Do we need a universalizing paradigm for rational decision-making? David Teira (UNED) dteira@fsof.uned.es & Rasmus Grønfeldt Winther (University of California, Santa Cruz) rgw@ucsc.edu November 21, 2014 @ EIPE Worshop, Erasmus U, Rotterdam

An implicit assumption about abstractions in science is that they have a proper scope. That is, theories and models should not be legitimately used outside their proper scope of application or when internal assumptions of intelligibility or plausibility fail to be met. We may wonder how much excess of abstraction is admissible before a model or a theory collapses. Our case study is the universalization of expected utility theory (EUT). We say that a theory is universalized when the scientists using it consider it capable of encompassing all interesting phenomena, both within its proper scope of application and beyond it. In the case we examine, every kind of rational decision between uncertain alternatives is deemed to follow the axioms of EUT.

A number of philosophers of economics have been arguing that EUT has gone beyond its proper domain of application: it can only represent our choices under very restrictive empirical conditions that do not exhaust the domain of rational choices. Ross (2005) has defended that EUT is mainly a faithful description of insects' behaviour and only under certain conditions captures the full complexity of human decisions; Guala (2006) contends that the preferences captured by EUT are often dependent on the structure of particular games and cannot be generalized beyond these contexts (or when these contexts are analogically met in human experience); Hausman (2012) claims that EUT describes our decisions only to the extent that these are subject to rational appraisal – assuming that rationality is precisely captured by EUT.

With these contributions in sight, we may wonder why economists and decision theorists have universalized and narrowed EUT, making it a general paradigm for the analysis of risky choices: was this a purely methodological option or was it driven by non-methodological factors? A group of historians of the social sciences (Erickson et al. 2013) have recently claimed that the universalization and narrowing of EUT is the consequence of the Cold War: had the American military not promoted interdisciplinary research on decision-making under uncertainty, the study of rationality might have proceeded in a piecemeal fashion respecting established disciplinary boundaries, with potentially fruitful dialogue among disciplines.

We want to assess the universalization of EUT in terms of knowledge-production and epistemic success or failure, and in light of similar processes in other disciplines, including selfish gene theory or genetic reductionism in evolutionary biology. Did EUT contribute positively to the study of rationality or did it rather reify a particular version of rational choice for non-epistemic reasons? From a pluralist and perspectivalist standpoint, we question whether research on rational decision-making should really stick to a single standard of rationality, and on which grounds one could or should justify an option for one.