

Can We Design Spontaneity? Hayek, Design, and the Normative Appeal of Spontaneous Orders

NATHANAËL COLIN-JAEGER

*American University of Paris, Center for Critical Democracy
Studies*

Abstract: Spontaneous orders are an essential concept in political theory and political economy. Such orders entail the impossibility of predicting outcomes in detail and hence controlling and directing social processes. Many phenomena characterizing contemporary societies can be depicted as spontaneous orders, from the housing and financial markets to the evolution of norms and trends. Yet, it is well known that not every spontaneous order is beneficial. Therefore, what form of political framework is compatible with recognizing such orders? In this article, I address this problem through the example of the work of Friedrich Hayek, a prominent liberal theorist of spontaneous orders. His work shows the necessity to theorize a government of spontaneous orders based on maximizing reasonable expectations and individual freedom. I finally emphasize what such a theory implies for political power, which is not abolished but should handle complexity appropriately.

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How can something be spontaneous and designed? In political life, spontaneity entails that individuals make their own choices and that a central authority does not direct the overall order. In contrast, design implies the intentional conception of a social order. Spontaneous orders are ubiquitous in contemporary societies because of the complexification of social and economic relations. Nobody can guide the overall order in a specific direction without excessive coercion of people's behavior. Yet, spontaneous orders do not necessarily lead to good outcomes and may even lead,

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ultimately, to self-destruction. This fact calls for a theory of government for such orders. We are left with a puzzle: spontaneous orders do not necessarily produce beneficial results, but on what ground can we design them without abolishing spontaneity, and what normative principles would fit such orders?

Friedrich Hayek conceptualized spontaneous orders. Famously, he is also a liberal thinker. Nevertheless, critics often target Hayek's theory as producing an ambiguity related to the normative nature of spontaneous orders and his defense of liberalism.¹ Hayek's theory would have to stand on two conflicting legs: his normative defense of liberalism and his positive research program based on his theory of cultural evolution and his study of complex systems. Hayek would have to defend the necessity to establish a liberal order while advocating for the limits of human reason and the possibility of interventions in a spontaneous and complex order. In this article, I take Hayek as the leading proponent of a liberal society based on spontaneous orders. I argue that most critics overlook the particularity and originality of his position, which consists in the elaboration of a theory of the design of liberal spontaneous orders. However, this article extends beyond Hayek. Indeed, most of the articles I consider in sections II and III have been concerned with the alleged contradiction between design and spontaneity in Hayek's work. In this article, I show how recognizing that the purpose of a liberal government is to institute and manage the rules of the game and design spontaneity delineates a new political theory, concerned with the type of interventions consistent with the conservation of spontaneity.

Since Hayek seems to encounter a contradiction between design and spontaneity, this is an excellent place to start. I will first show how this problem can be resolved by his work and what normative arguments are consistent with spontaneous orders. The first contribution of this paper is therefore to dispel the alleged contradiction between design and spontaneity.² If Hayek's liberalism is not subordinated to evolution or complexity, we require an alternative normative theory. Liberal spontaneous orders are defended through normative arguments explicitly designed to

¹ This tension is the focus of a great deal of the literature on Hayek. We may find examples of the problem in Vanberg (1986) followed by Steele (1987), Barry (1989), Yeager (1989), Miller (1989), Kukathas (1990), Voigt (1992), De Vlieghere (1994), Gray (1996), Leroux (1997), Angner (2004), Boettke (2018) and Boettke and King (2020). More recently, this critique is reiterated by Beck (2015, 2018), Faria (2017), Wilson (2020), and Luban (2020).

² Servant (2018) establishes that the impossibility of central planning and establishing the design of a social framework are compatible.

fit with the cognitive limits imposed by such orders. Far from relying on a social contract theory or explicit public reasoning, Hayek proposes a justification of liberalism based on (a) the promotion of a framework for coordination, (b) the maximization of liberty, and (c) an institutional discovery procedure through experimentation. In particular, I put forward a normative criterion to assess the improvements of a liberal order: the principle of maximization of expectations. If I am correct, these principles should be at the center of any discussion seeking to justify interventions in a complex society. Dispelling the 'Hayek problem'—that is, his alleged ambiguity or contradiction—is therefore the first step towards showcasing his alternative defense of liberalism and his contribution to contemporary political theory as a theory of government of spontaneous orders. The second contribution of this paper is thus to develop what such a theory would look like and what it amounts to, showing that a liberal design is not contradictory of the existence and function of spontaneous social and economic order.

I. SPONTANEOUS ORDERS AND COMPLEXITY

The concept of spontaneous order is inextricably tied up with the idea of complexity. By the end of the 1950s Hayek recognized complex orders everywhere (Caldwell 2000, 19).³ Hayek distinguishes the idea of spontaneous order and the concept of complexity since some spontaneous orders are not complex (Hayek 1973, 35). Nevertheless, spontaneous *and* complex orders are the most important ones, and the ones we will be concerned with.

