

One Long Argument in Economics: Explaining Intellectual Inertia in terms of Evolutionary Ontology

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In this article, we explain in terms of evolutionary ontology whether (and to what extent) economics has become an evolutionary science since Veblen published his seminal paper in 1898, “Why is Economics Not an Evolutionary Science?” We argue that researchers’ habitual and ceremonial behavior as well as ideologies and non-intellectual beliefs cause inertia in the research environment. Inertia caused by the research environment is so significant that economics does not “progress” towards a state advocated by Veblen, where economists revisit their thoughts and change their minds by following the (evolutionary) “drift.” In essence, we stress the evolutionary ontological reasons why economists do not abandon theories when the dominant paradigm in economics is disputed. The “drift” which Veblen thought would turn economics into an evolutionary science has now become an evolutionary process itself, in which economists are unable to displace non-evolutionary preconceptions in economics.

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1. Introduction

The possibility of an evolutionary program in economics was advocated by several economists at the turn of the nineteenth century (Marshall 1890; Menger 1892; Schumpeter 1912). Yet, it was most prominently expounded by Thorstein Veblen and has since been debated, interpreted, and advanced by many of his followers. In his seminal paper published in 1898, “Why Is Economics not an Evolutionary Science?” Veblen argued that while economics was not an evolutionary science at the time, it would become one. “The social and political sciences must follow the drift,” Veblen claimed, “for they are already caught in it” (Veblen 1898, 397). Yet, economics has failed to respond to the challenges of evolutionary critics since Veblen’s seminal paper in 1898. In this article, we argue that the turning of economics into an evolutionary science has been an evolutionary process itself due to the reasons to be explained below.

In the paper, we focus our attention on evolutionary ontology because we contend that it provides us with a rich epistemological framework to explain the failings of economics. We argue that many economists, in spite of the criticisms posed by evolutionary scientists, are not able to develop an evolutionary social theory mainly as a result of their habits of thought and the ceremonial features of academic scholarship in economics. In essence, the “drift” which Veblen thought would turn economics into an evolutionary science has now become an evolutionary process *itself*, perhaps more accurately described as “one long argument” (Darwin 1859 [1964], 459), in which economists are reluctant to displace non-evolutionary preconceptions in economics.

The causes that prevent economics from becoming an evolutionary science, such as intellectual path dependency (Yalcintas 2012 and 2016 Forthcoming), operate in such ways that the intellectual welfare of economic researchers cannot be increased to higher levels of thought where different strands of economics – including the dominant paradigm – would reciprocally benefit from the criticisms. Then, for instance, some errors remain uncorrected (see for instance Yalcintas 2011). And remaining errors impose *epistemic costs* (Yalcintas 2013; Fallis 2006; Radniztky 1987) on the shoulders of other economic researchers and the general public. Departing from K. William Kapp’s idea of social cost (Kapp 1950), we define epistemic cost as the intellectual value of the harmful consequences of economic research which economists do not take into account while conducting research. Researchers’ habitual and ceremonial behaviors include ideologies and non-intellectual beliefs that cause inertia in the research environment. Epistemic costs in economics are significant; and they are common. As a result, economics does not “progress” or “grow” toward an ideal state, e.g. a state advocated by Veblen where the knowledge that economists produce would have constantly increased if economists had considered revising their thoughts and changing their minds by following the evolutionary “drift.”

The structure of the paper is as follows. In the following section, we propose an evolutionary explanation based on intellectual path dependence, in which we account for the significance of economists' non-intellectual beliefs that give rise to a general unwillingness to rebut criticisms. Next, we claim that economic methodologists have focused attention mainly on the processes of theory selection, neglecting the social ontological reasons why economists do *not* select theories when the dominant economic ideology is disputed. Then, we take a closer look at Lawson's critical ontology in which he revisits Veblen's evolutionary science and argues that Veblen's genetic account provides insight into the circumstances in which habits of thought play significant roles in the canonization processes of knowledge in economics. Finally, conclusions follow.

