

Social Interaction Through Conscious Choice

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Abstract: Butos and McQuade build on the ideas of Hayek (1952) to relate the sensory order of individuals to social orders, including markets, science, and government. Hayek's conception of the sensory order is consistent with a sprawling research program on the nature of consciousness. The nature of conscious choice has significant implications for the organization of social institutions. While institutions are emergent orders, they emerge within a superstructure of institutional constraints that are imposed from the top down. The recognition that they are imposed by the conscious choices of self-aware individuals has substantial implications for the nature of social interaction.

One of the most important insights that economics has to offer is that orderly social systems can emerge spontaneously, without anyone planning them out. Individuals make their own plans, and institutional structures emerge that enable individuals to interact with others for their mutual benefit. Hayek (1948; 2014, ch. 11) has discussed extensively the way that orderly social interaction emerges spontaneously, as the result of human action but not of human design. This spontaneous order is generated by the conscious choices made by individuals at two levels. At one level, individuals make choices and make decisions subject to the constraints they face. The market order provides an example. Second, many of the constraints people face are the result of human design, also created through the conscious choices of individuals. This paper focuses on the implications of conscious choice within that second level of choice—the conscious choices that shape institutional constraints.

North (1991, p. 97) defines institutions as “the humanly devised constraints that structure political, economic, and social interaction.” A complete understanding of the social order requires not only an understanding of the choices people make subject to the constraints they face but also the way that those constraints emerge as a result of the conscious choices of those who design them. Buchanan (1990) notes that economics typically studies the way that people make choices subject to constraints, and labels as constitutional economics the study of the process by which people choose institutional constraints.

Much of Hayek's work on spontaneous order has focused on the way that order emerges as people interact within the constraints they face. This paper focuses on the implications of conscious choice on the design of institutional constraints by drawing on a multidisciplinary literature on consciousness in philosophy, biology, and psycholo-

gy, to identify what it means to be conscious. That literature, even within specific disciplines, has drawn few definitive conclusions. Incorporating economic insights may offer additional insights to the more general study of consciousness, while research on conscious behavior has the potential to offer insights on the evolution of social order.

One common element in both an emergent social order and the sensory order is that they are decentralized. As McFadden (2006, p. 390) observes, “There is of course no center of the brain where all this information is put together, but it is well established that there are a number of *correlates of consciousness*—dynamic activity that is usually associated with attention and awareness.” Self-awareness is a key component of conscious behavior that influences the development of social orders.

The spontaneous order of social institutions, including market institutions, evolves in much the same way as biological organisms and ecosystems evolve. As Alchian (1950) explains, those that are most fit for the economic environment survive and multiply; those that are the least fit die off. Butos and McQuade (2023, p. 43) quote Penrose (1952) who criticizes this evolutionary approach to economics by saying that this “variant of the growth approach leaves no room for human motivation and conscious human decision.”

Penrose identifies a major difference between biological evolution and the evolution of spontaneous social orders. In biology, differentiation occurs through genetic mutations that just happen with nobody choosing them. In social orders, differentiation occurs as a result of the conscious choices of individuals. As Butos and McQuade (2023, p. 43) state, “In social systems, the efficient causes all have as their basis the purposeful action of the participants in the system.”

A: INDIVIDUAL CHOICE

Robbins (1935, p. 16) defines economics as “the science which studies human behavior as a relationship between ends and scarce means which have alternative uses.” Human behavior, in this setting, consists of the choices people make regarding how to employ means to attain the ends they desire. Economists have depicted the process by which people make these choices in various ways. The neoclassical framework typically assumes that individuals act to maximize their incomes or wealth, and adds assumptions about the structure of utility functions, which leads to testable hypotheses. Mises (1998), in contrast, says “Human action is necessarily always rational. … When applied to the ultimate ends of action, the terms rational and irrational are meaningless. The ultimate end of action is always the satisfaction of some desires of the acting man.”

Ferguson (1966, p. 11), the prototypical neoclassical economist, describes the theory of consumer behavior as beginning with the assumption of perfect information on the part of those who choose. “First, we assume each consumer or family unit has complete information on all matters pertaining to its consumption decisions.” Individuals have utility functions that exhibit diminishing marginal rates of substitution and indifference curves that cannot intersect (Ferguson 1966; ch. 1). Rationality is then taken to mean that people’s choices are consistent with the assumptions of neoclassical utility theory

One argument in favor of neoclassical utility theory is that it would be possible for people to make choices that violate its assumptions, so the theory produces testable implications. Friedman (1953, pp. 11-12) defends this approach to describing economic behavior, saying “But economic theory must be more than a structure of tautologies if it is to be able to predict and not merely describe the consequences of action…” Friedman’s depiction of economic theory implies a behavioral model of stimulus and response to represent the way that people choose. People are faced with choices, and refer to their utility functions to find the appropriate predictable response.