Some features of complex systems are nowadays well-known. Ladyman and Wiesner (2020) list them in their synthesis of complex systems. The authors develop ten “truisms” of Complexity (Ladyman and Wiesner 2020, 10), which include the necessity for a significant number of elements, the absence of central control, feedback loops, non-equilibrium, spontaneous ordering and emergence, adaptive behavior, or robustness. Rather than defining all these terms technically, let me give a typical example: the Climate System (Ladyman and Wiesner 2020, 33f.). The Climate System comprises essential elements, from microbes and particles to

³ Paul Lewis (2012, 2015, 2016a, 2016b) shows to a greater extent how and why Hayek borrowed from others. The study of complexity in Hayek is by no means new and has been the topic of much research since the 1990s, for example, Chaumont-Chandelier (1999), Vaughn (1999), Kilpatrick (2001), Fiori (2009) and Axtell (2016). Gaus (2006, 2007, 2018) is an example of a philosopher who massively builds on Hayek's study of complexity to work out the implications of liberal political philosophy.

animals and societies. It is not the product of central direction but of co-evolution between climate and life on Earth. For instance, the production of atmospheric oxygen is driven by microbes interacting with geochemical cycles. Feedback loops are ubiquitous, from the changing composition of the ocean impacting the whole to human influence. We may distinguish negative feedback (stabilizing the system) and positive feedback (destabilizing it). One example of negative feedback is temperature regulation through the formation of clouds characterized by water evaporation when the sunlight increases the temperature. In contrast, an example of positive feedback would be the melting of the polar snow, because snow reflects the sunlight, and its melting enhances the overall temperature increase. This processual feature implies that the system can display local equilibria (the weather is not chaotic, in other words we may predict with reasonable certainty the weather tomorrow) and regularities (we may find large-scale stable patterns in the ocean's streams, for example). The system is dynamic due to internal forces and external influences (such as the position of the Earth relative to the sun). Here, non-equilibrium means the openness *of the system* and its dynamic nature, which can bring about *local equilibria* and stable situations. Finally, the system emerges from repeated interactions but displays adaptiveness.

Hayek refers directly to complex systems in two articles, 'Degrees of Explanation' (1955a) and 'The Study of Complex Phenomena' (1964). Complexity is undoubtedly the "key idea" of Hayek's work (Gaus 2006, 232). Spontaneous orders all display *an important number of elements*, be it individuals, groups, or neurons. Human societies are composed of *heterogeneous individuals* with diverse preferences, especially in the 'Great Society' characterized by a process of differentiation. Hayek underlines the importance of *feedback loops*, giving the example of the market since individuals must renew their expectations based on past experiences, especially when their expectations previously failed. This dynamic process is a defining feature of Hayek's approach based on a *non-equilibrium* understanding of social processes, and this mechanism is the reason for *robustness* and *adaptiveness*.⁴

First and foremost, the use of complexity should be understood as part of a positive research program. Hayek was interested in explaining

⁴ Another important concept is the concept of *emergence*. Some rules and norms are not the result of human design but emerge from the interactions of the individuals (see Hayek 1967b and Lewis 2015). Two classic examples for Hayek are language and money, which evolved without anyone directing the *complete* process. Some parts of the process can be consciously decided, but the process as a whole is not directed.

the workings of the social order and its properties. What kind of claims does this make for liberalism? We cannot make detailed predictions for a complex system, only pattern predictions (Hayek 1955a, 15).⁵ The corollary is essential. If we cannot predict the result of a change in detail, we cannot manipulate the overall order. Some parts of the order can certainly be managed, but not the totality. In a spontaneous and complex order, nobody can guarantee that a modification in the system's rules will produce the expected results, mainly when we aim at realizing a specific end. The study of complexity offers a powerful argument against planning and interventions. I will return in greater length to the implications of this lesson in sections IV and V.

II. THE ORIGINS OF SPONTANEOUS ORDERS: CULTURAL EVOLUTION

If human societies are complex systems, orders of action cannot result wholly from human design. The following question arises naturally: How did it happen? Evolution is the “only game in town” (Rosenberg and McShea 2008, 25) when design has been ruled out (be it human or divine) and thus the only available complement to Hayek's understanding of complexity.⁶ Hayek's expressions are well-known and are often viewed as the trademark of his liberalism. Human reason is the result of an evolutionary process and not its cause (Hayek 1979, 75), civilization is the result of an adaptative evolution (Hayek 1960, 23, 59; 1973, 46), and most rules of our current societies have not been the result of conscious choice (Hayek 1973, 50). All of this is especially true for our economy: “*We have never designed our economic system. We were not intelligent enough for that*” (Hayek 1979, 164; italics in the original). The problem is that Hayek seems to tell us that liberalism is a natural outcome of cultural evolution. We face a dilemma: either we accept that our rules are the result of an evolutionary process and cannot be modified because of complexity, leading us to commit the naturalistic fallacy; or we accept that we may revise and improve rules and we are therefore back to a form of ‘constructivist rationalism’.⁷

Hayek is first and foremost concerned with the evolution of norms, rules, and traditions, which constitute our way of interacting with each other and perceiving the environment (Hayek 1962; 1988, 12). I will

⁵ Hayek exemplifies the difference between patterns and detail prediction with the example of biology (Hayek 1964, 31–32).

⁶ Hayek defines evolution as the twin of spontaneity (see Hayek 1973, 23; 1979, 158; 1988, 146).