2. What Use is Evolutionary Ontology?

Evolutionary ontology provides us with the tools to study the methodologies that historians of economic ideas often tacitly take for granted while accounting for how economists behave in situations where economists choose theories amongst a number of alternatives that provide different explanations of the same phenomenon. Many historians of economists, while providing valuable insight into the way economic explanations work, seek to explain the "progress of ideas" in terms of explicit methodologies alone such as rational criticism (Popper) or dialectics (Hegel). However, the history of economic ideas is more than the sum of explicit methodologies. In the process, tacit methodologies, e.g. habits of thought, intuitions, instincts, intentions, ideologies, and the memory of the community of scholars play an important role. In our view, historians of economics should obtain the knowledge stored in the habits of scholarly communities, too. Historians should account for the roles that tacit methodologies play as well.

Economists' habits of thought matter because the history of economics is a complex of "self-continuing and self-propagating" processes where economists reproduce the findings and implications of the economic explanations of past generations when they explain new facts of the world. Inherited characteristics of social and intellectual institutions change over generations. However, as the punctuated equilibrium model shows (Eldredge and Gould 1972 and Gould and Eldredge 1977), characteristics of species resist to the pressures of change after rare and rapid episodes of interruption. In the same vein, social and intellectual institutions go through long periods of stasis in which there is little or no change over generations, followed by rapid change. In economics, the theory of path dependence or the theory of punctuated equilibrium refers to a circumstance where small disturbances in the course of events, such as chance events, become part of positive feedback loops and lead to disproportionately big consequences. When new pathways emerge, individuals who are making decisions today are limited by the consequences of decisions made in the past, although past

circumstances are no longer relevant. The theory of intellectual path dependence brings into economics a fresh perspective as the theory tells us why the processes in which social and intellectual institutions go through evolutionary change do not always give rise to desirable and intended consequences.

Evolutionary ontology, as we put it, is devised to explain the nature of these processes in which positive feedback loops determine the general validity and acceptance of an explanation. One needs evolutionary ontological accounts of the ways in which economists practice their science, because it is these accounts that can explain the epistemic phenomena in terms of the processes of intellectual causation. Intellectual causation explains the challenges that economists face when they encounter an objection to their philosophy of science. The demonstration of an outmoded philosophy of science, such as the pre-Darwinian methodology which Veblen criticized in most of his philosophical works, is a necessary but not a sufficient condition for economists to change their minds about their models and about the preconceptions behind their models. Preconceptions are not easy to replace, especially when scholars are not keen to replicate the findings of past economists. Resisting to replicate the findings of past models and refusing to insist on the tools and methods that are already available to the intellectual community are dynamic failures that lead an intellectual community to lock into an undesirable state of intellectualism.

In order for an argument to be accepted and diffused among scholarly circles, the argument has to become a part of scholarly processes in which implications and results of an argument are cited, disputed, and further developed. Science does not always yield the best results when scientists work on their own and on their behalf only. Since science is a collaborative field of intellectual specialization, new arguments require an audience to judge the novelty of the implications and findings. Since the beginning of the twentieth century, specificity of intellectual evolution has led to increasing returns to scientific scale, just as science has become more industrial. In order for the acceptance of a refutation of error or the acceptance of criticism of a defective explanation, refutations and criticisms must be a part of the intellectual causation where scholarly processes determine which claims have a better chance of being accepted by the audience and which claims are likely to remain unnoticed. When an argument gets the attention of a network of scholars, it is very likely that marginal returns to the use of the argument would rise exponentially. Under the conditions of increasing returns to scientific scale, a contribution spreads wide and fast even if the contribution causes a small change in the community's habit of mind.

One of the key issues here is the role that epistemic costs play in the doing and making of scholarly life. We argue that habits of thought impose epistemic costs on individuals. Individuals seriously consider these costs when they choose to remain loyal to their intellectual past or when they revise

their decisions. Epistemic costs are positive primarily because there is always an opportunity cost, in the form of time and other scarce resources (such as research funding) that economists must use as they develop new explanatory methods and techniques. Scholarly practices are often epistemologically costly in the sense that scholars require time to start new ideas and get inspiration, and energy to make new ideas work. Under conditions of positive epistemic cost, intellectuals have two options when counter-reasoning or refuting evidence challenges them: they can remain loyal to explanations based on existing habits of thought, or they can risk exploring a new path of evolution. Remaining with past habits of thought requires intellectuals to be content with the consequences of those actions, while exploring new paths necessitates an exchange of the current uncertainty with that of a new un-tested path.

