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Economics in a world amid flux

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Abstract

This essay is in celebration of the contributions of Mario Rizzo. I argue that among contemporary economists in the Austrian School of Economics tradition it is Rizzo that advanced, more than his contemporaries, the scientific research program of rational choice as if the choosers were human beings; the dynamic subjectivism and the agony of choice and social interaction; the causal processes and the institutional dynamics that make up a complex social order; and the role of law, politics and civil society in shaping commercial life. In making this argument, I attempt to arbitrage the contributions of two essays of Rizzo's: 'Law Amid Flux' and 'The Genetic-Causal Tradition and Modern Economic Theory'.

Keywords: beliefs; expectations; institutions; subjectivism; time; uncertainty

Introduction

The Austrian School of economics has throughout its history had various thought leaders that were highlighted with each generation: Menger, Bohm-Bawerk and Wieser; Schumpeter, Mises and Hayek; Kirzner, Lachmann and Rothbard; and in the 1980s, the leaders that emerged were Don Lavoie, Lawrence White, and Mario Rizzo. Rizzo advanced, more than his contemporaries, the scientific research program of rational choice as if the choosers were human beings; the dynamic subjectivism and the agony of choice and social interaction; the causal processes and the institutional dynamics that make up a complex social order; and the role of law, politics and civil society in shaping commercial life.

In what follows, I hope to draw a link between two of Rizzo's early contributions. First, his paper 'Law Amid Flux' (1980) which was published in the *Journal of Legal Studies* and sought to explore the economic logic behind the rules of negligence and strict liability in tort law. Second, his paper (co-authored is Robin Cowan) 'The Genetic-Causal Tradition and Modern Economic Theory' (1996) which sought to trace out from the beliefs and expectations of individuals to the generative processes that produce the coordination of economic activities through time.

Rizzo has also co-authored two of the most original and creative works in Austrian economics over the past 40 years: *The Economics of Time & Ignorance* (1985, with Gerald O'Driscoll) and *Escaping Paternalism* (2020, with Glen Whitman) which explores the complex issues around the nature of rationality and the behavioral critique of the neoclassical model of decision-making. Many of the arguments that I will develop in what follows will dovetail with arguments that are developed in those two books, but my emphasis here will be on those two foundational articles and their interconnectedness.

Much of what I say merely conforms with a judgment made by James Buchanan when he was asked in 1980 to provide a reference for Mario Rizzo for a fellowship from the Alfred Sloan Foundation. In his letter to Dr Kenneth Klivington at the Sloan Foundation, Buchanan writes:

I should recommend Rizzo highly to you. He has done very substantial work in the law and economics area. He approaches the whole area from a perspective that is “fresh” in the sense that it is not within the standard Posner-Chicago variant but yet at the same time does not precisely fall within the anti-Posner work launched primarily by legal scholars. Rizzo has published several papers that represent genuine contributions.¹

It is in this gap between the Posner-Chicago vision of the economic system, on the one hand, and the critics of the economic way of thinking on the other, where one can locate Rizzo's contributions to the science of economics and the discipline of political economy at a methodological, analytical and social philosophical level.

Mario Rizzo in context: The Austrian school

Scientific research programs, or schools of thought, are advanced by three things – ideas, funding and positions. The primacy, however, for a progressive scientific research program must be placed on ideas. It is the ideas and the freshness and creativity in solving pressing problems of analysis that attract funding and lead to leveraged positions within the scientific community. At least in theory that is how science in a free society works. There may be false starts, and fashionable fads, but as the dynamic processes that govern and organize scientific inquiry do their work, it is ultimately the power of ideas that prevail. This underlying belief in the commitment to the scientific community, the internal logic of arguments offered and the persuasiveness of the empirical results presented must be ever-present in discussions of the sociology of science, or the critical examination of any scientific discipline. Yes, scientists are human beings with all our foibles and frailties.² But science in a free society has evolved built-in

¹The Buchanan Papers, GMU Special Collections Library, Correspondence R, 1977–1982, Box 83, Folder 3.

²In the late 1960s and early 1970s, several economists tried to provide an analytical explanation for the crisis in higher education at that time. Of course, their explanation focused on the incentive structure of the large public university as the source of the dysfunctions and maladies witnessed. Two of those economists were James Buchanan and Henry Manne. Buchanan in a letter commenting on a draft of Manne's paper on the governance structure of universities states: ‘Perhaps Gordon [Tullock] is right when he suggests that an

guard rails to balance the conservative forces that maintain the status quo, and the revolutionary forces that disrupt, and this essential tension is what generates progress. It is the 'heretics' that disrupt the status quo and produce progress in scientific thought, but it is the traditions and customs of scientific inquiry that ensure that the community of scientists is not overrun by pseudoscientific crackpots.