⁷ Luban (2020) recently identified this issue.

henceforth refer to these cultural norms and traditions under the simpler umbrella term ‘rules’. The phenomenon of interest is one of the evolutions of societies that brought about the ‘extended order’, that is, the complex order that emerged roughly during the 18th century. Hayek defines cultural evolution as the cultural transmission of learned rules that are neither invented nor fully understood (Hayek 1979, 155).

Significant discussions have concerned cultural evolution's similarity to biological evolution, and I cannot dive into the full details of these debates here.⁸ Let me take for granted that Hayek relies on group selection as a selection mechanism, rules as replicators, and that variations consist of moral and social entrepreneurship or conscious tinkering. But if group selection allows for the more adapted set of rules to prevail, then the road of evolution would lead to progress, and liberalism would be defended as the final product of this historical trend. We would have to respect and admire the rules we inherited because, even if we do not like them, they would be the best adapted and allow our prosperity (Hayek 1960, 61). This criticism of Hayek's later views is widespread.⁹

Some obvious cases question this faith in the product of evolution and spontaneity. Consider the possibility of self-destructive orders, such as Easter Islands, as Diamond (2005) described, or the persistence of sub-optimal and destructive rules, such as QWERTY keyboards or harmful traditions, such as foot-binding (Mackie 1996; Rosenberg 2017). Finally, evolutionary delay and moral atavism (nationalism, xenophobia, bigotry), as studied by Bowles and Gintis (2013, 5) or Storr and Martin (2008), also showcase that an evolutionary process can produce harmful outcomes.

These criticisms would sound the death knell of any attempt to justify liberalism on evolutionism or complexity. Spontaneity is a characteristic of a system, but it does not necessarily mean that it brings about good results, as the above examples show. It only means that it is impossible to direct every action and to predict a specific end-state. If Hayek were to ground his liberalism on these weak foundations, the project would be doomed, because there is no guarantee that a complex system would converge with liberalism. Yet we can find explicit passages where Hayek

⁸ For specific works about Hayek's theory of cultural evolution and its proximity with biological evolution, see Whitman (1998, 2004), Caldwell (2000, 2002), Angner (2002, 2004), Denis (2002), Caldwell and Reiss (2006), Gaus (2006), Marciano (2009) and of course Hayek himself (Hayek 1960, 59; 1979, 75, 155; 1988, 12, 21). Group selection is itself a controversial topic in biological evolution. It is nonetheless defended, see Sober and Wilson (1998), Boyd and Richardson (2005), and, for a philosophical discussion, Okasha (2006).

⁹ See, among many others, Beck (2018, 102-103).

acknowledges exactly this. Indeed, Hayek (1976, 111) considered nationalism as being as dangerous as socialism for liberalism—while both may emerge from evolution—and refused to consider the result of evolution as something we ought to defend and value (Hayek 1988, 27). Hayek thus does not commit to any form of naturalistic fallacy and neither does he consider that evolution is what justifies market institutions (Hayek 1988, 20–21). What did he propose, then?

III. DESIGNING SPONTANEITY: TINKERING OR RADICAL CHANGES?

The traditional way to vindicate Hayek's liberalism and its consistency with his evolutionary views is to emphasize the whiggish aspect of his thinking. If we cannot start from scratch (Sugden, 1993), the defense of liberalism should take the form of immanent criticism and piecemeal reform.¹⁰ In this section, I argue that Hayek advocated for more than this and that he is correct because the theory would be inconsistent otherwise. He supported the necessity for radical design.¹¹

Let us first turn to the tinkering view to understand why we must move past it. The use of reason is not forbidden but must take place in the inescapable context of our given society. Reason, after all, was shaped by the long evolution of rules and traditions. All progress must be based on tradition (Hayek 1979, 167), and deliberate choice can only gradually improve the results of spontaneous orders (Hayek 1973, 100). Ultimately, all improvements must take the form of piecemeal reforms (Hayek 1988, 69). The theory of adjudication in a common law system, developed in the first opus of *Law, Legislation, and Liberty*, is undoubtedly the most important example of such an attitude. The well-known distinction proposed by Hayek is between the “law of liberty”, the *nomos*, (Hayek 1973, 94), and the legislation, the *thesis* (Hayek 1973, 124). Hayek praises the role of the common law judge, who does not create law by legislation but is a servant of the spontaneous order (Hayek 1973, 119). The judge does not invent or make law, but discovers it, because law is a precondition for the mere existence of human societies (Hayek 1973, 72–76) and exists unarticulated and tacitly before being expressed. Established customs

¹⁰ This line of defense was developed by Nemo (1988), Shearmur (1996), Caldwell (2000), Boettke (2018) and Boettke and King (2020).

¹¹ This argument is supported by Servant (2018). I present somewhat different textual evidence for the claim.

precede codified rules.¹² The judge can decide which rules to enforce based on the system's consistency and may adjust rather than create. In this context, consciously designed rules can appear, if they fit the overall system of law. Design appears constantly, but locally.

Now, is the legal system guaranteed to run smoothly? Hayek answers in the negative. Legislation is required for this exact reason (Hayek 1973, 88). This defense of the importance of legislation is one of the main differences with another important theorist of the spontaneous growth of the legal system: Bruno Leoni (Cubeddu 2020, 90–91). An evolutionary delay is one of the main reasons for the necessity of legislation. Sometimes the legislator must intervene because the rules and the legal system's spontaneous growth are too slow to cope with societal and structural changes.