In order for an intellectual to switch between different pathways, curiosity for exploring a new path must overwhelm the costs that such an exploration would incur. When exploring a new path, intellectuals hope to gain new insights that were not available on the old well-worn path. Ignoring such alternatives may cause “trained incapacity” or “occupational psychosis” in the sense that, continuing re-analysis of the same path of inquiry leaves actors without the risk of consequences from new action but also without the pay-offs from exploring new alternatives. As Veblen claims, disregarding new paths will only lead to “widening the candidate’s field of ignorance while it intensifies his effectiveness within his specialty” (Veblen 1918, 286).

Habits of thought help economists understand and explain the events taking place around them, insofar as economists epistemologically benefit from the readily available tools to analyze the facts of the world. Such tools are formed via ideas that proved to be useful previously. Individuals make up their minds in diverse and unique situations and so usually face difficulty. The difficulty is principally that individuals in economic and social life rarely have a clear and precise idea about how the diverse circumstances, within which they have to make decisions, are going to change. They usually suppose that the results of their past behavior are indicative of the future consequences of similar behavior. They think that alike-causes will generate alike-consequences.

However, this is not always true. Habits of thought do more than simply guide humans in the process of understanding the social and economic environments, which are otherwise unfamiliar. Habits of thought also set borders and rules that regulate the pathways of scientific and artistic progress. Given the fact that habits of thought increase reluctance to “[depart] from the archaic point of view” (Veblen 1898), epistemic costs are among the factors that give rise to intellectual path dependency (Peacock 2009; Dobusch and Kapeller 2009; Yalcintas 2006, 2016 Forthcoming; Jolink and Vromen 2001). Intellectual path dependency means that there is no certainty in the selection of an argument within intellectual communities.

The selection of an argument is an over-determined process and the evolution of an intellectual system as a whole has no final end-goal. There is no single pathway that gives rise to the survival or extinction of an argument. In fact, in social sciences, the history of ideas is the sum of a number of pathways, in which intellectuals interpret the world based on different preconceptions and reach a variety of conflicting conclusions. The significance of path dependency in the evolution of academic scholarship is that different pathways do not always converge. Competition between the conflicting conclusions of disparate paradigms does not produce “a” winner. Instead, a variety of conclusions, and therefore “winners”, coexist. Often times, scholars resist the pressures of change, despite the fact that they accept the validity of the refuting arguments and the counter-evidence. In other words, convincing the audience of the validity of an argument is not enough for the argument to be established.

3. Why are Theories Not Selected?

Theory selection is not only the result of robust reasoning; it also depends on contingencies, luck, and so forth, which further complicates the processes in which scientific knowledge evolves. To some degree, there must be certain mechanisms or tendencies in operation that make scientists deliberately stick to their guns and keep themselves away from criticism. Here, again, evolutionary ontology would help us understand the scholarly intentions that prevent change in economists’ points of view.

The literature on intellectual causation in economics, where several authors discuss the significance of path dependence in the evolution of economic ideas, has been growing rapidly. In a recent article, Leonhard Dobusch and Jakob Kapeller argued that “economists who preferred neoclassical theory for scientific, ideological, or other reasons had a vital interest in participating in and affecting the open-ended process of path-formation and enhancing the paradigmatical status of neoclassical economics” (Dobusch and Kapeller 2009, 13). They furthermore claim that economics has been locked in to “neoclassical economics,” and underline the significance of positive feedback mechanisms that set ideological barriers for economists that prevent them from adopting, or even seriously considering, evolutionary metaphors and evolutionary reasoning.

We agree with their analysis. Insofar as habits are the primary code of behavior among scholars and the entire function of scholarly activity is to produce more habits of conduct, scholarly life is under the risk of becoming ideological, i.e. getting locked into a set of ideological judgments about scientific method. The more intellectuals consult ideologies for answers, the more difficult (or epistemologically costly) it becomes to change viewpoints, methods, and paradigms. Pathways emerging out of influential ideologies may both have advantageous and disadvantageous consequences for scholars,

depending on how ideologies operate and whether they provide scholars with up-to-date tools for understanding the events in society.

