# Coordination as naturalistic social ontology

Valerii Shevchenko, HSE University

# How a naturalistic social ontology is possible?

That is unambiguously connected with the life sciences.

## How social ontology is related to social scientific methodology?

- 1. Ontology precedes research (Searle 1995, Epstein 2015);
- 2. Ontology is the result of iterated empirical work, theorizing and reflection (Elder-Vass 2007, Guala 2007, Little 2020).

## Two main ways of doing social ontology *(Guala 2007)*

#### 1. Conceptual analysis

- Searle 1995, 2010
- Epstein 2015
- Gilbert 1992
- Tuomela 2002

#### 2. Game theory

- Lewis 1969
- Skyrms 2014
- Sugden 2006

Both tackle essentially empirical questions from an a priori point of view and lack empirical foundations (*Guala 2007*).

#### Social coordination is ubiquitous:

- implicit "code of conduct" at academic conferences like this one
- traffic lights
- explicit legislative rules
- any social interaction planned or emergent

#### **Research Questions**

- 1. Why do humans understand how to interact with each other in different social situations?
- 2. What makes social coordination describable in gametheoretic terms possible?
- 3. How has evolution made humans able to coordinate?
- 4. How a naturalistic social ontology unambiguously related to evolutionary biology and cognitive science is possible?

#### Social Coordination in game theory:

- 1. Conventions
- 2. Norms
- 3. Institutions

#### Conventions

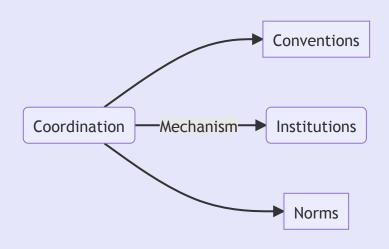
- guide "the use of space, time, posture, or gesture and also provide indications of the relative power, prestige, and status among the individuals taking part in interactions" (Karp 2016: 7);
- are behavioral regularities emerging from repeated interactions (Lewis 1969);
- are reached with help of psychological factors responsible for converging on a particular equilibrium, or a focal point (Schelling 1960).

#### Norms

- are rules based on empirical and normative expectation regarding behavoir—"grammar for social interactions" (Bicchieri 2018);
- are "the cement of society" (Elster, 1989).

#### Institutions

- are constitutive rules like "X counts as Y in C" (Searle 1995);
- are self-sustaining salient behavioral patterns (Aoki 2007);
- are norm-governed social practices (Tuomela 2013);
- are rules-in-equilibria (Guala & Hindriks 2015, Guala 2016).



What enables social coordination itself, and how does it differ from that in animals?

#### Guala & Hindriks (2015)

Unified social ontology: "rules-in-equilibria"

- 1. "X counts as Y in C" is derivable from "if X, do Y";
- 2. Coordination is a basic social mechanism;

#### Guala & Hindriks (2015)

- 1. Social coordination as "correlated equilibrium" might be rooted in evolution;
- 2. Sterelny (2003): human and animal conventions differ in scope of actionable signals;
- 3. Humans are able to invent and follow different rules given the same *correlation device*.

### Evolutionary conditions → coordination leading to social institutions?

### Cognitive requirements → coordination sustaining social institutions?

#### Guala *(2020)*

"what cognitive mechanisms establish coordination?"

### Kaidesoja (2019)

"Explanations in terms of game theoretical equilibria do not explicate any causal processes or mechanisms".

## Turner's (2007) "sane" constraints on social theory

- 1. Cognitive realism
- 2. Computational tractability
- 3. Physical realizability

"we can think of actual societies as made up of multiple focal points which are the subject of joint attention by different overlapping groups, as the distributed rather than centralized source of multiple modes of coordination"

-Turner, 2018: 209

#### The road ahead

- 1. to view social coordination as involving cognitive optimization; element class="fragment" -->
- 2. describe this optimization in terms of evolutionary and cognitive mechanisms;
- 3. model cognitively minimal agents capable of sustaining social institutions.