This answer introduces a conceptual issue. How do we know we are improving the order with a legislative action or legislation at the margins? To answer this crucial question, Hayek specifies a criterion. He offers a normative answer (Hayek 1973, 100–103): the judge should strive to improve the number of reasonable expectations, thus fostering cooperation. I will come back to this criterion in the next section. It is sufficient here to notice that this answer raises three problems. The judge's position encapsulates an *epistemological problem*: why would the judge possess an advantageous position to evaluate what counts as an improvement? A *social problem* is that this solution presupposes consensus among judges on what should count as good law. Some judges may prefer to defend social goals or to promote one form or another of perfectionism, that is, the moral position where the state ought to intervene to foster a specific conception of the good life. Finally, a *political problem* is that such piecemeal change cannot consist of a defense of liberalism because it cannot produce liberalism from a non-liberal order. What would piecemeal changes and immanent criticism do in the Soviet legal system? These problems call for the defense of a liberal framework.¹³

The metaphor of the gardener clarifies this point (Hayek 1955a, 19; 1964, 40). The gardener illustrates a liberal attitude since he does not create the plants, the fruits, and the vegetables of his garden but helps them to grow following their nature. From this, I distinguish between a mere *intervention* and an *interference*. An intervention is the action of the

¹² The common law has been the subject of scrutiny in the literature, for example see Nemo (1988), Sugden (1993), Hamowy (2003), Hasnas (2004), Posner (2005), Mack (2006), and Cubeddu (2020).

¹³ For a particularly developed theory of this political problem, see Scheall (2020).

gardener, which helps the garden grow slowly—Hayek may prefer the English gardens to the French Le Nôtre-like gardens. An interference is an action that “brings about a particular result which is different from that which would have been produced if the mechanism had been allowed unaided to follow its inherent principles” (Hayek 1976, 129). But what exactly are the mechanism and the ‘inherent principles’ whose development we should seek to preserve? Indeed, it cannot be any natural or randomly given mechanism. Otherwise, the gardener would just let weeds grow in his garden or insects invade it. The gardener certainly leaves room for spontaneous growth, but this growth is designed within the garden’s framework. The only way to make sense of this example is to understand the role of the gardener as a model of what a liberal should aim to do within a liberal society. This leads us to distinguish between spontaneity within a designed framework—which requires intervention to build the framework leading to beneficial results—and undesigned spontaneous growth.

The assumed background for immanent criticism and piecemeal change is liberal civilization. Liberalism is not only a method of gradual change but also a substantial stance, or as Hayek states, “successful defense of freedom must be dogmatic” (Hayek 1973, 61). Liberal improvement can only take place in a liberal society when the spontaneous process is guided by the meta-rules of a “truly radical liberalism” (Hayek 1949, 433). The meta-rules are, for Hayek, the components of the rule of law (impersonality, generality, publicness, and permanency) and the declaration of individual rights (concerning oneself and property) and define what kind of laws can be enacted or not. In short: any piecemeal change requires a set of substantial values in the background. Without a liberal framework, the spontaneous order can destroy individual freedom and liberalism. Thus, Hayek’s liberalism is a theory of the design of liberal spontaneous and complex orders (Hayek 1973, 64–65). Any order does not fit the bill, but only a spontaneous functioning order within a liberal framework. In the Cairo Lectures, we read how we could “produce” or “create” an order in society (Hayek 1955b, 161). For this, we need “Liberty-Loving Statesmen” who want to “assist the formation of a spontaneous order” (192). This ambition is not an anomaly, but a consistent claim by Hayek when discussing the role of government, whose function is to “provide a beneficial framework for the free growth of society” to foster the “growth of civilization” (Hayek 1979, 152). Hence, government does not

always hamper a liberal society but is necessary for the constitution of a beneficial spontaneous order.¹⁴

Is Hayek's answer satisfying? Design is indeed the antithesis of what he often recommends. As Mack (2006, 263; emphasis added) puts it, “a well-ordered society exhibiting rational coordination among its members *need not be a designed and commanded order*”. Yet, I suggest reading him precisely as a philosopher who defends the possibility of designing an order. The reason is simple: the word ‘design’ (and one could make the same case for ‘planning’) covers two different concepts. The first concept of design refers to directing a process to produce a specific result (for example, price control). Actions of this type clash with his understanding of complex systems because they imply that we can realize an end-state according to some pre-established pattern. In ‘The Errors of Constructivism’ (1970) Hayek advances a fierce criticism of such hubris. The second concept of design entails no such dire consequences. Radical liberalism is designed not to produce results (for example, equal distribution of wealth and goods, equal access to housing through rent control). Moreover, Hayek's radical liberalism offers an adequate framework for the growth of spontaneous order, respecting the feature of a complex social order. Designing the framework is precisely refusing to direct individual actions towards specific ends, to allow individuals to pursue their ends. One concept of design entails the coercion of free interactions between individuals, while the other is constitutive and implies the construction of a sphere of autonomy, in which individuals can make their choices.

