New Wine into Old Wineskins? *Methodenstreit*, Agency, and Structure in the Philosophy of Experimental Economics

Ivan Boldyrev

Experiments have become part and parcel of today's economics. Experimental evidence is used to update and to refute economic theories, but also helps in formulating new theories or policies. Experimental evidence and (quasi)experimental designs are becoming increasingly popular in many fields of applied economics (Angrist and Pischke 2010). The consequences of this transformation are deep enough to prompt methodological reflection at least as wide-ranging and radical, as the change itself. In this discussion, seemingly outdated distinctions may gain a new significance and inspire more general questions on the structure and perspectives of current economic science.

In this paper, I will briefly defend two claims that, I believe, put the "experimental turn" in economics into the broader historical and philosophical perspective.

First, I argue that the adoption of experimental method should be seen as part of the general tendency of recent economics to become more empirical. It helped decisively to recognize the context-dependence of economic agency and economic rationality. This tendency invites us to rethink current economics in view of the famous *Methodenstreit* and to ask anew how it can be not just a social, but a cultural and an historical science. Thus, apart from marking a turn in the intellectual history of economics, experiments demonstrate *the ways economics itself may turn (in)to history*.

Second, and related issue, concerns the relevance of experimental economics for policy. Here, I suggest that it is instructive to look at the current debates in view of a classical *agency-structure dualism* familiar from social theory. It is this dualism—implying both tension between and attempts to reconcile agency and structure—that is invoked when discussing policy prospects of experimental (and behavioral) research. In particular, what exactly should be changed as a result of a given policy (be it in view of promoting the welfare or increasing efficiency, or similar

I. Boldyrev (✉)
Department of Economics, Institute for Management Research, Radboud University, Nijmegen, The Netherlands
e-mail: i.boldyrev@fm.ru.nl

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concerns economists address)? Answering this question by referring to the interplay between agency and structure may additionally illuminate important methodological aspects of experimental economic research.

1 Going Local

There is one basic feature most economic experiments share—they are situated events, happening in a particular environment, limited in space and time and providing only partial generalizations, or "the library of anomalies". But is this feature so unique?

It has been 20 years since Avner Greif, in defending new approaches to economic history, observed the profound change in economic *theory*—a change that, since that time, has only become deeper. Both micro- and macroeconomists, Greif argued, had abandoned the search for "a single universally applicable economic model" (Greif 1997: 401) and instead produced a plethora of contextualized specific models in order to capture the complexity of ever-changing economic world. Indeed, the way from general equilibrium to game theory (Rizvi 1994) in microeconomics and from the unified "rational expectations" approach to the current perplexity over "right" macroeconomic theories in view of the recurrent critiques of the "dominant" DSGE paradigm (Korinek 2017) all demonstrate that economics is becoming more local and ad hoc (see a nice older text by Amable et al. 1997) and, importantly, more *empirical* (on various facets of the "empirical turn" see, in particular, Hamermesh 2013; Backhouse and Cherrier 2017).

The "experimental turn" fits very nicely into this picture. An important tendency in experimental economics, observed by various authors, is the shift from the theory-testing function to direct application of experiments in different real-world situations (Guala 2007; Santos 2011). This change is often tackled as a re-assessment of inductive reasoning (see, in particular, the interpretation of experiments as "exhibits" in Sugden 2005); the relative emancipation from the primacy of theory (Backhouse and Cherrier 2017); or as a turn to "performativity" (Guala 2007; Callon and Muniesa 2007; Herrmann-Pillath 2016). Thus, experiments are often seen as tools to comprehend or transform *a qualitatively changing historical reality*, without strong claims to universal "external validity". This entails the plurality of particular causal mechanisms and regularities isolated and revealed by experiments and the uncertainty as to which particular combination of those mechanisms is at place in each specific case under consideration.

These developments remind very much of the older debate in economics, namely, the famous *Methodenstreit* between Carl Menger and Gustav Schmoller representing, respectively, Austrian and Historical School. What interests me in this debate is less the idea of a "correct" method—deductive or inductive—but rather the different ways to understand *the subject matter of economic theory*. In this respect, *Methodenstreit* demonstrated the major opposition between understanding economics as a universal science of rational behavior and as an historical science dealing with particular values

and cultures. Note that at stake was the context-(in)dependence of economic action, and not the very ability of economists to make generalizations (allowed by both sides of the debate).