# Implications of naturalizing coordination for social ontology and social science

- 1. Basic social mechanism (coordination) is unambiguously rooted in evolution of cognitive and social capacities → naturalistic social ontology;
- 2. Groundwork for "interactional mechanics" a general theory of face-to-face social interaction.

#### References 1

- Aoki, Masahiko. 2007. "Endogenizing Institutions and Institutional Changes\*." *Journal of Institutional Economics* 3 (1): 1–31. https://doi.org/10.1017/S1744137406000531.
- Bicchieri, Cristina, and Peter McNally. 2018. "SHRIEKING SIRENS: SCHEMATA, SCRIPTS, AND SOCIAL NORMS. HOW CHANGE OCCURS." Social Philosophy and Policy 35 (1): 23–53. https://doi.org/10.1017/S0265052518000079.
- Elder-Vass, Dave. 2007. "A Method for Social Ontology: Iterating Ontology and Social Research." *Journal of Critical Realism* 6 (2): 226–49. https://doi.org/10.1558/jocr.v6i2.226.
- Elster, Jon. 1989. The Cement of Society: A Survey of Social Order. Cambridge University Press. https://philpapers.org/rec/ELSTCO-2.
- Epstein, Brian. 2015. The Ant Trap: Rebuilding the Foundations of the Social Sciences. Oxford Studies in Philosophy of Science. New York, NY: Oxford University Press.
- Guala, Francesco. 2020. "Solving the Hi-lo Paradox: Equilibria, Beliefs, and Coordination." In *Minimal Cooperation and Shared Agency*, edited by Anika Fiebich, 11:149–68. Studies in the Philosophy of Sociality. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-29783-1 9.
- Guala, Francesco, and Frank Hindriks. 2015. "A UNIFIED SOCIAL ONTOLOGY." The Philosophical Quarterly 65 (259): 177–201. https://doi.org/10.1093/pq/pqu072.
- Kaidesoja, Tuukka, Matti Sarkia, and Mikko Hyyryläinen. 2019. "Arguments for the Cognitive Social Sciences." *Journal for the Theory of Social Behaviour* 49 (4): 480–98. [https://doi.org/10.1111/jtsb.12226](https://doi.org/10.1111/jtsb.12226]
- Karp, David A., William C. Yoels, Barbara H. Vann, and Michael Ian Borer. 2016. *Sociology in Everyday Life: Fourth Edition*. Waveland Press. https://books.google.com?id=uIPlCwAAQBAJ.
- Lewis, David. 2008. Convention: A Philosophical Study. John Wiley & Sons. https://books.google.com?id=GgCkLtTqBsMC.
- Little, Daniel. 2020. "Social Ontology De-Dramatized." Philosophy of the Social Sciences 51 (1): 13-23. https://doi.org/10.1177/0048393120916145.

#### References 2

- Schelling, Thomas C. 1980. *The Strategy of Conflict: With a New Preface by the Author*. Harvard University Press. https://books.google.com?id=7RkL4Z8Yg5AC.
- Searle, John R., and Willis S. and Marion Slusser Professor of Philosophy John R. Searle. 1995. *The Construction of Social Reality*. Simon and Schuster. https://books.google.com?id=zrLQwJCcoOsC.
- Skyrms, Brian. 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.
- Sugden, Robert, and Ignacio E. Zamarrón. 2006. "Finding the Key: The Riddle of Focal Points." *Journal of Economic Psychology* 27 (5): 609–21. https://doi.org/10.1016/j.joep.2006.04.003.
- Tuomela, Raimo. 2013. *Social Ontology: Collective Intentionality and Group Agents*. Oxford University Press. https://books.google.com?id=6ltpAgAAQBAJ.
- Turner, Stephen. 2007. "Social Theory as a Cognitive Neuroscience." *European Journal of Social Theory* 10 (3): 357–74. https://doi.org/10.1177/1368431007080700.
- Turner, Stephen P. 2018. Cognitive Science and the Social: A Primer. 1st ed. Routledge. https://doi.org/10.4324/9781351180528.