Among the many assumptions underlying neoclassical utility functions, perhaps most significant for present purposes is that they are stable, both across time and across individuals. This allows for comparative static models to give testable predictions. By assuming that utility functions are stable over time and among individuals, Stigler and Becker (1977) explain that the theory is able to predict changes in behavior

over time, or differences in behavior among individuals, as a result of differences in relative prices and/or incomes.

Buchanan (1964, p. 217) makes a case against this approach to economics. “If the utility function of the choosing agent is fully defined in advance, choice becomes purely mechanical. No ‘decision,’ as such, is required; there is no weighing of alternatives. On the other hand, if the utility function is not wholly defined, choice becomes real, and decisions become unpredictable mental events. If I know what I want, a computer can make all of my choices for me. If I do not know what I want, no possible computer can derive my utility function since it does not really exist.” Penrose’s critique of evolutionary theory applies to neoclassical utility theory as well: it “leaves no room for human motivation and conscious human decision.”

Referring to Hayek’s ideas on complex social phenomena, Marsh (2010, p. 119) says that the “mind is itself constitutionally (and terminally) constrained in fully understanding its own (complex) mechanics...” If people simply made choices by referring to their utility functions, this would not be the case. Indeed, neoclassical utility theory offers a complete description of the actions people would take given the alternatives they face. That is what gives neoclassical utility theory the ability to predict that Friedman (1953) celebrates.

B. CONSCIOUS CHOICE

The paper has made frequent reference to conscious choice without defining what it means to be conscious. Chalmers (1995, p. 200) says “Consciousness poses the most baffling problems in the science of the mind. There is nothing that we know more intimately than conscious experience, but there is nothing that is harder to explain.” Following Chalmers, the discipline of philosophy has labeled attempts to understand consciousness as the hard problem.¹

Hayek (1952, p. 133) says “It may be impossible to give a satisfactory definition of what consciousness ‘is,’ or rather that this is a phantom-problem of the same kind as the ‘problem’ of the ‘absolute’ character of the sensory qualities. We shall endeavor to avoid this difficulty by not asking what consciousness ‘is’ but by merely inquiring what consciousness does.” Marsh (2010, p. 120) notes, “the hard problem, for Hayek, is forever intractable.” Marsh (2010, p. 127) goes on to say “Hayek takes the view that a unified theory of consciousness (i.e., the hard *and* easy problems) is forever beyond our grasp.” But as Rey (1997, p. 461, italics in original) observes, “Among ordinary beliefs about consciousness, none seems more powerful or more certain that that we each know immediately in our own case, in a special way that is immune to any serious doubt, that we *are* conscious.”

Hodgson (1991, p. 40) notes the difference between experiencing pain and the physical manifestations of pain, such as grimacing, withdrawing, crying and so forth, “which may be observed by others. The distinction between conscious mental events and physical events is probably clearer in the case of pain than most other examples...” Hodgson (1991, p. 41) says the same applies to emotions such as fear, anger, and elation. We imagine those emotions in others because we experience them ourselves. Our own consciousness is both what allows us to perceive it in others, and what differentiates us from others. There is you, and then there is everyone else.

Another point of view on consciousness, offered by Dennet (1991), Crick (1994), Edelman (1989), and others is that consciousness is nothing more than a set of biological processes. It is an illusion. Ginsburg and Jablonka (2019, p. 96) say that neurobiologists “regard consciousness as the outcome of the self-organizing dynamic interactions between the low-level parts of a hierarchically structured neural system, which are constrained by the higher levels of organization and give rise to global, novel, and coherent patterns of precepts or actions.” Dawkins (1976) characterizes living things merely as survival machines for genes. Acts of perception are neuronal events, Crick and Koch (1990) explain. Introspection would seem to call into question this line of reasoning, because everyone experiences consciousness—the self-awareness that goes beyond just acting in response to a stimulus.

Johnjoe McFadden (2020) has developed a conscious electromagnetic field (CEMI) theory of consciousness, in which he depicts consciousness as the perception of perturbations in the brain's electromagnetic (EM) field. Describing the evolving CEMI theory of consciousness, he says "Consciousness is what algorithms that exist simultaneously in the space of the brain's EM field *feel like*." McFadden (2006, p. 397) says "The only place in the known universe where electromagnetic fields occur that are capable of communicating self-generated irreducibly complex concepts like 'self' (and thereby persuading an observer that they are indeed conscious) is in the human brain."

Hayek (1952, p. 142) says, "If sensory perception must be regarded as an act of classification, what we perceive can never be unique properties of individual objects but always only properties which the objects have in common with other objects. Perception is thus always an interpretation..." Chalmers (1995, p. 203) offers an example. "Why is it that when electromagnetic waveforms impinge on a retina and are discriminated and categorized by a visual system, this discrimination and categorization is experienced as a sensation of vivid red? We know that conscious experience *does* arise when these functions are performed, but the very fact that it arises is the central mystery."