Now, if economics today seems to move away from universal theories, what are we to make of experiments in this context? According to Plott (1991), experiments should help reject (and, perhaps more problematically, confirm) *universal* economic theories, of which they merely provide particular examples. But what if theories themselves are not of universal validity, what if they are designed and tested more or less ad hoc, locally in space and time—that is, in culture and history? If we assume that *economics in general* now embraces more local and specific analyses, moving from one big theory or paradigm to a set of models tailored to account for particular causal mechanisms, than experiments, both in their theory-testing and in their more autonomous, theory- or market-generating functions should appear as more local, too.

To be sure, economics now cannot fully subscribe to the approach of the German Historical school. Neither can it fully renounce its universalist aspirations. But the tension involved in *Methodenstreit* and the historical approach in general open up a new methodological perspective on economic experiments and suggest seeing them not only as tools to establish generally ("externally") valid results and comprehend the nature of human rationality, but also as a series of culturally and historically situated attempts to provide contextualized and partial generalizations. Those generalizations would then *describe* as much as *explain* and could be seen as parts of more comprehensive narratives and explanations involving further empirical methods, abstract modeling and, perhaps, following again the legacy of the *Methodenstreit*, insights from history and from other human sciences, such as anthropology. This latter interdisciplinary collaboration seems a particularly uneasy task, although not unknown to economic experimentalists (see, for example, the famous study in Henrich et al. 2004).

All this moves experiments closer to *case studies*. Again, this hardly amounts to identifying the two, but demonstrates local and—in this sense—historically situated nature of experimental results. Seen in this light, many important issues in the methodology of experimental economics, such as the problem of reproducibility of experimental results, the sensitivity of those results to particular contexts, or the "performativity" of experiments—can be discussed with this "pole" of history in mind. In the limit case, no result would be fully reproducible and every experiment, like every country or age discussed by the *Historical school*, would be unique as an "exhibit" of particular culture in a particular time period.

2 What Policy? Agency, Structure, and History in Appraising Experimental Economics

Once we pose the problem of universality and address the issue of historical and cultural relativism in the context of economic experiments, the question immediately arises as to what kind of universal validity one might expect from experimental research and, in particular, what its foundation could be.

One way of thinking about this problem consists in confronting "the social" with "the natural", the historical and cultural relativism with the immutable or else very slowly changing laws of human nature that would allow broader generalizations and arguably reduce the heterogeneity of human cultures to some harder—and thus universalizable—facts about the workings of the human mind. With all simplicity of this opposition, it is, as many others, alive and matters for many different contexts. One of them concerns the policy implications of experimental research.

In his instructive paper addressing different ways to link experimental results to policies, Lee (2011) distinguishes three programs in this respect: the "heuristics and biases" program of Daniel Kahneman, Amos Tversky and Richard Thaler; the "fast-and-frugal-heuristics" program associated mostly with Gerd Gigerenzer; and the experimental-market-economics program advanced initially by Vernon Smith. Lee's question is: what kind of normative claims do these programs imply and what might their respective policy proposals be? However, underlying this question is another one: what exactly—"agency" or "structure" (or, perhaps, both)—should be changed in order to make human behavior more "optimal" or "rational"? Should we hope for improving individual decision-making or should we more emphasize its institutional context?

The "heuristics and biases" program assumes inherent human irrationality while suggesting the importance of changing structural (institutional) constraints of irrational action. In this perspective, agency does not really matter, for it cannot be really changed quickly and in a predictable way, but the structure does. The "fast-and-frugal-heuristics" program stresses the mutual dependence and co-evolution of agency and structure that both turn out to be malleable and subject to improvement. Finally, the experimental markets program clearly focuses on the "ecological rationality" of intersubjective, institutional structures and not primarily on cognitive capacities of individual agents. These distinctions echo previous classification of "technological" (institutions-focused) and "behavioral" (agency-focused) experiments (Santos 2007).