We contend that the existence of radical directions is insufficient to ensure that new and better procedures of explanation would eventually prevail. Changing a community's habits of mind is a process of cumulative causation where many social and intellectual mechanisms are in operation. The emergence of new explanations tends to increase variation among theories; however, this tendency does not necessarily lead to the replacement of already existing explanations. Several factors, the most important of which is a community's habits of thought, prevent previously interacting (or "interbreeding") intellectual communities from interacting with each other. New explanations arise but they only attain sophistication within isolated intellectual realms. New explanations thus often coexist with old explanations; they fail to challenge the existence of other explanations.

Although evolutionary economics is still a theoretically fragmented field of research (Witt 2014), the significance of economists' contributions in evolutionary epistemology should not be overlooked. (See Nelson and Winter 1982; Hodgson 2004, 2007; Hodgson and Knudsen 2006, 2010; Witt 2003, 2006; Dopfer 2001; North 1994; Pagano 2001; Metcalfe 1998, 2012). In general, evolutionary approaches to economics emphasize the fact that economy is characterized by ongoing transformation of agents and institutions. Nevertheless, the extent of the transformation of economics into an evolutionary science is debatable. We think that academic scholarship in economics has failed to produce an intellectually desirable outcome, in that the response to the criticisms posed by evolutionary political economists has been inadequate. However, we do not think better scholarship would have been possible in the absence of such a failure.

The nature of academic scholarship requires scholars to benefit from the great number of potential explanations that are available. Scholarly conditions, under which explanations are subject to processes of intellectual speciation, increase the sophistication of the economics profession as a whole. The source of failure in academic economics is the lack of intellectual interaction and poor scholarly conversation among the different pathways of thought (or "schools of thought"). Thus variation among economic explanations tends to increase at the expense of diminishing social and intellectual communication among economists. This deficiency gives rise to the exclusion of some ideas only because these ideas come from diverging pathways of thought. It is this lack of intellectual interaction, or scholarly conversation, which prevents many economists from accessing the richness of evolutionary epistemology and incorporating it into economic analysis.

Many contemporary scholars working on evolutionary social theory provide many good reasons why economics should be an evolutionary science, but a full transformation in economists' habits of thought has not yet taken place. We therefore think that the evolution of economic analysis is not

simply the result of the decision, whether or not to abandon economic models and explanations. The evolution of economic analysis is rather the consequence of several tendencies, all in operation at once, which sometimes prevents the actualization of specific scholarly consequences. In the case of Veblen's evolutionary science, the problem has not been the absence of causes for changing the present state of economics. Intellectual motivations have existed and been expressed repeatedly since 1898, if not earlier. The problem has been a multiplicity of causes that have led to diverse effects on the acceptance, rejection, or modification of an argument within a community, rather than the non-existence of such causes.

Intellectual path dependence in economics might generate an incorrect image in the minds of philosophers of science. They might erroneously conclude that economists never respond to their critics and are resistant to proposed changes, based on an absence of intellectual structures and mechanisms. We contend that such structures do exist and that economists are indeed sometimes willing to listen to their critics. A world that "existed" in the absence of structures would be a world without power relations, uncertainties, and scholarly merit; explanations of the structures of such a world would be explanations of freestanding societies and communities. This is not the case. The significance of the multiplicity of causes is that consequences of certain social causes neutralize and counter-balance the consequences of some other social causes. Scholarly structures exist – and, moreover, they are interlocked, in that structures are in need of other structures and sub-structures to operate.

