Habitual Behavior: Reduction of Complexity of Human Daily Life

Raffaela Giovagnoli, Pontifical Lateran University, giovagnoli@pul.it

We consider the role of habits in human individual and social ordinary life by moving from the fact that habitual behavior is fundamental to organize our activities in individual as well as in social contexts. It is a complex process that reduces the complexity of daily life also in social contexts where we take part to informal joint practices as well as to institutionalized ones. The difference between habits and automatism or simple routines is that the former give control over actions, while the latter don't. According to this view, that crosses philosophy and neurobiology, the habit is a "stable disposition for self-development" (Wood & Neal 2007, Bernacer & Murillo 2014, Lombo & Gimenez-Amaya 2017).

Ann Graybiel proposes a fruitful relationship between habits and goals because goals are explicitly present during action evolution and selection and they increasingly blur the more an action is repeated. A habit completely disengaged from a goal becomes either a stimulus-response pair for a non-human animal or a pathological trait for human beings. Habits can be "neutral", "good" or "bad" where good habits seem to be those choosen to guide our behavior and bad habits those that powerfully take control on our behavior. This categorization seems to make possible to include goals as drivers of habits. Graybiel also maintains that habits play an important role in social life; in this case they are "shaped" as mannerism and rituals (Graybiel 2008).

Recent studies from cognitive neuroscience, biology and psychology show converging perspectives on the organization of goal-directed, intentional action in terms of (brain, computational) structures and mechanisms. They conclude that several cognitive capabilities across the individual and social domains, including action planning and execution, understanding others' intentions, cooperation and imitation are essentially goal-directed. To form habits we need goal representations both in individual and social contexts. They have a crucial role in the planning and control of action; moreover, action understanding and imitation are performed at the goal rather than the movement level. It seems that the motor system is highly engaged in anticipatory, simulative and generative processes. Some authors introduce an interesting speculative perspective, and make the case that the same predictive mechanisms provide both a 'linkage with the future' required for taking goal-directed action, and a 'linkage with others' required to act socially. We can observe a significative reformulation of basic concepts in cognitive and behavioral sciences, and a common theoretical view—a motor-based (or action-based) view of cognition—is emerging across disciplines. They provide a description of the abilities of action execution, its planning, and understanding of others' intentions as essentially goal-directed and served by the same representations, which are action-oriented and involve deeply the motor apparatus (Castelfranchi & Pezzulo 2007, 2008; Lowe 2018).

Routines and goal-directed behavior characterize habits both in the case of individual and social behavior. We create our own habits while fulfilling our basic needs and desires. But, we are social beings and we need to organize our activities also to participate in different social practices. For example, rituals have the important function to create social spaces in which individuals can share emotions, experiences, values, norms and knowledge. The function to share experiences is fulfilled when there exist a social space created by cooperation for reaching certain goal. If we want to

achieve a positive result about the extension of habits in the social dimension we need to move from a sort of goal-directed activity that we can perform together. "Collective performance" is a notion that can be analyzed and formalized starting from psychological processes of actors whose actions are determined in large part by learned habits and associations rather that by deliberating over the likely consequences of exogenously defined alternatives. However habits have their active dimension as we have seen above. Habit-based processes give routines, istitutionalized practices, or organitional customs their distinctive common qualities. We think that these two forms of intentionality correspond to the notion of "flexibility", which implies the voluntary control over our actions and to the notion of "rigidity", which characterizes the mere following rules in the sense of routine behavior. First, we need to be moved to act in a certain way. We-Intentionality works when we want to do something together (we have a collective intention) so that we can cooperate to achieve our common goal (Cohen, Levinthal, Warglien 2014; Magnani 2018; Giovagnoli 2018, 2019, 2020).

References:

Wood W., Neal D., *A New Look at Habits and the Habit-Goal Interface*, Psychological Review, 2007, Vol. 114, No 4, 843-863

Lombo J., J. Gimenez-Amaya, *The unity and stability of human behavior. An interdisciplinary approach to habits between philosophy and neuroscience*, Frontiers in Human Neuroscience, 8, 607, 2017.

Graybiel A., *Habits, Rituals and the Evaluative Brain,* Annual Review of Neuroscience, 31, 2008, 359-87.

Bernacer J., Murillo J.I., *The Aristotelian Conception of Habit and Its Contribution to Human Neuroscience*. Frontiers in Human Neuroscience ,2014.

Lombo J., Gimenez-Amaya J., *The unity and stability of human behavior. An interdisciplinary approach to habits between philosophy and neuroscience*, Frontiers in Human Neuroscience, 8, 607, 2017

Lowe R., *Learning and Adaptation: Neural and Behavioral Mechanisms behind Behavior Change,* Connection Science, vol. 50, Issue 1, 2018.

Castelfranchi C., Pezzulo G., *Thinking as the Control of Imagination: a Conceptual Framework for Goal-directed Systems.*, Psychological Research (73), (4), 559-577, 2009.

Pezzulo G., Castelfranchi C., *The Symbol Detachment Problem*, Cognitive Processing, 8 (2), 2007.

L. Magnani, *Rituals Artifacts as Symbolic Habits*, in R. Giovagnoli & G. Dodig-Crnkovic, *Habits and Rituals*, Special 7, Open Information Science/De Gruyter, 2, 2018, 147.

M. Cohen, D.A. Levinthal, M. Warglien, *Collective Performance: Modeling the Interaction of Habit-based Actions*, in Industrial and Corporate Change, Vol. 23, n. 2, 2014, 329-360.

Giovagnoli R., *From Habits to Rituals: Rituals as Social Habits*, in Open Information Science De Gruyter, v.2, Issue 1 (2018);

Giovagnoli R., *Habits, We-intentionality and Rituals* in Proceedings MDPI of the IS4SI 2019 Summit, Berkeley 2019;

Giovagnoli R., *From Habits to Rituals: Rituals as Social Habits* in Giovagnoli R., Lowe R. (Eds.), *The Logic of Social Practices*, Springer, Sapere, Cham, 2020.