Grounding, not dichotomy: Turner's "Hobbesian" and "pervasive" models of the social

Valerii Shevchenko, HSE University

Regarding the relationship between the social and the cognitive, philosopher of cognitive and social sciences Stephen Turner (2018) reviews two models of the social: the "Hobbesian", or autonomous agent social, and "pervasive" social. More importantly, he emphasizes that ontological positions are implicitly related to the models of cognition one employs, knowingly or not.

The "Hobbesian", or autonomous agent social, presupposes that individual agents are rational deliberators. This view is largely seen in game theory. For example, Skyrms (2014) uses evolutionary dynamics to show how Hobbesian social contract might have emerged. Although not discussed by Skyrms himself but pointed out by Turner, a position like this, seen from the perspective of the cognitive-social nexus, implies that the cognitive ontologically precedes and grounds the social. First there are fully formed cognitive agents able to deliberate and then their aggregate "produces" the social. This account leads to individualism stating that explanations of social phenomena should be put forward mostly in terms of individual agents and their actions or that only these exist.

Turner connects the "Hobbesian" model with the computational model of mind, where it is seen as an internal abstract process of calculation over representations. This means that deliberation is guaranteed by cognitive agents' ability to represent the world and calculate over these representations. This, in turn, has further implications regarding human cognitive architecture and more fundamental question like "is the mind modular?", "if it is modular, have these modules evolved for serving specific task?", and the like (Turner 2018).

In contrast, "pervasive" model of the social presupposes that the cognitive and the social are interdependent and affect each other in terms of evolutionary formed cognitive capacities serving certain needs. This means that agents, whose arrangements produce "the social", are not fully autonomous, for they are themselves byproducts of the evolutionary formed social cognition and enculturation. This position is ontologically ambiguous, for it is not evident what are social entities here. This position might equally lead to holism, which states that social phenomena either exist over and above individuals or should be explained as independent of individualist explanations (Zahle and Collin 2014) or to individualism. And if this "pervasive" model of the social might seem more empirically plausible from a naturalistic point of view according to recent research (Tomasello 2014; Sterelny 2012), what implications does it have for social ontology? These are open questions.

However, the more fundamental question is "are these models a dichotomy?", for if not, it would mean that one does not have to choose a "right" model of the social and

to subscribe to a correspondingly "right" model of cognition. I argue they are not — the relationship between "Hobbesian" and "pervasive" socials is not a dichotomy, but metaphysical grounding, where the former is ontologically dependent on the latter. It means that in order for a "Hobbesian" social to exist, there should be "pervasive" one in the first place.

As Turner (2018) notes, coordination is the main mechanism of scaling up from autonomous agents to larger social groups and societies, which means that it is the main mechanism of the "Hobbesian" social. This is essentially what evolutionary game theory studies regarding social ontology. However, as Skyrms (2010) illustrates using Lewis's (2008) signaling games framework, coordination might have evolved from random signals which are not paired and attuned to each other to produce a coherent coordinated output. In addition, as Skyrms shows that ability to coordinate actions to produce a jointly optimal output is found even in animals, the cognitive requirements for the "Hobbesian" model might be significantly lowered. It means that to be capable of jointly coordinating to come to a social contract does not require ability for rational deliberation. However, this is exactly the part of Skyrms's model that is criticized for its inability to account for another parameters besides signals, i.e. metarepresentation, reading environmental cues like animals' tracks (Sterelny 2017). In other words, it is implausible from the point of view of human evolutionary history.

The issue with the "Hobbesian" model is twofold: its possibility conditions and its applicability to human social contracts. Taking into account Sterelny's critiques, it seems that cognitive requirements for animal and human coordination are different, for only humans have social institutions. He explains it with a human ability to decouple behavior from stimuli with the aid of representation of the environment (Sterelny 2003). It means that in terms of Skyrms, this is not only externalist random signals which are responsible for the eventual possibility of successful coordination, but representations of these signals as well, which are not accounted for in Skyrms's model. This happens to support Turner's insight on connection between computationalism and "Hobbesian" social.

However, Sterelny's conjecture is not the only possible one out there. As Paternotte (2014) notes, the issue with social evolution theories as a source for naturalistic social ontology consists in showing, why a certain cognitive factor was not only selected for in the first place, but remained robust in the course of evolutionary history. He lists three research strands possible for adopting as a source for coordination as the basis of social ontology. These are Machiavellian intelligence hypothesis stating that strategic abilities like deception, coalition formation and lie evolved, also entailing the capacity for beliefs about beliefs or metarepresentation; the shared intention hypothesis, that recognizes we-intentionality and ability for joint attention and sharing as basic for uniquely human sociality (Tomasello 2010); assisted learning hypothesis, that puts repeated cooperative challenges and adaptations to it as basic for human sociality (Sterelny 2012).

In sum, human ability to efficiently coordinate to produce jointly optimal social outcomes has evolved gradually, and this process was different for human species as opposed to non-human animals. This means that "pervasive" social is primary, and "Hobbesian" is secondary, at least from an evolutionary point of view. Sterelny expresses this shift in game-theoretic terms like a shift from fitness maximization to utility maximization, and explains it with the rapid growth of social groups in early Holocene and accompanying weakening of vertical cultural heritability. This is why "Hobbesian" social is grounded in "pervasive" one.

References

Lewis, David. 2008. *Convention: A Philosophical Study*. John Wiley & Sons. https://books.google.com?id=GgCkLtTqBsMC.

Paternotte, Cédric. 2014. "Constraints on Joint Action." In *Perspectives on Social Ontology and Social Cognition*, edited by Mattia Gallotti and John Michael, 103–23. Studies in the Philosophy of Sociality. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-017-9147-2_8.

Skyrms, Brian. 2010. *Signals: Evolution, Learning, & Information*. Oxford ; New York: Oxford University Press.

———. 2014. *Evolution of the Social Contract*. Second edition. Cambridge ; New York: Cambridge University Press.

Sterelny, Kim. 2003. *Thought in a Hostile World: The Evolution of Human Cognition*. Malden, MA: Blackwell.

———. 2012. *The Evolved Apprentice: How Evolution Made Humans Unique*. Jean Nicod Lectures. Cambridge, Mass: The MIT Press.

———. 2017. "From Code to Speaker Meaning." *Biology & Philosophy* 32 (6): 819–38. https://doi.org/10.1007/s10539-017-9597-8.

Tomasello, Michael. 2010. *Origins of Human Communication*. MIT Press. https://books.google.com?id=T3bqzIe3mAEC.

———. 2014. *A Natural History of Human Thinking*. Harvard University Press. https://doi.org/10.4159/9780674726369.

Turner, Stephen P. 2018. *Cognitive Science and the Social: A Primer*. 1st ed. Routledge. https://doi.org/10.4324/9781351180528.

Zahle, Julie, and Finn Collin, eds. 2014. *Rethinking the Individualism-Holism Debate: Essays in the Philosophy of Social Science*. Vol. 372. Synthese Library. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-05344-8.