To our understanding, economics is still not an evolutionary science because absences in economics are "causally efficacious" (Lawson 1997, 259) in the sense that the evolutionary reasoning in economics could not "transform structures in order to enhance the scope for realizing human potential, to broaden opportunities . . . [and] . . . replace structures that are unwanted, unneeded, and restrictive by those that are wanted, needed, and empowering" (Lawson 1994, 280). To put it another way, the reason why economics is still not an evolutionary science "appears to be not so much a lack of attention to the details of evolutionary models (though there is often room for improvement here) as an insufficient attention paid to questioning the nature of the social realm to which it is intended that the evolutionary models be applied" (Lawson 1997, 111). The reason appears to be that intellectual causation in economic scholarship could not break free of the consequences of lock-in effects in the evolutionary history of economics. As Veblen claims, "[h]istory teaches that men, taken collectively, learn by habituation rather than by precept and reflection; particularly as touches those underlying principles of truth and validity on which the effectual scheme of law and custom finally rests" (Veblen 1919 [1964], 15).

In order for a science to undergo a revision, knowledge and ideologies should support the change of mind in favor of displacing “old” habits of thought. This does not happen very often. Although “new” does not necessarily mean “better,” lock-ins amount to irreversibility of consequences in the long run. We conclude that the history of economics since the beginning of twentieth century has featured several intellectual path dependencies not because the majority of economists are not convinced by evolutionary reasoning, or any other critical paradigm, but because the epistemic costs of changing one’s mind have become so high that “different” theories have remained “different” and variety among theories kept increasing.

4. Insights from Evolutionary Ontology

Veblen’s genetic account of the evolution and diffusion of knowledge from the eighteenth century until the beginning of twentieth century (Veblen 1919 [1932], 82 – 179) provides insight into the circumstances in which habits of thought play significant roles in canonization processes of knowledge in the twenty-first century. Writing on the preconceptions of economic sciences decades before economic methodology has become an autonomous field of research, Veblen demonstrated that research into economics and philosophy is more than what many of the economic methodologists discuss today, i.e. there are more elements that deserve attention in this research program. Economic methodologists’ limited, or one-sided, explanation of how ceremonial practices in economics lead to intellectual hysteresis in the evolution of economic theories.

Non-scholarly habits of thought, belief systems, and ideologies have a role in this process. We argue that habits of thought are one of the important factors causing economists to deselect the option of revising their preconceptions. Indeed, this concern was one of the issues raised by Veblen when he observed that, in spite of the changes in the material conditions of society in the nineteenth century, economists of the time still possessed a natural rights conception of science inherited from the pre-evolutionary period. The natural rights conception of science, foremost, relies on “... (natural laws) working teleologically to an end ... which they should subserve ...” (Veblen 1899, 150). The advent of machine processes had a decisive effect on habits of thought. People started to think in terms of processes despite the fact that they were previously accustomed to thinking in terms of statics. Foremost, Darwinian scientific approach altered the focus of science from natural laws which govern phenomena, to processual theories of consecutive change, in which interactions between causes and effects do not come to rest. Veblen’s ideas were formed in such an environment when he argued that, “[an] evolutionary economics must be the theory of a process of cultural growth as determined by the economic interest, a theory of a cumulative sequence of economic institutions stated in terms of the process itself” (Veblen 1898, 393).

Yet, despite the merits of explanations in evolutionary epistemology, no “genetic process of cumulative change” (Veblen 1914 [2006], 326) has fully taken place in economics. The conversion of the matter-of-faith quality of economics (or “taxonomic methods and ideals of pre-evolutionary days”) towards a matter-of-fact knowledge (or “step-by-step argument from cause to effect”) (Veblen 1899) has not yet fully occurred. Why has economics not transformed itself into an evolutionary science even though the material conditions in which economists live, socialize, and think, have dramatically changed?

One of Lawson’s numerous contributions to economic philosophy has been that theory selection is neither a Popperian (or Lakatosian) practice in which theories are assessed according to their falsifiability, nor a process advocated by Paul Feyerabend and others who argue that theorists choose explanations without complying with any epistemic criterion (Lawson 1997, 36-42 and 43-48; Lawson 2003, 28-32). Lawson claims, in line with Veblen, that theory selection is an evolutionary process, which should be explicated in terms of cumulative causation. Lawson suggests, “that Veblen’s is primarily an ontological project, concerned centrally with processes of cumulative causation. This is counterpoised to the deductivist mainstream project of his time” (Lawson 2002; see also Lawson 2003, 184-217; 2014). According to Lawson (1997, 2003), orthodox economics endorses a positivist conception of science, and restricts itself to finding event regularities and to the analysis of surface phenomena. Scientific laws are thus always identified by these event regularities. Yet, the world is structured by underlying principles and tendencies into which economists should principally inquire in order to provide a valid explanation of the phenomena. The aim of science is to illuminate such powers and structures that govern the events of experience.