The Austrian School of Economics has been in existence since the 1870s as a unique approach to economic science. It has had moments of wide and generalized acceptance that put its practitioners at the pinnacle of the discipline, and it has had its moments of having its insights dismissed as irrelevant or worse incoherent. But the approach to economic science that is characterized by this particular school of thought has never disappeared within the scientific community. The emphasis on the animating actor at the core of all economic phenomena, the subjectivism of value, cost and knowledge that these actors reflect in their decision-making and interactions with other decision-makers, and the processes of adaptation and adjustment to the constant changing circumstances they face created by the actions of others or shifts in the background environment of their activity, still captures the imagination of a significant segment of working economists (see Kirzner, 1997; Boettke and Coyne, 2023).

And, it is not just adherents of the writings of Menger or Mises or Hayek or Kirzner, but by economists like Paul Romer (2015) who raises questions about 'mathiness' causing confusion (and perhaps even charlatanism) in economic theory, or as Brian Arthur (2023) recently argued that economics in nouns has reached a dead-end, while an economics in verbs points forward to progress in scientific explanations. Science can, and does, take wrong turns. The correction process takes bold intellectual entrepreneurship, and for the institutional guard rails of science in a free society to do their job. Hayek (1975, 439) in his Nobel Lecture actually suggested that in the sciences of complex phenomena that weirdly it is those methods that appear most scientific that are the least, while those that appear to be the least scientific may turn out to be the most. This puts economics, which is one of those sciences of complex phenomena, in an intellectual conundrum because many practicing economists would rather treat the discipline as one of simple phenomena and proceed accordingly in terms of method

entrenched and large bureaucracy can continue to exploit the taxpayer-donor almost without limits'. But then he continues to draw out the implications for the curriculum of this line of argument and Manne's own model of university governance. 'And this applies already to economics, and even more to other social sciences and humanities disciplines. We can get a selection process working so as to remove genuine value more and more from the curriculum that is offered. There are essentially no feedbacks that will work to set off equilibrating corrections. It becomes quite possible, therefore, that whole disciplines and subdisciplines, costing millions, will evolve that are the modern equivalent to the scholastic arguments about angels on heads of pins, with no more value than the latter. Professional economists can be trained to manipulate Jacobins, the lattuces, the Pontrighan [sic] functions, and to teach students to do this, *without either having learned even the crudest notions of the market system*, as such. *And nothing about economic institutions that exist*. What is there to prevent this? ... what can those of us do who would like to see this turned around?' Buchanan then turns the tone of his letter toward one of hope and possibility by pointing to the surprising positive scientific reaction to the development of public choice. 'Political economy in the larger sense is returning fast'. It is in the power of ideas that scientific revolutions ultimately rest. See James M. Buchanan Papers, GMU Special Collections Library, Box 66, folder 7, Buchanan to Manne 20 April 1971.

and methodology.³ Correction comes from the power of ideas as developed by bold and in their context heretical thinkers. They must steer a path between the arrogance of the eccentric and the complicity of the conformist.⁴ This essay, however, is not primarily about the state of modern economic thought. Rather, I am leveraging this background to address the issue of economics in a world amid flux and the necessity of complex adaptability and constant adjustment to changing circumstances, with the intention of offering a particular appreciation for the foundational contributions of Mario Rizzo to economic theory and political economy.

This essay will proceed as follows: The ‘What is the meaning of a world amid flux?’ section discusses the meaning of a world amid flux; the ‘How do we cope as human actors in a world amid flux’ section explore how we cope with flux; the ‘How does our coping produce progress?’ section will address how our coping produces progress; and the ‘Conclusion’ section will conclude. Throughout, Rizzo’s work will be placed in context with historical and contemporary political economists who explored these same research questions.

What is the meaning of a world amid flux?

The British economist George Shackle (1972, 156) once wrote that ‘So far as men are concerned, *being* consists in continual and endless fresh *knowing*’. The implications of this are staggering for the static modeling of the economic affairs of human societies. The notion of full and complete information is just not scientifically productive once we acknowledge that all action takes place in time, that actions through time implies learning, and learning implies previous errors that must be discovered and corrected. The essence of the economic problem is not the static allocation of scarce means among competing ends, but the necessity of constant adaptation and adjustment to the ever changing circumstances of economic life. Carl Menger in his *Principles of Economics* (1871 [1981], 67) argued that idea of cause and effect in economic science is intimately related to the idea of time. ‘A process of change’, he argued, ‘involves a beginning and a becoming, and these are only conceivable as processes in time’. More recently, James Buchanan (1964, 218) in ‘What Should Economist Do?’, argued that

A market is not competitive by assumption or by construction. A market *becomes* competitive, and competitive rules *come to be* established as institutions emerge to place limits on individual behavior patterns. It is this *becoming* process, brought about by the continuous pressure of human behavior in exchange, that

³See, e.g., Kenneth Boulding’s critical review of Paul Samuelson’s *Foundations of Economic Analysis* for an early contrary point of view where he argues that: ‘It may well be that the slovenly literary borderland between economics and sociology will be the most fruitful building ground during the years to come and that mathematical economics will remain too flawless in its perfection to be very fruitful’ (1948, 199).

