

MECHANISMS AND BLACK BOXES

Chair **Maurizio Ferrera** (NASP-University of Milan)
Speakers **Andrew Bennett** - Georgetown University
Daniel Little - University of Michigan-Dearborn
Flaminio Squazzoni - BEHAVElab and University of Milan

The mechanistic understanding of causation marks the rise of modern science as a rational and empirical endeavor independent of metaphysical assumptions. Mechanisms shift puzzling events in a scheme of antecedents and-consequents that makes the world intelligible from within. As a rhetorical device, the scheme guides our learning from the past and assists us in imagining the future. Its confirmation on the testbench of observations, moreover, yields usable knowledge for desirable changes.

Conventionally, we locate a mechanism within the 'black box' connecting a causal input and the output effect. Researchers have long been invited to open it up and better prove the existence and shape of these connections. However, mechanisms have proven as hard to grasp as once metaphysical objects had.

Some strategies equate them to the interaction of some fundamental constituents and test whether consistent models allow retrieving the effect. The move invites to a Chinese box regress that the model assumptions can conveniently bottom out. The move, nevertheless, cannot prevent the question of the tenability of these assumptions, or the doubt that the model trades relevant heterogeneity for parsimony or viability.

The concern for unsound portrayals motivates those strategies that trace the mechanism as the single sequence of occurrences in a case. In providing richer evidence, it raises the twin question of which level of detail is needed to ensure an airtight, seamless image of the process, and of how to sort the hallmarks of the causal process from the vagaries of the local context.

In short: are interactions and chains the same mechanism at different degrees of generality, or different mechanisms instead? If related, which criteria one should meet to dis/confirm the other? Then, should the two be 'nested' into a single research design for the sake of higher credibility, or can we keep on relying on the scientific division of labor among the invisible colleges?

This MeMa seminar invites leading scholars from different disciplines to engage in a conversation on fundamental questions of mechanistic causation, and the practical consequences that different responses can have on research standards, protocols, and collaborative practices.

17 January 2020
Room A, h. 13.30
NASP Graduate School
via Pace 10 - Milan