The phenomenon of consciousness is embodied in self-awareness, although Chalmers never uses that exact term.² Chalmers (1995, p. 214) says "a mechanism of awareness will itself be a correlate of conscious experience." Jeannerod (2007, p. 548) says "The ability to recognize oneself as the agent of a behavior or a thought—the sense of agency—is the way by which the self builds as an entity independent from the external world. By way of consequence, self-recognition is a prerequisite for attributing a behavior to its proper agent, be it oneself or another person."

Bermudez (2007, p. 457) says, "Without the capacity to be aware of our own thoughts, beliefs, and other mental states we would be unable to engage in many of the intellectual activities that are frequently thought to be characteristically human. Only self-conscious creatures are able to reflect upon their own mental lives or to develop strategies for the future, for example." This observation has obvious implications for people's economic behavior.

Hayek (1952, pp. 135-136) observes "that conscious experiences can be remembered and will be recognized as already experienced before when they occur again. 'Memory' or 'recognition' here means no more than the reappearance in consciousness, in combination with circumstances with which it has become associated, of what has been consciously experienced before." Hayek (1952, p. 193) goes on to say "It may be noted in passing that these considerations also have some bearing on the age-old controversy about 'freedom of will.' Even though we may know the general principle by which all human action is causally determined by physical processes, this would not mean that to us a particular human action can ever be recognizable as the necessary result of a particular set of physical circumstances."

McFadden (2006, p. 396) connects the concept of free will with his CEMI theory saying "We experience the influence of the CEMI field as *free will*. This is why our willed actions feel so different from automatic actions: they are the effects of the CEMI field as the cause. ... In CEMI field theory, we are not simply automatons that happen to be aware of our actions. Our awareness (the global CEMI field) plays a causal role in determining our conscious actions."

Hodgson (1991, p. 157) conjectures that "evolution has apparently favoured consciousness, not merely by giving rise to organisms with consciousness, but also by equipping them with mechanisms to ensure that in times of danger or crisis, or otherwise requiring important decisions to be made, full conscious attention is brought to bear on the problem." When the appropriate action is clear, one can make decisions with relatively little conscious effort. When ambiguity presents itself, conscious choice is more likely to result in a better outcome.

For the purpose of understanding social order, perhaps the most important characteristic of consciousness is self-awareness. People recognize themselves as distinct individuals who have the ability to decide for themselves what choices they will make.

C. SELF AWARENESS AND CONSCIOUS CHOICE

Imagine, as economists often do, an omniscient benevolent social planner who designs an institutional structure to maximize social welfare. Individuals behind a Rawlsian (1971) veil of ignorance, in which they know nothing about their own personal characteristics, would readily agree to this institutional structure, following Rawls's thought experiment. In the real world, many might disagree, because they are self-aware and make conscious choices to further their own interests. Indeed, the whole purpose of the Rawlsian veil is to eliminate people's self-awareness.

Butos and McQuade (2023, p. 11) remark that Hayek "despaired of the ability of traditional democratic liberal constitutionalism to secure liberty given the widespread lack of appreciation of the superior epistemic properties of a spontaneous order." But self-aware individuals make conscious choices, thinking about things from their own perspectives. Conscious individuals could be aware of and appreciate "the superior epistemic properties of a spontaneous order," and yet still desire to construct an order more favorable to themselves. Self-aware individuals may even perceive their own interests as closely allied with the public interest.

Consider a famous example. In 1953, Charles Wilson, CEO of General Motors who was nominated to be Secretary of Defense, was asked in his confirmation hearing before the United States Senate, whether he saw any conflict of interest that might arise because of his association with General Motors. He responded, "for years I thought what was good for our country was good for General Motors, and vice versa." More recently, Henry Paulson, Secretary of the Treasury from 2006 to 2009 and former CEO of Goldman Sachs, bailed out a failing Goldman Sachs in 2008, claiming it was in the nation's interest to do so. That same year, Goldman Sachs competitor Lehman Brothers was denied similar government support and went bankrupt. We can speculate on how that series of events might have been different had the Treasury Secretary been a former Lehman Brothers CEO rather than the former CEO of Goldman Sachs. Self-aware individuals tend to see social interests through the lens of their own personal interests.

Consider another example, somewhat far afield from politics and government: sports fans. People might be interested in the outcomes of sporting events for their entertainment value, but sports fans are emotionally involved with their teams' performances. They are happy when their teams win and depressed when they lose. Behaviorally, a hometown victory will lead to more spending in local shops and restaurants, indicating a behavioral change that would not seem to be predicted by neoclassical utility theory. Why should people's consumption choices be affected by the outcomes of sporting events?

People might have a financial stake in an outcome if they bet on their team, but even here, fans will bet on their own teams, and refuse to bet on rivals, because of their self-awareness as fans of a particular team. They may make the conscious choice to make a bet they think is likely to lose, because they are emotionally invested. This type of behavior has not made its way into the academic analysis in economics and political science, but it is consistent with Hayek's (1952) description of the sensory order.