⁴See Buchanan’s remarks from 1982 ‘The Dishwater of Orthodoxies’ in Buchanan Papers, GMU Special Collections Library, finally published in Boettke and Marciano, ed., (2020), where he argues: ‘The genuine innovator-entrepreneur, who seeks to challenge, to stir up the dishwater of the orthodoxy, must expect to counter resistance at every stage. At best, he and his fellow [heretics] can hope to find academic settings that are temporarily congenial to their efforts, settings that encourage those who dare to be different.’

is the central part of our discipline, if we have one, not the dry-rot of postulated perfection.

Science, of course, seeks parsimonious explanations. This has been a staple wisdom for centuries. In more modern times parsimony was linked also with notions of scientific control of the environment for testing, so we could isolate the critical factors. In economics, most of our core principles are stated in if, then form and qualified by the *ceteris paribus* clause. But, of course, in the wild, or outside the controlled environment of our lab or thought experiments, other things are never constant.⁵ Yet, we must always remember that the main benefit of the sciences of human action is actually the ability to render intelligible the world in the wild. A proper training in price theory, for example, has the ability to transform an ordinary individual into an observational genius (see Buchanan, 1966; Boettke, 2017). Adam Smith taught us that the scientific process captures the human mind through a sense of wonder, then surprise and then finally appreciation. Consider Smith's (1776 [1982], 22ff) discussion of the innumerable exchanges and acts of production that must be coordinated with one another to produce even the homely common-woolen coat found on the back of the day laborer. And Smith (1776 [1982], 26–27) adds to the mystery by pointing out that such a coordination of activities through time is not achieved through any face to face awareness of the needs of others, or deep friendships, but through the cooperation and coordination with anonymous others. Thus, his famous passage about the 'butcher, brewer or baker' providing us our dinner not out of benevolence, but with regard to their self-love.

Note that both the common-woolen coat and the dinner enjoyed are already in existence before contemplation of how they came into being. Once we reflect on that phenomenon, there is a sense of wonder – as Bastiat would later put it, Paris gets fed. The mystery is how. Note our surprise when we realize that this is accomplished not through any central command dictating how resources are allocated to produce the coats that keep us warm, or the dinner that satisfies our hunger. And finally, our appreciation for the spontaneous order of the market once we learn the economic theory of the market and the power of invisible-hand explanations. The explanandum in economics is peaceful social cooperation under the division of labor, and the explanans is rational choice institutionalism, or the invisible-hand explanation of the market.

The central lesson of economic science is the ability to explain this complex coordination of economic activities through time from the ordinary behavioral postulates of

⁵ Alfred Marshall in *Principles of Economics* (1920, 287–288) provides a striking illustration: 'When demand and supply are in stable equilibrium, if any accident should move the scale of production from its equilibrium position, there will be instantly brought into play forces tending to push it back to that position; just as, if a stone hanging by a string is displaced from its equilibrium position, the force of gravity will at once tend to bring it back to its equilibrium position. The movements of the scale of production about its position of equilibrium will be of a somewhat similar kind'. He continues in the next paragraph, 'But in real life such oscillations are seldom as rhythmical as those of a stone hanging freely from a string; the comparison would be more exact if the string were supposed to hang in the troubled waters of a mill-race, whose stream was at one time allowed to flow freely, and at another cut off. Nor are these complexities sufficient to illustrate all the disturbances with which the economists and the merchant alike are forced to concern themselves' (emphasis added).

human actors, and against a background of a constantly changing environment because of endogenous and exogenous shifts and shocks. To abstract away both from the individual dilemma of the agony of choice in the face of deep uncertainty and ignorance, or the system-level dilemma of production and exchange in a world amid flux is to abstract away from the most significant contribution that the scientific discipline has to offer. For ease of exposition in introductory courses, we may simplify the environment and the decision difficulty. But as we advance through the study of economics, we move away from the Crusoe economics of pure allocation and embrace the more complex scientific task of explaining patterns of outcomes from the exchange and production decisions of individuals, and the role of the institutional framework within which those decisions are made. And, at least in my experience as a teacher, we ask our students each step along the way to see themselves in the situation of the decision makers at each node along the process. As I read it, this is the intent of the epigraph to Philip Wicksteed's *The Common Sense of Political Economy* (1910), where he enlists Goethe's phrase 'We are all doing it, but none of know we are doing it'. The cleverness, creativity and resourcefulness of economic life reside in the actors we are studying, not necessarily, and certainly not exclusively, in the economists-observer doing the studying or modeling. We must strive to practice economic science as it were from the Inside-Out, not from the Outside-In. One way the Austrians have expressed this throughout the history of the tradition has been in the idea that we are who we are studying. In the sciences of human action, we have a unique starting point to our intellectual enterprise because we have knowledge from within, and do not need to approach our subject matter with only knowledge from without. This both opens up avenues of inquiry and closes off others as inappropriate.