The interplay of agency and structure can become a tension that is involved in defining the boundaries of economic approach. When Gul and Pesendorfer (2008) make their case "for mindless economics"—that is, roughly, for economics different from and independent of natural science—they repeatedly claim that the aim of standard economic analysis is "to analyze institutions (sic!), such as trading mechanisms and organization structures, and to ask how those institutions mediate the interests of different economic agents. This analysis is useful irrespective of the causes of individuals' preferences" (Gul and Pesendorfer 2008, p. 8). The new *Methodenstreit*

initiated by Gul and Pesendorfer is somewhat similar to the older one, because it involves a social science—economics—again, as in the nineteenth century, in need to justify its own, particular type of rationality, and its own ontology providing the right to generalize irrespective of neuroscientific facts.

Note how both experimental economists focusing on markets and psychology-oriented behavioral scientists situating their normative concerns between changing agency and structure clearly tend towards *irreducibility of "structure"*—that is, cultural norms in which human action is embedded and which preclude us from deriving any universal laws of economic action. Even the psychology-inspired fast-and-frugal-heuristics program actually mostly addresses claims of the type "if heuristic x says to do y, and if x is more effective/fast/frugal than other heuristics in environment E, and one is in environment E, then do y" (Hands 2014). In other words, even here *rationality becomes local and context-specific*. The behavioral experiments run by the adherents of nudging are equally geared toward institutional control—and institutional transformation, allowing for more rational outcomes. Thus, even those who think they are dealing with "human nature", have society and culture at the back of their heads. The same is, of course, true for market-based experimental approaches that start from the rules to be implemented.

This is precisely the way how *in this context* the distinction between agency and structure corresponds to the previous one, between universalism and historical/cultural specificity. I say "in this context" because many agency-focused accounts would surely stress the cultural and historical embeddedness of human action and consider it to be fully compatible with methodological individualism. I will not go into details here, but the only aspect I wish to highlight is precisely the link between the analysis of institutions and the spatial and temporal heterogeneity of societies. This link brings us back to economics as an historical science.

3 Conclusion: On Re-contextualization

Is it worthwhile to rethink experimental economics in view of some old-fashioned methodological debates? I think the answer is yes, and the reason is that these seemingly outdated debates are still on the agenda, and it is an important methodological task to recognize them in their new clothing. Economics today is still a social science that should be open to history and description, to qualitative and interpretive approaches that allow to grasp the complexity of real economies embedded in cultures and polities.

What could be the implications of this perspective on economic experiments? Answering this question necessarily involves some speculation, as in any other attempt to delineate the tendencies in the development of complex intellectual and academic practices. That is why these implications are to be taken *cum grano salis*.

Perhaps the most immediate and significant one follows directly from the inductivist tendency in economics I sketched above. Abandoning the pretense of universalism amounts to the re-evaluation of more partial and small-scale studies. Experimen-

tal design would then be more tailored to fit particular aims of more local explanations and policy concerns. There would be less emphasis on reproducibility/robustness of results across various cultures and contexts and more on tracing in detail particular causal mechanisms at work in the contexts under scrutiny.

This widening of methodological perspective obviously allows for more interdisciplinarity. Once no economic model appears to be universally valid, more qualitative approaches become equally legitimate. Ethnomethodological and interpretive work in sociology, various anthropological and ethnographic approaches, discourse analysis and, of course, history—all might contribute to the problems at hand. Note, that here, history can be tackled not as the reproduction of the same, but rather as a set of disciplines conveying the view of contingency and complexity of happenings, of the multiplicity of factors (that is, of course, uneasily reconciled with economists' quest for parsimony of assumptions and unambiguity of conclusions). In this sense, the search for more valid explanations could consist less in comparing how the same formal structure works in qualitatively different contexts, but rather in looking at whether the particular local regularity is revealed by other empirical methods. Qualitative approaches gain additional significance once we admit that the same formal rules and norms can be perceived and interpreted by economic agents differently in different cultures.

Needless to say, this perspective does not amount to pure relativism. The heterogeneity and multiplicity of various approaches should not prevent us from making generalizations and revealing regularities. The older problem of the Historical school—the lack of "theory"—should be reinterpreted in the light of new developments. For current experimental economics does not arguably possess a unified "theory", either—rather, it is a set of experimental designs and results that together convey a certain understanding of human behavior across various contexts. In fact, context-dependence of economic action and rationality has been one of the major implications of behavioral experiments over the last decades! In this sense, experimental economics itself legitimizes its own "re-contextualization".

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