Butos and McQuade (2023, p. 31) summarize Hayek's theory of the sensory order, saying "Hayek describes the basic structure of the brain as a network of components, physically connected, that interact via the transmission of electrical impulses. ... Each neuron is connected to many others... and new connections can be established or existing ones eliminated." Butos and McQuade (2023, p. 32) continue: "The physical changes in neurons and their connections implement a form of learning in which the system adapts to its environment." This restructuring of thought patterns forms the basis for individuals to make conscious choices, and the incorporation of past experiences in the remapping of neural connections opens the opportunity for self-awareness.

Marsh (2010, p. 126) says "Hayek's conception is ... a model that allows us to go beyond our immediate environments to a past through memory, habit and tradition and forward through planning and imagination, neither requiring the direction from paradigmatic cognitive states such as beliefs and desires." For present purposes, an emphasis on planning and imagination contrasts conscious choice with a mechanical cause and effect depiction of human action. Marsh (2010, p. 126) notes that the concept of tacit knowledge,

which can be used only by the people who possess it, arises because of the ability of individuals to make conscious choices.

McFadden (2006) notes that much human activity—even complex activity—is undertaken without self-awareness. The complex actions of one's immune system, for example, occur unconsciously, and even a complex activity like driving a car might be done unconsciously as the driver's conscious thoughts drift elsewhere. But, McFadden (2006, p. 387) notes, we observe “the strictly human activities, like use of language—to be accompanied by awareness.” Self-awareness is a key characteristic of consciousness.

As earlier noted, Hayek (1952, p. 193) observes that “It may be noted in passing that these considerations also have some bearing on the age-old controversy about ‘freedom of will.’” The discussion in this section suggests the connection between consciousness and the ability of individuals to make creative choices when opportunities arise, rather than referring to stable utility functions that embody their preferences. The evolving nature of thought processes within the brain makes every person a unique individual. Hayek’s (1952) theory of the mind is consistent with self-aware individuals making conscious choices.

D. THEORIES OF BEHAVIOR AND SOCIAL EVOLUTION

One alternative to depicting individuals as conscious entities who act creatively and have the capacity to make different decisions when confronted with the same circumstances—to “think outside the box,” to make use of an overused phrase—is neoclassical utility theory. People have stable well-defined utility functions that meet the neoclassical assumptions, which yields predictable behavior. Neoclassical utility maximizers do not think outside the box.

To gain some insight into the way that conscious choice shapes institutional constraints, consider the cooperative societies of ants and bees, whose members work together for their mutual benefit. Their actions appear to conform with neoclassical utility theory, as Tullock (1971, 1994) observes, but few would classify them as making conscious choices.³ One difference between these insect societies and human societies is that within human societies there is a constant competition among individuals to alter institutional constraints to gain power over one another. This is a manifestation of self-aware behavior and conscious choice.

Another difference between human societies and insect societies is that human societies exhibit progress. Progress generated through the spontaneous order of the market has been especially evident since the beginning of the Industrial Revolution, and a comparison of conditions in ancient Rome compared to hunter-gatherer societies shows that progress has been occurring for thousands of years. Meanwhile, insect societies evolve only through biological evolution.⁴ This difference between the societies of ants and humans is due to human self-awareness and the ability to make conscious choices. They are entrepreneurial in the Kirznerian (1973) sense that they can recognize and act on opportunities that have previously gone unnoticed. When societies are composed of conscious and self-aware individuals, social evolution can occur without biological evolution. Ant societies have functioned the same way for thousands of years. Human societies are constantly evolving.

McFadden (2006) notes that while there are evolutionary advantages to developing conscious choice for some activities, that is not true of all activities (such as regulating one's heartbeat, or immune responses to diseases). So, natural selection would amplify the development of consciousness for some purposes but suppress it for others. When trying to evade predators or searching for food, one does better by not making conscious choices for some things—for example, one's heart rate—to devote full conscious attention to others.

One evolutionary advantage of consciousness is that it enables individuals to engage in creative and entrepreneurial behavior, which drives economic and social progress. It allows social evolution to occur more rapidly than biological evolution. But this same self-awareness drives individuals to seek power over others for their own benefit. Faced with a prisoners' dilemma situation, people may place their interests above the

cooperative interest of all, and even tend to see their personal interests as corresponding with the public interest.

E. THE INSTITUTIONAL DILEMMA

For centuries, the focus of social science on the design of institutions has been on the prisoners' dilemma nature of social interaction. In many cases, individuals following their own narrow interests end up producing a social outcome that is worse for everyone. This idea goes back at least to Hobbes (1651), who argued that there is a social contract which obligates everyone to abide by the government's rules to create an orderly society. Otherwise, the result is anarchy, which produces a war of all against all. The idea here is that rather than following their narrow self-interests, people could agree to be bound by such a social contract, which would improve everyone's well-being.

Twentieth century social contractarians such as Rawls (1971) and Buchanan (1975) build on those ideas to discuss what type of institutional arrangements people would hypothetically agree with to create an orderly society. This idea leans heavily on the concept of agreement: that everyone would agree to rules that would allow them to escape the prisoners' dilemma situation and produce an orderly society. One difficult question in this framework is discovering what would be the terms of this social contract. What constraints would everyone find in their own interests to abide by, assuming that all others faced the same constraints? This question will be set aside to focus on the next question: Even if a set of institutions could be developed that would allow people to escape that prisoners' dilemma, would people actually agree to it?