Mises (1949 [1966]) argued that the essence of *human action* was purposeful action against a backdrop of deep uncertainty. We imagine possible futures, we choose from among those the one most desirable for us, and we chart a course, or plan, on how to achieve that future. We are, purposeful human actors, not robots. As such we are striving to better our situation given our circumstances, but striving doesn't mean achieving. We are capable human choosers who learn and adapt and adjust our actions as we fail to achieve our goals, and our adaptation and adjustments are in the direction of improving our chances of achieving or shifting our goals all together. The key point, we are goal seeking creatures and those goals are fueled by our imaginations. Yes, human actors must constantly choose against given constraints, but it also true that human actors are clever and creative and seek to learn how to better achieve their goals either through more effective choices, or stratagems to relax the constraints where possible. We are not passive reactors that merely robotically maximize against constraints. As Fritz Machlup (1969) colorfully put it, the science of human action is a science in which matter can talk, rather than deterministically follow laws of the physical world. The market is a process of creative evolution, and the animating force of that evolution is the purposeful human actors exercising their imagination.

Hayek (1945); (1968) argued that one of the main benefits of the market is not it's allocational efficiency, but its adaptative efficiency. Economic problems arise, Hayek argued, because of, and as a consequence of, change. The market process consists of the constant adaptation and adjustment of economic activity to the ceaseless change in

the circumstances of economic life. Competition in the market is a discovery procedure that propels this social learning among economic actors. The system of property, prices and profit-and-loss aids this social learning by incentivizing economic actors through the assignment of property rights, guiding them in their *future* decisions through relative prices, and lures them with profits and disciplines them in their decisions through losses.

Finally, Israel Kirzner (1992) in an effort to bring some analytical focus to this process of continual adaptation and adjustment introduces the concepts of the underlying variables of the market in tastes, technology and resource availability and the induced variables of the market in prices, profit-and-loss statements and the pattern of resource ownership. Tastes, technology and resource availability are *givens*, but subject to exogenous shocks. For example, tastes change, or technological innovation happens, or resources become more scarce or abundant due to external shocks such as weather. The induced variables are dim reflections of the underlying variables, but the relationship is one of asymptotic approximation. In other words, the variable of prices, profit-and the pattern of resource ownership ‘chase’ after the underlying variables and any mismatch between the induced and underlying variables sets in motion adjustments by the participants in the market that close the gap between them. Of course, in the meantime, the underlying variables shift, and behavior is redirected and the induced variables reflect those changing circumstances. Economics in this sense becomes a science of tendencies and directions, and not one of point predictions.

As he began his career, Mario Rizzo wanted to situate the economic analysis of tort law within this understanding of economic life as one amid flux and thus in constant need of social learning through adaptation and adjustment. The standard Law and Economics literature of the time stressed the economic efficiency approach to the analysis of the common law. In addressing questions of negligence and tort law, the cost–benefit calculation was to identify the least cost avoider. But, as Rizzo (1980, 291) argued, there was ‘some very fundamental analytical problems’ with such an approach that ‘have not even been recognized in this literature, much less solved’. Rizzo argued that the efficiency norm as generally understood was ‘impossible as a goal for tort law’ once we confront the reality that we live in a world of ceaseless change. A world amid flux is a world where decision makers in the world, and analysts of that world, must recognize that we are constantly wrestling with the problems of the ‘uncertainties of technological change, the ambiguities of foreseeability, and the absence of a unique objective measure of social cost’. These problems ‘all conspire to make the efficiency paradigm a delusion’ (Rizzo, 1980, 317). In a letter to Rizzo dated 9 April 1979 in response to receiving a draft of this paper, Buchanan responds ‘I agree completely with the basic thrust of your argument.’⁶ He proceeds to press Rizzo though on the distinction between the choice of criteria for ‘deciding particular cases and the choice of criteria on what the law is to be’. This distinction between analysis of the economic play within a set of rules, and the analysis of the rules themselves will play a critical role in the next section.

⁶Buchanan Papers, GMU Special Collections Library, Correspondence R, 1977–1982, Box 83, Folder 6.

How do we cope as human actors in a world amid flux?

As Rizzo was writing his paper on genetic-causal explanations in economics, he sent a draft to Buchanan. In this paper, Cowan and Rizzo (1996, 311–312) sought to link the desires and beliefs of individuals to the generation of the economic order itself. In dealing with the endogenous sources of change within the economic system, and the various mechanisms that aid us in coping with the world amid flux, Cowan and Rizzo are seeking to illuminate the processes of economic life. The theoretical explanations that fit into the class of explanations characterized as ‘genetic-causal’ seek ‘to provide understanding of what generates or brings into existence a state of affairs, not simply what sustains that state’. This is contrasted with vast majority of modern mainstream economics, which concentrates its analysis of equilibrium states.

