and membership, and in using them to infer and anticipate others' behaviours. This inferential capacity to parse the social environment into relational 'conceptual primitives' and to identify the deontic principle that underlies them is what we call 'naive sociology' (Kaufmann and Clément 2014) following in part Hirschfeld (2001) and Jackendoff (1994). Given the adaptive force of this 'naive sociology', there is no reason to think that humans would not have it at their disposal. Moreover, a growing body of evidence suggests that naive sociology is present early in ontogeny, enabling very young children with a partial theory of mind to infer others' behaviour based on social cues, such as dominance (Charafeddine et al. in press; Mascaro and Csibra 2012; Thomsen et al. 2011) or affiliation (Rhodes 2012). The importance of these early normative expectations suggests that there is another foundational domain of social cognition, not reducible to theory of mind (Hinde, 1976; Fiske 1992).

The likely existence of this relation-based domain of social cognition encourages us to propose a gestalt switch from the theory of the blob to the theory of what we might call the 's-blob'. Rather than starting from the individual as being the primitive unit of the social world and hence of our social reasoning, the model of the 's-blob' focuses on the multi-level social relationships that define social reality. The 'core s-blob' consists of the 'deontic affordances' that enable social perceivers to foresee, in the here-andnow of local interactions, what will or should happen next. Thus a dominant posture affords submissiveness, the defenceless features of infants afford tolerance and protection and so on. The 'minimal s-blob', also mostly shared with non-human primates, refers to the typical kinds of enduring relationships, such as affiliation and dominance, which define 'nodes' of relative positions, each being characterised by a set of rights and obligations - for instance, the right for the dominant individual to get the food first and the obligation for the subordinate to wait (Cummins 1996). As for the 'cultural sblob', it consists of 'linguistically infected', time-defying and human-specific relationships that 'piggyback' on basic types of social relationships. So a nation, even if it involves an imaginative leap of which only humans are capable, can be seen as a very sophisticated sociocultural elaboration of basic group membership. Just like the blob, the 's-blob' is thus a multilevel phenomenon that results from bi-directional influences between low-level natural core processes and high-level cultural elaborations.

The rough 's-blob' model that we propose here may be of interest to those who, like Bloch, call for a dialogue between cognitive scientists and anthropologists for two main reasons. First, by moving the focus of scientific attention from more or less self-contained 'blobs' to the patterned relationships that naive sociology is designed

to grasp, it prompts cognitive scientists to be more realistic about the relational and deontic nature of social life. Second, by showing that our cognitive apparatus does not necessarily give a mentalistic turn to 'what social means', the 's-blob' model prompts social scientists to be, at last, realistic about the mental. Moving towards a relational ontology of social reality might thus help integrate the multilevel organisation of human life, including the mental and the social, into a general anthropology for which Bloch has paved the way so well.

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