This question is reasonable precisely because institutions of governance are designed to overcome a prisoners' dilemma situation. In a prisoners' dilemma, everyone has an individual incentive to decline to agree regardless of the choices of others. The authoritarian response is to force everyone to abide by a certain set of institutional constraints for the good of everyone. By forcing people to act cooperatively, they escape the prisoners' dilemma situation.

The problem with this authoritarian solution is that someone must have the authority to actually enforce it. The enforcer has the same incentive as everyone else: to opt out even when enforcing those institutional constraints on others. As Holcombe (2021) has explained, the requirement of enforcement divides a society into an elite group of enforcers, and the masses upon whom the rules are being enforced. The elite do not face the same constraints as the masses.

This distinction between elites and masses has a long history in the social sciences. To note one example which is particularly relevant to the design of institutional constraints, Mills (1956, p. 3) observes that "The powers of ordinary men are circumscribed by the everyday worlds in which they live ... But not all men are in this sense ordinary. As the means of information and of power are centralized, some men come to occupy positions in American society from which they can look down upon, so to speak, and by their decisions mightily affect, the everyday worlds of ordinary men and women." Members of the elite benefit from being able to make the rules to which the masses must conform. They do not want to be bound by that social contract; they want to design it and enforce its terms on others.⁵

This observation applies to more than just the elite. The prisoners' dilemma framework shows why even if it is in everyone's interest to agree to a cooperative solution, everyone has an incentive not to agree. The reason is that there are many possible institutional structures that could produce an orderly society, and everyone wants the one that is best for them. Consider a contract curve within an Edgeworth box diagram. Efficiency means being on that contract curve, but there are an infinite number of different outcomes on that curve. This is one area in which insect societies appear to have an advantage over human societies. Individual insects are not self-aware, and each acts according to the cooperative solution in a prisoners' dilemma setting. They act as if they were behind a Rawlsian veil of ignorance.

"Rational" individuals in insect societies "agree" to act cooperatively, "maximizing their utility," whereas in human societies, self-aware individuals can consciously choose to defect from the cooperative option, which appears to be the better choice for themselves, although suboptimal for the greater society.

One difference between ants and humans is that humans are self-aware and make conscious choices. This thought experiment—the differences between insect and human societies—helps demonstrate the difference between standard economic assumptions about human behavior and the implications of recognizing that humans make conscious choices.

F. CONSCIOUS CHOICE AND SPONTANEOUS ORDER

Hayek (1952) draws a parallel between the way the mind evolves to organize thoughts to understand the environment it senses and the way societies spontaneously evolve to create an order that is the result of the individual plans of members of society, but without any overall plan for its organization. Butos and McQuade (2023, p. 8) say that “Hayek’s cognitive theory as set out in *The Sensory Order* provides an explanation for the relationship between two distinct orders—the subjective order produced by the mind of the individual and the objective order external to, but sensed by, the individual.”

Butos and McQuade extend Hayek’s ideas and apply them to a wide range of social organizations. This idea of unplanned order has obvious application to markets, as Hayek (1945) described. Butos and McQuade apply this idea to the evolution of scientific ideas and government structures. If markets can be viewed as discovery procedures, as Hayek (2002) does, it is a small step to view scientific inquiry the same way, as a mechanism for advancing knowledge. Butos and McQuade (2023, p. 107) also see the emergent order in government, noting that “among government bureaucracies there is exhibited a wide range of adaptive responses to their environment and the constraints it imposes on them.”⁶

The Austrian school’s analysis of emergent order has tended to take constraints on individual behavior—both physical constraints and institutional constraints—as given and has analyzed the way individuals have interacted within those constraints to produce an orderly outcome. Even with regard to collective action, Butos and McQuade (2023, p. 98) say “The problem then becomes to examine how groups of individuals faced with making a ‘group choice’ will tend to react under different institutional arrangements.” Because institutions are humanly devised, rather than assuming, or even observing, institutional arrangements, an analysis of social order should extend to explaining how institutional arrangements are designed.

G. CONSCIOUS CHOICE AND INSTITUTIONAL CONSTRAINTS

A Hayekian approach to analyzing the social order focuses on how spontaneous orders can emerge without any overall plan, as a result of the interactions of individuals who make their own plans. People act within the constraints they face to accomplish the ends they seek. But institutional constraints are humanly devised, so a complete understanding of a social order requires understanding of how human interaction shapes those institutional constraints. Hayek recognized the importance of these institutional constraints. Butos and McQuade (2023, p. 19) say “Hayek argued that achieving the benefits of spontaneous order required rules of conduct regarding social interactions (e.g., rules of property and contract) and rules governing the relationship between individuals and government.” How are those rules of conduct devised?