Buchanan wrote back to Rizzo on 6 March 1991: ‘I think that you are onto something of great interest here, and something worthy of much more development and analysis that that which you open up in the draft paper itself. I have often found myself asking precisely the sort of questions about orthodox economics that you ask here.’⁷ And, indeed Buchanan and Rizzo are on the same page. Subjectivism, time, generative knowledge, exchange, process analysis, creativity and novelty are all at the heart of the sort of economics they wish to practice. But in such a world amid flux, the critical question is how to bridge the gap between solipsism and social order. By scientific construction, we have moved from the simple environment in which we can impose various controls to aid in the testing of predictions to the more complex environment of the wild, and yet we remain with two primordial facts of our economic existence: (1) individuals have purposes and plans and they strive to do the best that they can in realizing those plans given the circumstances they find themselves, and (2) as Bastiat famously put it, ‘Paris Gets Fed’—goods and services are delivered to willing consumers.

The production plans of some must mesh with the consumption demands of others. In the more equilibrium approach these two are, by construction, collapsed into one another. The system of simultaneous equations solves for a unique P and Q that will clear the market, but it does not explain the path on which that outcome emerges over time. The construction yields an instantaneous solution, and the exercise of comparative statics follows the same procedure once the exogenous shock is introduced. No path of adjustment is explicated. Adam Smith’s ‘higgling and bargaining’ is set aside for, at best, stories that we tell to make sense of our blackboard theory.

Critics of economics, including behavior economists, insist that the individuals in the system are prone to various weakness of will, and biases that prevent their purposeful behavior from being effective, and the market power of the firms enable them to behave in a manner which forgoes mutually beneficial exchange and eschews least cost technologies of production. Consider Keynes’s classic statement in *The End of Laissez Faire* (1926):

The world is *not* so governed from above that private and social interest will always coincide. It is *not* so managed here below that in practice they coincide.

⁷Buchanan Papers, GMU Special Collections Library, Correspondence R, 1989–1992, Box 83, Folder 9.

It is *not* a correct deduction from the principles of economics that enlightened self-interest always operated in the public interest. Nor is it true that self-interest generally *is* enlightened; more often individuals acting separately to promote their own ends are too ignorant or too weak to attain even these. Experience does *not* show that individuals, when they make up a social unit, are always less clear-sighted than when they act separately. (emphasis in original)

What is missing in both the equilibrium always, and the equilibrium rarely (or never) approach is an explication of how social cooperation under the division of labor emerges from the interaction of diverse and often socially distant individuals acting in a world of deep uncertainty and one of constantly changing circumstances. The coping mechanisms deployed by individuals are ignored. For example, as Ronald Heiner (1983) argued years ago it is in the adoption of various rules of thumb that enable individuals to negotiate their way through the morass of the 'dark forces of time and ignorance' as Keynes described. More recently, Gerd Gigerenzer in *Rationality for Mortals* (2008) shows how individuals cope with uncertainty through 'ecological rationality' and this enables them to navigate the complex decision arena they are operating within living their daily existence. But it is not just individual decision rules that we adopt to cope with our ignorance, but the institutional guard rails of commercial life provided by the private property and freedom of contract embedded in a rule of law. These formal institutions, as Hume taught us, are grounded in our moral conventions, and written on our hearts and minds well before they are ever written on parchment. It is this institutional level of analysis that enables us to bridge the gap between solipsism and social order.

Elinor Ostrom (1990, 25–26) perhaps put the general point as well as anyone. 'As an institutionalist studying empirical phenomena' she states, 'I presume that individuals try to solve problems as effectively as they can. That assumption imposes a discipline on me. Instead of presuming that some individuals are incompetent, evil or irrational, and others are omniscient, I presume that individuals have very similar limited capabilities to reason and figure out the structure of complex environments'. Ostrom then continues by insisting that:

It is my responsibility as a scientist to ascertain what problems individuals are trying to solve and what factors help or hinder them in these efforts. *When the problems I observe involve lack of predictability, information, and trust, as well as high levels of complexity and transactional difficulties, then my efforts to explain must take these problems overtly into account rather than assuming them away.* (emphasis added)

Ostrom's fallible, but capable, human choosers rely on rules to help structure their environment. Those rules are both formal and informal, and their enforcement is both through official sanctions, and the unofficial sanctions of social approbation and disapprobation. The key thing for our purpose is that it is the governing rules that facilitate cooperation or produce a situation of conflict in complex human interaction. One of our central tasks in scientific inquiry in moving from the action arena of individuals confronting the environment within which they find themselves (e.g., nature and other human actors) to the system-level success or failure at eliciting social cooperation, is

the study of institutional details. Institutions, it could be argued, are little more than the formal and informal rules of the social game and their enforcement. But the understanding of their operation in society is more granular, and the devil is always in the details. It is in pursuing this multiple methods research strategy, including field work, that Ostrom famously was able to wrestle with social dilemma created by common pool resource management, and to uncover how a great diversity of institutional arrangements could be devised (or evolved) by various people to serve the critical function of limited access, assigning responsibility, and providing enforcement through graduated penalties. But she argued that the lessons for understanding self-government went far beyond the particular case studies of common-pool resources. The social processes that achieved cooperation out of situations of conflict were drawn from, and contributed to, a broader literature in political theory and political philosophy associated with liberalism and self-governing democratic societies (1990, 214–216).