In his Clarence Ayres Memorial Lecture, Tony Lawson argued for the significance of social ontology in evaluating Veblen’s philosophical legacy and claimed that “Veblen was very clearly of the impression that economics would fall in line as an evolutionary science independently of any consideration of the latter’s likely intrinsic worth as a cognitive device” (Lawson 2002). Veblen’s program was ontological in nature, according to Lawson, concerned primarily with the processes of *cumulative causation*. Lawson claimed that the tradition of Original Institutional Economics ought to be falling not only in line with a constructive project, but also with a specific evolutionary ontological project within realist social theorizing.

However, despite the significance of Lawson’s call for a critical social ontology to under-labor for economics, an intriguing question has remained unattended: why do theorists *not* select theories when a more explicatory theory is available? We have already pointed out that this too is an evolutionary process, in which causes of theory selection and the consequences of not-selecting specific theories interact in such a way that the process does not result in a specific end. This, we reckon, is one of the

reasons why the process of theory selection does not feature *inevitability*. The significance of the point we would like to make is that “better” theories do not always outperform or replace “worse” theories.

The preconceptions of our approach is implicit in the critical realist approach and its conception of social ontology, in which the world is conceived as consisting of structures in addition to events, and mechanisms that are not directly observable but are responsible for the actual course of events. As Lawson (2003) argues in the social realm event regularities are difficult to find, and social structures are only relatively enduring and open to change by intentional human activity. Additionally, unlike their natural counterparts, social structures are dependent on human agents for their existence. Hence, deep understanding of social phenomena, e.g. the history of theory selection in economics necessitates studying not only the relevant theories in epistemic vacuum, but also analyzing non-scholarly habits of thought, belief systems, and ideologies of the actors in question.

5. Conclusion

The history of evolutionary and institutional economics, with special emphasis on the general acceptance of evolutionary and institutional economics in the US and Europe, is well documented. (See, for instance, Rutherford 1994; Hodgson 2004; Lee 2009, 2010.) In our interpretation of the history of critical streams of thought in economics from the 1880's to date there is an economic dimension to the operation of science in economics departments, especially in North America and the UK. The departments of economics have been monitored in terms of the intellectual (if not pecuniary) interests in the established habits of thought in the market of economic ideas. Proficiency in certain methodological approaches and fields of interest are attributed the highest status for an academic job. When a young professional gets his or her tenure then he or she demands the same from future PhD candidates and prospective employees. Under such conditions, the emergence and maintenance of new intellectual pathways turn into processes in which arguments for and against established habits of thought in economics do not clash but instead evolve in isolated environments where arguments are kept out of interaction. Given sufficient time and opportunity to theories, theoretical variety among different species of explanations continually increases whereas viewpoints remain unchanged.

What effects have Veblen's works given rise to? In our interpretation, Veblen's groundbreaking works have given rise to several emerging pathways in economics, both in the orthodox and unorthodox circles. Divergence among intellectual pathways in economics has led to the epistemic autonomy of several “schools of thought” in economics in the sense that the majority of orthodox economists isolated themselves from the charges of evolutionary political economy and generated an independent intellectual agenda. The intellectual causation that has been in operation in economics since the

beginning of the twentieth century has run on evolutionary grounds where epistemic costs involved in the scholarly lives of economists have “naturally” forced them to stick to their guns when they were confronted with criticisms.

This suggests that in order to be able to change the ways in which economic scholarship works, it is essential to be able to challenge not only the argument but the selection environment as well. This is why we think that social economists ought to introduce conceptions and analytical tools from which philosophers of economics would benefit. In the absence of a social perspective on the community of researchers in economics, economists as well as the public sector making use of the knowledge that economists produce would keep imposing epistemic as well as social costs on the economy and society.

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