Butos and McQuade (2023, p. 19) go on to report Hayek’s optimism on these rules, saying “Hayek (1960, p. 63) claimed that ‘better rules of conduct’ will prevail by displacing inferior sets of rules and by sustaining larger populations.” There are reasons to question this optimism. One is the simple observation that oppressive and unproductive institutional structures seem to constantly arise all over the globe. Relatively productive institutions in twentieth century Venezuela have given way to oppressive institutions in the twenty-first. Meanwhile, the institutional oppression of North Korea exists beside the free and productive institutional structure in South Korea. The Soviet Union, created in 1917, broke up in 1991, and despite the optimistic predictions in the 1990s became Putin’s Russia in the twenty-first century.

While examples could continue, some insight into why Hayek’s optimism is open to question goes back to the fact that institutions are designed through the conscious choices of self-aware individuals who tend to see the collective interest as congruent with their own. Indeed, Hayek (1944, ch. 10) explained why

political institutions tend to enable the worst to get on top. The political institutions Hayek saw as necessary for a liberal order—protection of property rights and enforcement of contracts—require an enforcement mechanism, and those who have the power of enforcement are in a position to use that power to dictate an institutional structure advantageous to themselves.

Unlike citizens behind a Rawlsian veil of ignorance, self-aware individuals commonly make conscious choices with the goal of gaining power over others. Galbraith (1983, p. 10) says, “In all societies, from the most primitive to the ostensibly most civilized, the exercise of power is profoundly enjoyed. … power is pursued not only for the service it renders to personal interests, values, or social perceptions, but also for its own sake, for the emotional and material rewards inherent in its possession and exercise.” Bertrand Russell, in his Nobel lecture (1950) compares the acquisitiveness of neoclassical utility theory with the aspirations of self-aware individuals, saying “The world would be a happier place than it is if acquisitiveness were always stronger than rivalry. But in fact, a great many men will cheerfully face impoverishment if they can thereby secure complete ruin for their rivals.”

Butos and McQuade (2023, p. 99) incorporate this idea, conjecturing that “government is successful because, first, it provides clear and viable opportunities for the pursuit of happiness of internal participants (whether that be power, prestige, or wealth, or the promotion of social ends thought worthwhile); second, it is an arrangement which is capable of sensing (and even anticipating) and reacting adaptively to certain features of its environment; and third, its product is such that, over time, it at least partially conditions the feedback from the environment toward favoring the system’s sustainability and growth of effective authority.” Governmental institutions are designed through the conscious choices of self-aware individuals who have the power to impose those institutions on the masses.

Butos and McQuade (2023, ch. 8) go on to discuss the way governmental institutions evolve as a result of the decentralized actions of those involved: legislators, bureaucrats, interest groups, and others. There is, in this sense, an emergent order in governmental institutions, as Wagner (2007) has noted, but that order emerges within a planned order that is designed by those who have the power to impose their rules on the masses. Butos and McQuade (2023, p. 102) note that when social problems surface, government’s “disposition to deal with the crisis not only by expanding its scale but also by widening the scope of its activities is enhanced, and legislation enacted following such a disposition results in increasing legislative authority over aspects of society not previously subject to it.” They are observing the effects of the conscious choices of self-aware individuals who have both the desire and the ability to gain more power over others.

Institutional constraints are not designed by the cooperative behavior of individuals who are seeking ways of escaping a prisoners’ dilemma situation. Some individuals have the power to design those institutions that impose constraints on the masses. While there are elements of spontaneous development in all institutions, their general framework is imposed from the top down, by force. Those institutions are the product of the conscious choices of self-aware individuals.

This paper has laid out a framework for analysis that can be used to understand why particular institutional constraints exist to shape social orders. Why did some societies impose class systems such as slavery, castes, and royalty, while others are more egalitarian? Why do the political elite impose institutional constraints that are obviously socially suboptimal? Surely Nicolas Maduro recognizes that the institutional changes implemented from the top down in Venezuela since the beginning of the twenty-first century have been counterproductive. They are the result of the conscious choices he and others in the Venezuelan power elite have made. The recognition that these institutional structures are the result of the conscious choices of self-aware individuals lays a foundation for better understanding the nature of social orders.

H. CONCLUSION

This paper has attempted to draw a connection between Hayek's ideas on social organization, as described by Butos and McQuade (2023) and theories of conscious behavior. One challenge is that consciousness has been the subject of inquiry in multiple disciplines—primarily philosophy, biology, and psychology—and there has been no consensus on what consciousness is, even within those individual disciplines. The hope is that economics can lend some insight into the nature of consciousness, and that the concept of conscious choice can offer a more complete depiction of social behavior.

The understanding of emergent social orders—the idea that orderly and productive institutions can arise as the result of human action but not of human design—has been one of the preeminent accomplishments of social science. Hayek has been a leading figure in this area of inquiry. His contributions, and those of Austrian school scholars more generally, have analyzed the way that individuals, faced with institutional and other constraints, develop ways of interacting for their mutual benefit. This paper steps back to look at how those institutional constraints—largely the result of human design—have evolved, and the role that people's conscious choices play in their design.