Rizzo's work in law follows in this tradition through a similar deep digging in case law to illuminate how the evolved law settled disputes and resolved conflicts. Rizzo in 'Law Amid Flux' refers to 'institutional efficiency', to be contrasted with economic efficiency. The sort of cost-benefit calculations that the courts must make following the efficiency approach, Rizzo argued, are an impossible task. Passing judgment about alternative legal arrangements cannot be based on such considerations. It

'seems clear that since the "fine-tuning" paradigm is a mere delusion, the only basis on which the "efficiency" of systems can be compared is on a fundamental institutional level. The *central* question is then: which legal framework provides a more stable environment for individuals to pursue their own ends in harmony with each other? Ironically, it is precisely because we live in a dynamic world where the information needed by "fine-tuners" is not available that the answer must be the antiquated and static system of strict liability'. (1980, 318)

This basic argument would be further developed in the subsequent decade after Rizzo's paper by Richard Epstein (1995) and James Buchanan (with Geoff Brennan, 1985). Epstein argued that we need 'simple rules' for a 'complex world', whereas Buchanan highlighted the 'reason of rules'. Epstein's argument is an exploration of how laws concern the autonomy of the individual, the right to private property, the freedom of contract and the addressing of harms with tort law. What matters is clarity and thus predictability in the framework as a background to regulate human interactions in the conduct of ordinary social life. Buchanan (and Brennan) on the other hand, explores the microfoundations and functional significance of rules. Rules solve, in essence, time inconsistency problems, and bind our hands so that we can achieve more in the long run than if we followed our more short-term proclivities. By following rules, as an individual we can become better than we are, and similarly by adopting rules that successfully tie the ruler's hands we can get better governance.

In all these cases, it is the rules that enable us to cope with the complexities of the world. These rules – again not only the formal rules of law and politics, but also the informal norms and customs of society – provide the essential framework against which social life is conducted, including commercial life. Lionel Robbins (1952) persuasively argued that the sort of political economy practiced from Adam Smith to J. S.

Mill was due to a co-evolution of the liberal institutions of law and polity, and the economic science of behavior within that institutional framework. The classical political economists were never talking about economics in a vacuum, but rather economics in the wild. And the wild was framed by the institutions in operation. The more turbulent the flux of economic conditions, the more stable the background conditions must be in order for individuals to pursue productive specialization and realize peaceful social cooperation through exchange. Without the institutions of property, contract and consent – that is, the stability of possession, the transference of possessions by consent and the keeping of promises – social order indeed becomes ensnared with a violence trap. But within a rule environment that promotes ‘greater certainty’ and predictability, it will promote greater ‘efficiency in the basic institutional sense because property rights, in effect, become more clearly and definitely defined’ (Rizzo, 1980, 317).

Besides Hume, Smith and Mill, a long list of political economists and social philosophers understood these basic points Rizzo highlighted. Most notably F. A. Hayek. But Hayek’s writings on the necessity of an institutional framework, let alone his work on subjectivism and dynamic competition, and the interaction between the flux of the economic world and the anchor provided by the institutional framework of the common law and liberal government, simply fell on deaf ears in the decades after WWII. Economics during this time was transformed into a science of social control, rather than a science that offered social understanding. The technocrats sought to develop an institutionally antiseptic theory that could provide the necessary tools for social planning across all variety of geographic locations and cultural heritages. Institutions, at best, were treated as given, and then the analysis proceeded from there. But once treated as given, it is often the case that institutions were treated as forgotten. In the post 1950 period, not only was Milton Friedman fighting the intellectual dominance of the Keynesian revolution in macroeconomics, but figures like Armen Alchian, James Buchanan, and Ronald Coase were challenging the Samuelsonian neoclassical synthesis by bringing institutions back into the forefront of economic analysis. They were not content to assume the institutional framework but sought instead to derive the institutional framework itself from the ordinary behavior postulates of economics. In doing so, they developed property rights economics, public choice economics and law-and-economics. These developments all were made possible by approaching economics not from the perspective of equilibrium always. As Rizzo (1980, 291) put it: ‘A static world of general equilibrium would make an efficient tort law possible, and yet render it unnecessary; in such a world, markets would be universal’. But Rizzo continues: ‘A dynamic world, however, demands the certainty and simplicity of static law’.

How does our coping produce progress?