The dilemma is side-stepped if we recognize that Hayek does not defend liberalism for evolutionary reasons: we do not have to choose between committing the naturalistic fallacy or following a rationalist constructivist stance. Indeed, constructivism entails the ambition of planning society according to a set of goals and outcomes we want to produce, while design does not necessarily imply this. In addition, this discussion allows us to better understand the status of spontaneous orders. Luban (2020, 77) argues that most of Hayek's spontaneous order stories were ‘fairy tales’. This section shows that spontaneous orders should primarily be understood as an instrument for social design: it is better to design a spontaneous order given the cognitive limits imposed by complexity and

¹⁴ This constitutive function of government casts off the differentiation thesis, which entails that, for spontaneous order theorists such as Hayek, we should distinguish a political sphere and an economic sphere. See, for instance, Luban (2020, 79). Both spheres are always intertwined because one is the condition of the other.

evolution. The argument ultimately relies on the idea that liberal spontaneous orders display normatively appealing features.

Before turning to the normative justifications and features of such designed spontaneous orders, I should confront an important objection, voiced by Scheall (2020). The objection raises doubt about the soundness of the distinction I just introduced between an intervention (on the framework) and an interference (within the order of actions). In the end, there is no real difference between the two because designing a framework makes people act within and according to the framework, hence restricting the set of possible outcomes. Interventions, with the modification of some social rules, would amount to interferences of a higher order, promoting some specific kinds of behavior. If some orders of action are said to be better, it is because they display better outcomes, for instance, less coercion. Intervening at the rule level to restrict some actions would not be different than interfering directly with the actions of individuals. In the end, the same knowledge problem occurs: to know if a rule R' is better than a rule R in society S , we would have to anticipate the social order O_s emerging from R' and compare it to O_s without R' . Stating this comparison assumes that we: (a) possess relevant knowledge about the social dynamics in O_s ; (b) understand the function and relations of R' in the more general system of rules, and (c) know what it would entail to introduce it in another system of rules producing O_s . All these assumptions are heroic in the context of complexity and have been heavily criticized.¹⁵ This objection is particularly onerous when considering the case of transition interventions. Shaping a liberal framework from a non-liberal standpoint is very epistemologically taxing.¹⁶

This objection is fundamental and requires specifying the type of rules consistent with a complex and pluralistic order. Coordination in such an order cannot be the result of direct command, above all because nobody possesses all the relevant information to direct the overall order. Interventions on the rules of the game do not create a specific outcome but shape a type of game. Let me take the toy example of basketball, which conveys the core message. The basketball game is defined by a set

¹⁵ This mode of reasoning is characteristic of a planning mentality, criticized by Hayek during the socialist calculation debate (see, among others, Hayek, 1937). Ikeda (2004) explains the process theory developed by the Austrians (Mises, Hayek, Kirzner, and himself). Colin-Jaeger (2021) proposes a historical reading of Hayek in the context of the 1930s.

¹⁶ As stated by Scheall (2020, 6) this problem of liberal transitions is one major issue in Austrian thinking, and Austrian theorists lack a theory of transitions.

of defining rules, ascribing what is not allowed and what counts for what. Such a design is a requisite for the game of basketball to exist. Once this game is defined, teams of players can cooperate and compete within a defined environment, and some teams may discover strategies, counter-strategies, optimal ways to play the game, experiment, and so on. The important point is that the definition of the rules of the game does not say anything specific about which team will win the tournament. It means rules must primarily be negative and leave a wide array of individual strategies open, to be compatible with the maximum of individual expectations (I will come back to this point in the next section).¹⁷ In short, the order of action is spontaneous because the actions and strategies of individuals within the framework are constrained but (a) would not be possible without the framework, and (b) are not commanded towards a specific way of playing. The game itself has no particular end purpose besides allowing individuals to coordinate, cooperate, and compete with their preferences and values.¹⁸ Coyne (2007), in his work on post-war reconstruction, emphasizes the role of such framework interventions in laying down the rules of the game for peaceful interactions. Nevertheless, one must underline the limits of such transitions since most post-war reconstruction efforts were failures from a liberal standpoint (if we exempt Japan and Germany). Some pre-requisite conditions are necessary for framework interventions to be successful.¹⁹

IV. THE NORMATIVE APPEAL OF A LIBERAL SPONTANEOUS ORDER

Spontaneous orders can be equally productive or infecund because they are not predictable or controllable. Hayek is not a defender of spontaneous orders *simpliciter* but of liberal spontaneous orders developed within the framework of liberal rules and principles. What justifies the superiority of liberalism and the market, if not spontaneous orders or evolution?

¹⁷ Mack (2006) and Gaus (2006) make the distinction between the order of rules and the order of actions particularly clear.

¹⁸ The metaphor of basketball, though useful, may encounter a difficulty here, because the game of basketball sometimes possesses end-purposes, such as being pleasant for the public. We may understand some of the rule changes in basketball history to promote spectacular actions. This underlines that the distinction between outcome-directed rules and procedural rules is gradual rather than dichotomic.

¹⁹ Coyne (2007) studies such conditions in his work. Building on Scheall (2020) we may argue that these conditions might be cultural and psychological prerequisites for shared knowledge in social networks. The acceptability of a liberal transition builds on the history of the system. Therefore, evaluating the (potential) success of a transition requires empirical work. This goes beyond what I want to establish in this article.