The role of conscious choice in social evolution draws a connection between the very open-ended study of consciousness and economic analysis of individual behavior. The emergence of consciousness has evolutionary advantages to those who have it. Economic progress is the result of the conscious choices of self-aware individuals. More generally, the institutional structure that governs the way individuals interact with each other has largely been constructed by self-aware individuals who negotiate with others, creatively looking for ways to tilt the rules in their favor. The entrepreneurship that has driven economic progress is possible only because people are self-aware and make conscious choices. That is the difference between the static social orders of ants and the continually evolving social orders in human societies.

The self-awareness that leads individuals to cooperative and mutually advantageous interactions when they act within institutional constraints has the potential to work against cooperative behavior when people design those institutional constraints. Institutions, as constraints on people's behavior, must be enforced to be effective. Some individuals impose those institutional constraints by force on others, and those self-aware individuals who have the ability to marshal that force to design and impose institutional constraints on others have an incentive to do so in ways that benefit themselves.

Commenting on the idea of emergent social orders, Butos and McQuade (2023, p. 170) say “One major lacuna seems to be the lack of a treatment of government and political systems as adaptive systems, and even authors such as Beinhocker (2006), who promote the wide applicability of a complex systems approach, tend to treat government simply as a device for making and applying (hopefully enlightened) rules.” Governments do have that characteristic—they have processes that emerge without anyone planning them out—but within an overall planned superstructure that is imposed from the top down. The characteristics of that superstructure are the result of the conscious choices of self-aware individuals.

Incorporation of a theory of conscious choice into the understanding of political, social, and economic institutions can lead to a better understanding of how socially suboptimal institutions can emerge and persist. Consciousness is worth studying because, as McFadden (2006, p. 388) says, “Consciousness generates phenomena in the world. It is a cause of effects.” Butos and McQuade (2023) build on Hayek's ideas to offer substantial insight into the development of social systems. The social order is an emergent order, but within a planned order of humanly devised institutional constraints. Some but not all institutional constraints are emergent; others are consciously designed. An extension of their work can incorporate the recognition of conscious choice to analyze the way that institutional constraints are designed by self-aware individuals.⁷

NOTES

- 1 Chalmers (1996) elaborates on the ideas in his article in the book he published the next year.
- 2 Chalmers does discuss the relationship between awareness and consciousness, noting that consciousness incorporates people being aware of their surroundings—things they see, hear, and feel, for example. Self-awareness is the recognition of a boundary between the self-aware individual and everything and everyone else. Hayek (1952, p. 133) equates consciousness and awareness, saying “Consciousness, in the sense in which this term is synonymous with awareness, is an attribute which attaches only to some but not all mental events.”
- 3 In the very unsettled investigations of consciousness, panpsychism is the idea that all matter is conscious to some degree. Bruntrup and Jaskolla (2017) offer some ideas on this subject. See also Goff (2017) who defends the idea of panpsychism.
- 4 Hodgson (2015, ch 13) notes ambiguities in the way evolution is viewed, noting that it can refer to changes that occur from one generation to the next, or changes individuals within a generation make. Ant societies can evolve as biological evolution occurs over generations. Human societies can evolve as individuals make conscious choices to do things differently from those who came before.
- 5 Note that Hobbes (1651) explicitly recognized that those who enforced the social contract were in an elite category separate from those upon whom it was being enforced, in contrast to twentieth century contractarians like Rawls (1971) and Buchanan (1975).
- 6 Wagner (2007, 2016) has considered this idea in detail.
- 7 The author thanks David Emanuel Andersson, James Caton, Leslie Marsh, and participants at the 2023 Southern Economic Association meetings and the 2024 meeting of the Public Choice Society for helpful comments. Any shortcomings in the paper remain the responsibility of the author.

REFERENCES

Alchian, A. A. 1950. Uncertainty, Evolution, and Economic Theory. *Journal of Political Economy* 58(3):211-221.

Beinhocker, E. D. 2006. *The Origins of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*. Cambridge, MA: Harvard Business School Press.

Bruntrup, G., and L. Jaskolla, eds. 2017. *Panpsychism: Contemporary Perspectives*. Oxford: Oxford University Press.

Buchanan, J. M. 1964. What Should Economists Do? *Southern Economic Journal* 30(3):213-222.

_____. 1975. *The Limits of Liberty: Between Anarchy and Leviathan*. Chicago: University of Chicago Press.

_____. 1990. The Domain of Constitutional Economics. *Constitutional Political Economy* 1(1):1-18.

Butos, W. N., and T. J. McQuade. 2023. *Hayekian Systems: Research Into the Structure of Social Interaction*. London: Routledge.

Bermudez, J. L. 2007. Self-Consciousness. In: M. Velmans and S. Schneider (eds.) *The Blackwell Companion to Consciousness*, pp. 456-467. Malden: Blackwell Publishers.