The prime driver of progress in economic development is technological change, and the novelty and creativity of entrepreneurial actors. As Cowan and Rizzo (1996, 306) put it change in beliefs, either in terms of alertness to a previously unrecognized profit opportunity or new awareness of possibilities, drive the economic process. Entrepreneurs in the market context engage in both arbitrage behavior and innovative behavior; they are both alert and creative. Within the standard textbook model, it is entrepreneurs that both ensure that we tend to operate on the Pareto frontier, and continually act to push

that frontier farther from the origin. It is because of entrepreneurs acting on the signals of the price system that in a functioning market there is a strong tendency to continually discover new ways to produce more with less, rather than stagnate by producing less with more. But the entrepreneur is an analytical nuisance to equilibrium modeling. So are aspects of human action such as imagination, creativity, surprise, novelty, and one could argue human purposiveness itself. In 1986, Rizzo sought to organize a conference for Liberty Fund on the theme 'Intellectual Formalism and Freedom' and he invited Buchanan to attend. Unfortunately, due to his commitments Buchanan was unable to attend the conference, but he retained Rizzo's letter and his conference proposal. The purpose of the conference, Rizzo explains, 'is to explore the interrelationship between highly formalistic models of human behavior and the idea of individual freedom'. Session I of the conference explores the work of philosopher Henri Bergson and his expressed concern that Newtonian models cannot account for novelty and creativity, 'freedom' from what went before'. These Newtonian models, Bergson argued, might be acceptable in studying the physical world, but they are inappropriate applied 'to ever more complex forms of life'. Session III of the conference was proposed to be on creativity in the market, and the simple theme was to explore how 'highly formalized economic theory precludes any consideration of the creative element in market processes'. Buchanan's only response to this tempting invitation after invoking his commitment constraints, is to state that he was 'very surprised that you make no mention of Shackle in your discussion, since he seems, among all economists, to be the single one who has been concerned most about the problem you pose'.⁸

The economic process is one of perpetual progress and improvement in the material conditions of human beings. Trade and technology are the main vehicles for progress, and entrepreneurs are the drivers of the vehicles. Economic growth and development are not orchestrated by technocrats near or afar. It is not about resource management *per se*, but the unlocking of the ultimate resource—the human imagination. What matters for our discussion in relation to Rizzo's 'genuine contributions' as Buchanan put it, is how the law serves as a fifth factor of production in the process of economic development.

Unlike land, labor, capital and entrepreneurship – the four factors of production in the classical political economy formulation – the law itself is the framework within which those factors coordinate economic activity with one another. Entrepreneurship, for example, can be directed by the institutional ecology into productive win-win activities, or into unproductive zero sum thinking. The rule of law, as Hayek stressed in *The Road to Serfdom* (1944, 72–87), curbed the discriminatory nature of politics by putting limits on legislature. The very definition of a progressive society – economically, politically, culturally – was one that constantly pushed to move from status to contract in our daily lives. A politics that exhibited neither discrimination nor relationships of domination. A society absent of coercion, and absent of privileges. The Rule of Law, not legislation, is the foundation for progress. In societies that have prospered, the basis of wealth creation has rested on the institutional framework of a free society. A free

⁸Mario Rizzo to James Buchanan 12 June 1986; Liberty Fund Proposal; James Buchanan to Mario Rizzo 24 June 1986, James M. Buchanan Papers, GMU Special Collections Library, Box 83, Folder 7.

society consists of a political–legal framework, and a set of legitimating mores to that framework, in which productive entrepreneurial activity can take place. It is characterized by respect for the rights of individuals, the security of private property rights, the sanctity of contract, and the openness to free trade. It is this institutional framework that expands the range of peaceful social cooperation through mutually beneficial exchange among diverse and disparate individuals. Our task as political economist is to study how alternative institutional arrangements impact the ability of individuals to pursue productive specialization and realize peaceful social cooperation. It is in this very process that entrepreneurial actors will discover the profit opportunities conducive to capital investment and technological innovation. Through this process, the creative, clever and resourceful individuals that populate an economy will act in ways that result in greater real productivity, higher real wages, greater variety of goods and services offered in the marketplace, and an overall increase in the health and well-being of human beings. Progress is precisely that, progress. Things get better over time as we escape the Malthusian trap by overcoming violence and the drudgery and misery of poverty.

Rizzo did not take the short cut in explaining the superiority of the liberal economic, legal and political order. He instead embraced the challenge of dealing with the essential complexity of economic and social life. We live in a very imperfect world, populated by very imperfect human beings, who must confront not only nature ‘red in tooth and claw’ but other human beings. As Cowan and Rizzo (1996, 289) state: ‘Static analysis of essentially dynamic problems tends to collapse the latter into the former’. This move must be intellectually resisted if we are to understand economic progress and the miracle of modern economic growth.