The answer lies in what Hayek considers the most adapted framework to defend individual freedom. Most critics understand Hayek as defending the claim that liberal institutions are good because they result from evolution and spontaneous order. This should be the opposite: spontaneous orders are valued because they are the most compatible with people's autonomy and freedom of choice. Besides Sugden (1993) and Gaus (2018), little attention has been, comparatively, given to the normative justification for liberal spontaneous orders. In this section and the next, I develop the core normative commitments of a Hayekian political theory and draw consequences for how a government of spontaneous orders should operate, given the importance of the maximization of reasonable expectations, which is the crucial element for the stability of a complex society.

I will develop three interconnected arguments that deserve to be elaborated: the common good of the coordination framework; the defense of individual freedom as a meta-value; and the pluralism and experimentation allowed by a liberal society. These arguments are humbler than a transcendental deduction but allow for a situated justification of liberalism and the market order.

Let us start with the common good argument. This argument was sketched by Sugden (1993, 413) and developed significantly in political philosophy by authors such as Tomasi (2012). Hayek is not known for being sympathetic to common good arguments, which are always suspected of conveying particular conceptions of the good. Nevertheless, he uses the expression when crafting his concept of catallaxy. The “common good” is an “abstract order which in a free society must leave undetermined the degree to which the several particular needs will be met” (Hayek 1976, 114). This cryptic description refers to what I understand as a fundamental underlying principle in his theory:

Maximization of Individual Expectations Principle (MIEP): an institution can be said to be beneficial or a change to be an improvement if and only if it allows more people to generate more reasonable expectations about the future and hence coordinate their actions with one another.

This principle, implicit in Hayek, possesses many implications. First and foremost, it recognizes that individuals have different sets of values, preferences, and goals. The intervention aims to produce rules allowing individuals to coordinate with each other peacefully while, as explained by Mack (2006, 262), precluding gains from trespass and plunder.

Expectations about the future are strong beliefs about what (i) is allowed and therefore how one may expect others to behave, and what (ii) may be the result of a given action given the set of rules instituted. Second, such a principle possesses an opportunity side: the role of a rule or a set of rules is to promote the maximum of individual opportunities (and expectations to be able to attain these opportunities). This implies a normative criterion to weigh a rule against a counterfactual scenario, which is the criterion of maximizing such reasonable expectations. Hayek mentions explicitly the idea of maximization. In the first volume of *Law, legislation, and liberty*, Hayek refers to the criterion which should guide the judge's decisions: "which expectations ought to be protected must therefore depend on how we can maximize the fulfillment of expectations as a whole" (Hayek 1973, 103), and the same principle is referred to in his defense of the catallactic order (Hayek 1976, 125). Let us take the case where some actions are not forbidden, such as opportunistic free-riding behaviors. These behaviors would produce a situation where individuals are led to systematically impair the actions of others and would decrease the general number of fulfilled expectations. It is important here that some set of actions should be forbidden to make more actions possible. Consequently, rules should forbid sets of actions, rather than command what individuals ought to do. Third, an epistemic side, where the goal is to facilitate "correct foresight" (Hayek 1960, 30). This epistemic criterion expresses the important idea that the liberal order enables, with its general and impersonal framework, improvement of the chances for anyone to pursue their ends, or rather anyone taken at random (Hayek 1976, 130). The critical feature here is that the framework of a liberal society with a defined market order enables individuals to form their expectations about the actions of others without central coercion.²⁰

Why is the promotion of reasonable expectations so important? Because a defense of a liberal complex order goes hand in hand with a defense of individual freedom from coercion. If the system is complex, freedom should be protected since it leaves room for adaptive behaviors. In a liberal order, freedom is "essential to the functioning of the process" because it allows "each individual [...] to act on his particular knowledge, always unique [...] within the limits known to him and for his own individual purpose" (Hayek 1960, 29). Hayek defines individual freedom as

²⁰ This is an early claim of Hayek (see Hayek 1945). This leads to a reduction of the epistemic burden of the policymaker because it side-steps the need for information centralization (see, for an enlightening discussion, Scheall 2020, 137f.).

the protection against arbitrary coercion from another's will (Hayek 1960, 12) and thus the possibility to follow one's own ends, only guided by general and abstract rules (Hayek 1976, 123). In other words, the MIEP promotes the minimization of coercion, because it does not promote a general goal for society. Let me unpack this argument in three steps. First, liberal spontaneous orders preserve freedom from arbitrary coercion by the government and other individuals; second, it is morally neutral because it does not impose any conception of the good on anybody in particular; third, individual freedom should be considered a meta-value by any reasonable individual.²¹ A bundle of liberal rights guarantees the first step and produces a moralized version of individual expectations, that is to say, only expectations respecting other people's rights are legitimate. The second step is the effect of the absence of central authority to dictate the values of individuals. Legitimacy must be attained through acceptability.²² Hayek defends the third step by saying that liberty is not a particular value but a condition for any moral value to exist (Hayek 1960, 6). This final step undoubtedly follows from the MIEP: maximizing the compatible set of reasonable expectations is consistent with the existence of different values people may want to endorse.

