To be continued: The genidentity of physical and biological processes Alexandre Guay & Thomas Pradeu

The concept of genidentity has been proposed as a way to better understand identity through time, especially in physics and biology (Lewin 1922; Reichenbach 1956). It says that the identity through time of X is nothing more than the continuous connection of the states it goes through. The genidentity view is utterly *anti-substantialist* in so far as it suggests that the identity of X through time does not presuppose whatsoever the existence of a permanent "core" or "substrate" of X. Yet applications of this concept to real science have been scarce and unsatisfying. Here our aim is to show that a well-defined concept of genidentity can be crucial to shed light on identity through time in physics and in biology. Examining several examples, we defend a genidentity view and offer a comparison between physical and biological cases. Finally, building on Locke's *Essay*, we show that understanding identity on the basis of continuity suggests a move towards an ontology of processes.