Recognizing that we live in a world amid flux is a first step. That recognition has methodological, analytical and ultimately social philosophical implications. In 1980, Rizzo had organized an earlier Liberty Fund conference which Buchanan was invited and he was happy to attend on the theme of ‘Role of Economic Efficiency in a Free Society’. In Buchanan’s response back, he states: ‘The topic you outline is a fascinating one, and worthy of considerable thought and discussion. As you know, I am Kirznerian in my position here’. Buchanan further explains that most economists unfortunately adopt a teleological concept of efficiency ‘which is totally wrong in a free society, or is at least incompatible with liberty’.⁹ Those familiar with Buchanan’s writings will recognize this argument, which can be found in his critique of Arrow’s theorem and social choice theory, as well as his criticisms of the textbook rendering of Lionel Robbins definition of the economic problem of society.

Buchanan, like Rizzo, championed an exchange paradigm in economics, not an allocation paradigm. The proper approach to economics is to study exchange and the institutions within which exchange relationships are formed and are transacted. In our study of the necessary institutions for economic progress, we must give elbow room for ordinary individuals to pursue opportunities that others may not see, and to discover the unknown and unimagined by others. It is wrong headed to assume that the

⁹ Mario Rizzo to James Buchanan 27 March 1980; Liberty Fund Proposal; James Buchanan to Mario Rizzo 31 March 1980, GMU Special Collections Library, Box 83, Folder 5.

resources and possibilities are fixed and given and thus known for economic actors to maximize. Such an intellectual mindset may permit the theorist to choose the optimal trade-offs given a social welfare function, but it cannot explain the source of modern economic growth and the institutional framework required to realize that economic progress. Matt Ridley in *How Innovation Works* (2020) sums up this point with his phrase ‘Innovation is the child of freedom, but the parent of prosperity’.

Within a set of rules – liberal rules of property, contract and consent – Hayek referred to the price system as a telecommunication mechanism. Property incentivizes, relative prices guide, profits lure and losses discipline human actors through a bewildering throng of economic possibilities. The price system helps us achieve social order by aiding economic actors to adjust and adapt to ever changing circumstances not only quickly but also correctly. But an operating price system while necessary is not sufficient. It must be embedded in an institutional framework conducive to the complex coordination of economic activity through time.

Static law, for Rizzo, is the counterpart to the price system at the rule level of analysis. It is ‘static’ in the sense of ‘anchoring’ expectations. But like with a ship, the ‘anchor’ cannot impede progress. The law is ‘dynamic’ in the sense that it is adapting and adjusting to changing circumstances and the expectations formed around the accumulation of legal precedent. The process of the evolution of the body of law tested in concrete cases is, like the price system, grounded in changes that are made *on the margin* and in an *end-independent* manner to the mutual benefit of participants in the system. The ‘governing dynamics’ for addressing the puzzle of a world amid flux in both the law and the market have very strong affinities. As Bruno Leoni (1961) saw, there were direct parallels between the Mises-Hayek critique of socialist central planning, and the arguments for the value of evolving judge-made law, over legislative decrees. The law, like the market, is in the process of *becoming*, but again, through a process of adaptation and adjustment on the margin and in an end-independent manner. In this regard, ‘static’ law serves as the basis for enhanced predictability and thus enhancing the possibility that individuals can pursue their own ends and be architects of their own life.

The search for formal tractability with maximizing and equilibrium models resulted in a purging of human creativity that is born from the effort to cope with deep uncertainty and wrestle with the implications of time and ignorance. Not only does this purging reflect a loss of the human actor caught in their decision-making between alluring hopes and haunting fears, but also discounts the role of institutions in constituting the social ecology within which commercial life exists. This is not just the formal rules of the social game, but also the informal rules of the social game found in customs and practices. That is a lot to sacrifice for a promise of intellectual precision. In the sciences of complex phenomena this move must be resisted, it is not what makes a science out of economics, it is what undermines the scientific progress of economics. Mario Rizzo laid the intellectual groundwork for that resistance in these foundational essays (and his subsequent work).

Conclusion

This essay has tried to intellectually arbitrage between Rizzo’s work on law and his work on genetic-causal explanation. What is common to both is the recognition of

the essential complexity of economic life, rooted in the diversity of desires and beliefs and the recognition that taking seriously the passage of time implies uncertainty and ignorance. The very notion of causation is tied to the passage of time, the possibility of error and of learning through error detection and correction. As Cowan and Rizzo (1996, 292) state: 'There must be some process that links desires to market outcomes'.

I have argued that this process is to be the foundation to activity within an institutional environment defined by law, politics and society. Rizzo's work on the simple static framework of the law provides the essential framework against which economic actors cope with a world amid flux, and in their coping create through entrepreneurial arbitrage and innovation the economic basis for the tremendous improvement in the human condition. It is an intellectual privilege to read Rizzo, and I can only hope I have done some justice to the insights he has provides with his writings. I believe his work in economic theory and law-and-economics is critical to the continued development of the sciences of human action – the sciences of essential complexity – and our ability to escape the scientistic traps that formalism and positivism laid in 20th-century version of the social and policy sciences. It is a trap, that Hayek (1975) warned us, that threatens to turn economic science into charlatanism, and the practitioners of this 'science' into tyrants over their fellow citizens and destroyers of the very free society in which they so richly benefited.

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