The third argument in defense of a liberal framework is a direct consequence of what I have just developed. The defense of freedom goes hand in hand with the Great Society, characterized by the flourishing of various forms of life (Hayek 1988, 62-63). In such an order, individuals are emancipated from the morals of the close community. Pluralism is a cause of the emergence of the extended order since heterogeneity gives rise to complexity. It is to be cherished because it makes experimentation possible, the invention and constant modification of rules by different individuals, and ultimately adaptation within the system possible. This experimentation aspect is praised explicitly by Hayek: "it is through this gift of the knowledge acquired by the experiments of some members of society that general progress is made possible" (Hayek 1960, 43), and experimentation itself is only possible when the individuals follow their

²¹ It is possible that some individuals would refuse this and only accept unequal freedom, but they are not reasonable individuals, because they do not accept the reciprocity of rights. On this, Hayek agrees with Rawls (1971). The first step of the argument is often deemed insufficient because it does not tackle the problem of private authority within firms. This is certainly an important concern that should be addressed more extensively. It is sufficient for us now to say that competition is usually sought as the answer to promoting more opportunities for individuals and, hence generating more choices.

²² The work of Gaus is certainly the most important continuation of this justificatory work. See, for instance, Gaus (2022).

different ends, in other words, when a sphere of autonomy is instituted and protected. This experimentation process nourishes moral evolution as well as the market order. Competition is a prominent theoretical example of a process where some expectations are sacrificed on the altar of beneficial effects implied by the discovery of new information and error correction. The fact that some expectations are not verified is not only the condition for the maximization of verified expectations but also the condition for information discovery through a feedback procedure. In other words, experimentation allows us to reach new information to the advantage of most individuals.

Here again, we see that liberalism is defended because it is a theory of ordering beneficial spontaneous orders, not because it is a result of cultural evolution.²³ Every political theory of spontaneous orders must deal with the same problem: which normative principles are compatible with recognizing such an order, and hence, which kind of government?

V. LIBERALISM AS A DESIGN OF SPONTANEITY

Complexity and spontaneity are facts of human life, as much as reasonable disagreement.²⁴ Hayek paved the way for a theory of government of spontaneous orders. The government takes the form of specific intervention on the game's rules. The metaphor of the game's rules is ubiquitous in Hayek. Rules constitute a space of intelligibility, in which players can form their expectations and form strategies and expectations but do not command the individual over a specific outcome. This perspective, emphasizing the role of government through the rules of the game, is what best answers the double challenges of the complexity of the social order (that is, the problem posed by the impossibility and undesirability of commanding the social order towards a fixed set of values and particular political goals), and of the radical pluralism of individual values and expectations (that is, the problem posed by evaluative diversity for the justification of social institutions in the Great Society). Most work on Hayek insightfully underlines how spontaneous order may emerge. In this

²³ The question remains as to how liberalism emerged. It is possible that we discovered the liberal principles randomly, as one result among others from the evolutionary process. The important point is that it is not because these principles are the result of cultural evolution (as with everything else) that they are normatively appealing.

²⁴ Reasonable disagreement has been a central component of political philosophy since Rawls (1993). As shown by Gaus (2018), evaluative diversity and the heterogeneity of the individuals in a society is one of the main drives for the rise of complexity. For a careful study of the relations between diversity and complexity, see Page (2011).

article, I have focused on the normative appeal of liberal complex and spontaneous orders. Cultural evolution or complexity do not explain by themselves what a liberal government should do, but what governments cannot do because of ignorance, in other words to direct and command the social order towards one goal or end. It urges us to consider as a first principle of politics that we must start with radical ignorance of our actions. Spontaneous orders within an institutional liberal framework do not have a telos, besides allowing individuals to form expectations free from coercion.

Such a government need not necessarily be minimal because a spontaneous order based on individual actions and adaptations may produce new problems continuously. The impossibility of centralizing all relevant information to conduct social, economic, and political change, does not lead to laissez-faire. Markets are but one example of how a social institution can be beneficial without centralization of prices while requiring political and legal powers (such as a bundle of rights, that is, rights of property, contract, responsibility, potential anti-trust laws, competition policies, and so on). Learning and feedback mechanisms such as entrepreneurship can endogenously solve these problems, but some political decisions may be required in some instances, especially when structural changes lead to new forms of coercion.

Let us develop this issue a little with the example of inequality. The search for equality is usually associated with the realization of an end-state of equality (be it strict equality or equality according to desert).²⁵ This is exactly what the Hayekian program precludes: directing a social state towards a particular end-state requires, among others, important knowledge of the current state of affairs and the end state, but also the knowledge of intermediary states of affairs and the law of how a given state of affairs may produce another. The policymaker may encounter massive knowledge problems on the way, on top of imposing a particular view of equality on persons who do not necessarily share the same values. Radical diversity of views and social complexity raise a limit to such a quest for equality. Moreover, such interference would lead to a dangerous road, described by Ikeda (2004), who highlights the ‘dynamics of intervention’ in regulated capitalist regimes, where one political intervention (for example, rent control) distorts the price system and produces

²⁵ At least, this is how Hayek (1976) opposes social justice. We may introduce other forms of equality, from formal equality before the law to equality of consideration, equality of opportunities, or relational equality.

perverse effects (shortages of houses), requiring more interventions, with the risk of producing more and more uncontrolled effects. According to Ikeda's analysis (2004, 27), such a process leads to massive instability, due to the growing tolerance for interventions in the market.²⁶ In the end, Ikeda-Scheall's challenge may remain, in other words, that a modification of the framework faces a knowledge problem in a complex system, consequently running the risk of producing unforeseen outcomes requiring more interventions, leading to the instability of the social and political order. What would our distinction between intervention and interference amount to, in the case of equality?