Chalmers, D. J. 1995. Facing Up to the Problem of Consciousness. *Journal of Consciousness Studies* 2(3):200-219.

_____. 1996. *The Conscious Mind*. New York: Oxford University Press.

Crick, F. 1994 *The Astonishing Hypothesis*. New York: Charles Scribner's Sons.

Crick, F., and C. Koch. 1990. Towards a Neurobiological Theory of Consciousness. *Seminars in the Neurosciences* 2:263-275.

Dawkins, R. 1976. *The Selfish Gene*. Oxford: Oxford University Press.

Dennett, D. C. 1991. *Consciousness Explained*. London: Penguin Books.

Edelman, G. M. 1990. *The Remembered Present: A Biological Theory of Consciousness*. New York: Basic Books.

Ferguson, C. E. 1966. *Microeconomic Theory*. Homewood: Richard D. Irwin.

Friedman, M. 1953. *Essays in Positive Economics*. Chicago: University of Chicago Press.

Galbraith, J. K. 1983. *The Anatomy of Power*. Boston: Houghton Mifflin.

Goff, P. 2017. *Consciousness and Fundamental Reality*. Oxford: Oxford University Press.

Ginsburg, S., and E. Jablonka. 2019. *The Evolution of the Sensitive Soul: Learning and the Origins of Consciousness*. Cambridge MA: MIT Press.

Hayek, F. A. 1944. *The Road to Serfdom*. Chicago: University of Chicago Press.

_____. 1945. The Use of Knowledge in Society. *American Economic Review* 35:519-530.

_____. 1948. *Individualism and Economic Order*. Chicago: University of Chicago Press.

_____. 1952. *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*. Chicago: University of Chicago Press.

_____. 1960. *The Constitution of Liberty*. Chicago: University of Chicago Press.

_____. 2002. Competition as a Discovery Procedure. *Quarterly Journal of Austrian Economics* 5(3):9-23.

_____. 2014. *The Market and Other Orders*. London: Routledge.

Hobbes, T. 1651/1950. *Leviathan*. New York: E. P. Dutton.

Hodgson, D. 1991. *The Mind Matters: Consciousness and Choice in a Quantum World*. Oxford: Clarendon Press.

Hodgson, G. M. 2015. *Conceptualizing Capitalism: Institutions, Evolution, Future*. Chicago: University of Chicago Press.

Holcombe, R. G. 2020. Contractarian Ideology and the Legitimacy of Government. *Journal of Institutional Economics* 17(3):379-391.

Jeannerod, M. 2007. Consciousness of Action. In: M. Velmans and S. Schneider, (eds.) *The Blackwell Companion to Consciousness*, pp. 540-550. Malden: Blackwell.

Kirzner, I. M. 1973. *Competition and Entrepreneurship*. Chicago: University of Chicago Press.

Marsh, L. 2010. Hayek: Cognitive Scientist *Avant la Lettre*. In: Butos, W. N. (ed.). The Social Science of Hayek's 'The Sensory Order', pp. 115-155. *Advances in Austrian Economics* 13.

McFadden, J. 2006. The CEMI Field Theory: Seven Clues to the Nature of Consciousness. In: J. A. Tuszynski, (ed.), *The Emerging Physics of Consciousness*. pp. 387-399. Berlin: Springer.

_____. 2020. Integrating Information in the Brain's EM Field: The Cemi field Theory of Consciousness. *Neurosci Conscious*: doi: 10.1093/nc/niaa016. PMID 32995043; PMCID: PMC7507405.

Mills, C. W. 1956. *The Power Elite*. New York: Oxford University Press.

Mises, L. von. 1998. *Human Action*, Scholar's Edition. Auburn: Mises Institute.

North, D. C. 1991. Institutions. *Journal of Economic Perspectives* 5(1):97-112.

Penrose, E. T. 1952. Biological Analogies in the Theory of the Firm. *American Economic Review* 42(5):804-819.

Rawls, J. 1971. *A Theory of Justice*. Cambridge, MA: Belknap.

Rey, G. 1997. A Question about Consciousness. In: N. Block, O. Flanagan, and G. Guzeldere (eds.). *The Nature of Consciousness*, pp. 461-482. Cambridge, MA: MIT Press.

Robbins, L. 1935. *An Essay on the Nature and Significance of Economic Science*. London: Macmillan and Co.

Russell, B. 1950. www.nobelprize.org/prizes/literature/1950/russell/lecture

Stigler, G. J., and G. S. Becker. 1977. De Gustibus Non Est Disputandum. *American Economic Review* 67(2):76-90.

Tullock, G. 1971. The Coal Tit Is a Careful Shopper. *American Naturalist* 105:77-80.

_____. 1994. *The Economics of Non-Human Societies*. Tucson: Pallus Press.

Wagner, R. E. 2007. *Fiscal Sociology and the Theory of Public Finance*. Cheltenham: Edward Elgar.

_____. 2016. *Politics as a Peculiar Business*. Cheltenham: Edward Elgar.