PHD THESIS SUMMARY: The performativity of economics: a conventionalist approach

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The performativity of economics has been the focal point of attention for the last decade in economic methodology and economic sociology. Initiated by Michel Callon, the performativity *thesis*, the idea that economics, more than merely describing an external social world, shapes it in its own image, directly challenges the scientificity of a social science that pushed to the extreme its desire to become an objective science. Since this thesis claims to destroy the whole battlefield of economic controversy it is not surprising that we find critics (let us recall that, for Popper, criticism is the basis of objectivity) of the performativity thesis in mainstream as well in more heterodox economics fields: if the social world takes the form of any theory which describes it, there is no longer such a thing as an external world in the name of which we can judge the validity of those theories' claims.

This point seems odd to the reader of J. L. Austin, the father of the idea of performativity in the philosophy of language. Indeed, for Austin, a performative utterance is above all an utterance that cannot fail to mean something, but can fail to do what it calls for. In his masterpiece, *How to do things with words* (1962, 5), Austin gives famous examples of this kind of utterance: "I name this ship the *Queen Elizabeth* [...] I give and bequeath my watch to my brother [...] I bet you sixpence it will rain tomorrow". Here, the state of the world can *or cannot* be changed; the performative utterance can be *happy* or *unhappy*. The happiness of an utterance rests, in Austin's theory, on a set of felicity conditions. As we can see, the potential failure of performativity is consubstantial of the definition of the performativity. I would even say that the limits of performativity are the heart of Austin's definition of this concept. The idea of the performativity of economics proposed by Callon seems to be missing this perspective, which I wanted to bring back in my

dissertation: a definition of the performativity of economics according to its possibility of failure.

In the first part of the dissertation, I argue that much of the criticism toward Callon's performativity thesis stems from its lack of consideration of the potential unhappiness of economic theory. For instance, Mirowski and Nik-Khah (2007), and also Miller (2002), emphasize the conservative way in which performativity theory is engaged when it claims, contrary to most critics of rationality assumptions, that homo economicus does exist, because of the embeddedness of the economy in economics. If economics shape the world, there are no longer true or false theories per se, and there is no longer the possibility of factual challenge. Some other authors (Ferraro, et al. 2005; 2009; Felin and Foss 2009a; 2009b) argue that if economics matters in the construction of reality, we need to explain how and why. It is necessary to understand why, in a situation of competition between several economic theories, one is adopted and not the other. Felin and Foss (2009b, 676) call for a 'reality check' and argue that only true theories impact the social reality because agents choose and keep a theory in mind after its confrontation with reality. This is a contestation of the direction of causality. In Callon's view of performativity, a theory T is applied and thereby becomes pertinent regarding agents' expectations. Ferraro, Felin and Foss reverse this chain: A theory T is a good description of the social reality; that is why it becomes more used by agents.

After having pointed out what Callon left out of Austin's account, the main purpose of the second part of the dissertation focuses on elaborating a new approach to performativity centered around a set of felicity conditions. Since Austin's theory comes from the philosophy of language, the conditions he emphasizes cannot be used directly for the question I ask: what are the conditions for a theory to perform the social world? I therefore develop new felicity conditions, resting on David Lewis's theory of conventions. Following Lewis (1969, 76; 1975, 5-6), a regularity R in the behavior of members of a population P in a recurrent situation S is a convention if and only if:

- (1) Everyone conforms to R
- (2) Everyone expects everyone else to conform to *R*
- (3) Expectation (2) gives everyone a good reason to conform to *R* themselves

- (4) Everyone prefers a general conformity to *R* rather than a slightly-less-than general conformity
- (5) Everyone would prefer that everyone conform to R', on condition that R' meets the last two conditions
- (6) Conditions (1) to (5) are common knowledge

My claim is that a theory becomes performative if it becomes a convention \grave{a} la Lewis. From points 1 to 6 of David Lewis's definition of convention, I develop several conditions a theory has to fulfill in order to be performative. To say that economics performs the economy by becoming a convention emphasizes two major points. First, to perform in the social world, a theory has to potentially be a convention. This implies, according to Lewis's definition, that it has to be *empirical* and *self-fulfilling*.

- 1.1 *Empiricity*: a theory is said to be empirical if it permits the identification of and discrimination among at least two coordination points. If there is no choice between *R* and *R'*, there is no need for a convention: "this condition provides for the arbitrariness of conventions" (Lewis 1975, 6).
- 1.2 *Self-fulfilling:* people conform to R because the fact that everyone conforms to R makes it a fixed point, and thus a self-fulfilling prophecy. Everybody conforms to R because everybody thinks that everybody conforms to R (it is common knowledge), and R is therefore efficient in the sense that it permits people to coordinate with each other. As Lewis argues "reasons for conforming to a convention by believing something [...] are believed premises tending to confirm the truth of the belief in question" (Lewis 1975, 5).

The second point is external to the strict definition of convention. To perform the social world, a theory must become a new convention in an existing social world made of conventions. As a consequence, performativity is closely linked to the degree of coherence between new and existing conventions.

2. *Coherency:* to perform the world, a convention derived from an economic theory has to fit with existing conventions.

In the third part of my dissertation, I analyse three limits of performativity: the form of the theory, the necessity to be self-fulfilling and coherency with the conventional world. Each limit is the object of a specific case study, namely, the theory of rationality, financial markets

and market design. In each case study, I follow the different transformations a theory had to undergo, some of which permitted these theories to perform the social world.

To give a sample of the potential use of my theoretical framework, the 'financial market' case focuses on the famous study by Donald MacKenzie and Yuvan Millov (2003) of the performativity of the Black-Scholes-Merton model (BSM) on the Chicago Board Options Exchange (CBOE) from 1973-1987. MacKenzie and Millov argued that BSM's empirical success resulted not so much from discovering pre-existing price regularities, but because traders used it to anticipate each others' pricing of options. As a result, actual options prices came to correspond with the prices predicted by BSM. I point out in Chapter 7 that this conclusion is partly incorrect since the BSM model never became a *self-fulfilling* model (condition 1.2). The stock market crash of October 1987 is, I defend, empirical proof that the financial world never fitted with the economic theory contained in BSM.

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