One must consider that any understanding of social justice is not incompatible with a political theory recognizing the primacy of spontaneous orders. We may, indeed, distinguish two kinds of inequalities: (i) inequalities of outcome which are due to differences of talents, capacity, or pure chance, which are not predictable, let us call these 'outcome inequalities'; (ii) inequalities of outcome due to structural differences and therefore are predictable, let us call these 'structural inequalities'. Let me reuse my example of basketball to give an easy picture of this difference. Think of the difference between the rules in European basketball and NBA basketball. In European basketball, there is no time restriction for a center in the area under the basket ("the paint"), while there is the three-second rule in the US. The rule systematically disadvantages the centers, who cannot defend as efficiently as they might. This situation produces systematic asymmetries which are not random but directly related to some characteristics of the individuals. The set of existing rules may well structurally be advantageous for some individuals over others and introduce inequalities even when based on seemingly formal equality. This is the case for market situations, where the spontaneous order may also accommodate structural injustices, such as racial, class, or sexual inequalities. Sunstein (1997, chap. 6) demonstrates how a market order, built upon institutions inherited from segregation, not only reproduces but may reinforce inequalities. The market process does not necessarily purge racism and segregation (that is, if women or black workers are cheaper, they should be hired more than white men, and therefore segregation disappears). It is sufficient that employers have a taste for discrimination, that third parties push towards it, or that race, or sex is used as a proxy for

²⁶ Social justice becomes relevant, in this context, only because of political interventions since it creates compensation claims when redistribution occurs. This is what Ikeda coins the "self-fulfillment thesis" (Ikeda 2004, 27). I thank an anonymous reviewer for the reference to Ikeda's work.

productivity to create an effect on human capital investment from disfavored populations. Therefore, markets may increase rather than decrease discrimination if such effects are endogenous to the market process. In these situations, rule interventionism is undoubtedly desirable to forbid discrimination based on sex or race and promote equality of opportunity. Would some interdictions to not provide equality of opportunity be an interference? In some cases, certainly (in cases of quotas, for instance), but not necessarily. Normatively, because what is owed to individuals depends on what we put into our moralized conception of liberty. The interdiction of discrimination would not count as coercive of individual freedom but as the protection of spheres of autonomy. Modifying the framework for peaceful interactions between individuals does not always entail outcome-oriented coercion.²⁷

This theory is compatible with more intervention than what Hayek himself tends to acknowledge. In a complex and spontaneous order, many situations require regulation because they frustrate individuals' expectations and because the dynamism of the order tends to generate rules that were once adapted but are now discriminatory. Moreover, a complex society continuously creates disagreement, dissatisfaction, and frustration *because* of its complexity and experimental nature. This matter of fact is, nevertheless, not an argument for the abolition of complexity but for interventions at the level of the game rules compatible with the MIEP. In these situations, the matter is less about achieving an ideal end-state of pure equality or justice but about dealing with the constraints of complexity and spontaneity to achieve the highest degree of (legitimate) expectation fulfillment. Many works have built on these insights to improve the overall structure of the argument, such as the question of justification (Gaus 2016) or the form of governance such a theory implies. Polycentric theories of government seem to be a good candidate for dealing with complex systems because they urge us to break down the system into more manageable parts of self-governing (yet interconnected) pieces (Müller 2019). Such systems make the most of diversity and freedom to promote a variety of institutional experimentations, allowing institutional

²⁷ The Ikeda-Scheall challenge remains nevertheless fundamental because it obliges us to put in the first stage the knowledge problem about interventions: probably, the distinction between intervention and interference is not clear-cut (because a change in the rule entails a modification of expectations and hence a modification of market process and prices). As mentioned in this section, there is a role to play for experimentation within differentiated institutional frameworks in polycentric contexts to answer this important knowledge problem.

interventions to be tested while providing for a feedback mechanism through an exit right. I do not have the time to fully expand on this matter in this article, but it highlights a major consequence of what a Hayekian view would lead us to accept: building a system able to cope with complexity and learn from experiments is more important than establishing ideal conditions for justice without taking into consideration the challenges of complexity.²⁸ In this article, I hope to have shown how such an attempt would dispel the dilemma usually discussed in the literature and hence participate in reorientating the discussion on the normative principles underlying liberal spontaneous orders. As such, this is still an open program.

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²⁸ Colin-Jaeger (2024) develops a normative theory of polycentric orders based on the feature of antifragility within such systems.

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Nathanaël Colin-Jaeger holds a PhD in Philosophy from the ENS de Lyon and is currently a postdoctoral researcher in Political Philosophy at the American University of Paris, in the Center for Critical Democracy Studies. His work focuses on the normative justifications for the market order, democratic theories, and liberal and neoliberal theories.
Contact e-mail: <ncolinjaeger@aup.edu>