Comments on Palmberg, Potts, and Scheffel

GUS DIZEREGA

We are exploring theoretical territory opened up by the contrast between what F. A. Hayek termed *cosmos* and *taxis*. Each of us brings to this project the conceptual tools we learned within our respective disciplines, tools specialized for the services they supply to economics, political science, sociology, or other disciplines. This complex discussion comes with two costs and one opportunity that outweighs the costs. Disciplinary tools were often developed in ignorance of the distinctions captured in the terms cosmos and taxis. Certainly that is the case in my own field of political science. In addition, often there is no simple translation of terms from one discipline to another. This journal can play an important role in clarifying the relationships between disciplines and integrating their insights into the kinds of analysis we are pursuing in this forum.

The benefit is that as we approach these issues from different perspectives we will be sensitive to different dimensions of their operation. The result will be a richer appreciation of emergence than would be possible from development within a single discipline.

The following remarks will be mostly critical, but if considered by themselves these criticisms will leave the wrong impression. I found both Johanna Palmberg's and Jason Potts' papers of considerable value, enriching my own thinking. Eric Scheffel's paper seems of interest to economists mostly, and so I am unable to comment on it beyond the methodological issues I raise. But given the space allotted me and the time available, focusing on more critical issues seems most productive for encouraging future discussions.

Hopefully my remarks will set the stage for what I believe to be two important initial discussions. First, can economics, and particularly Austrian economics guide our understanding of social cosmos? Or is Austrian theory as an application of Hayekian insights appropriate for economics, but inadequate for guiding insights essential to understanding cosmos in other fields? Put differently, does the spontaneous-order model create a framework more abstract than the most abstract account of Austrian theory, and include phenomena unable to be assimilated by Austrian economics? I argue yes. Second, what is the relationship between emergent social phenomena, emergent biological phenomena, and spontaneous social phenomena? Exploring the finer points of what constitutes emergence or spontaneous order is central to resolving these questions, and this is a discussion well worth having.

JOHANNA PALMBERG

Johanna Palmberg's discussion of how understanding spontaneous orders contributes to our understanding of vital cities testifies to the richness of insights our project can open up. At the same time I believe a more self-consciously careful use of this term would deepen her analysis, for I believe "spontaneous order" is not equivalent to "emergence" but rather an important subset of emergence, one requiring standardized feedback and formally equal status among participants. Neither of these is necessary for emergent social phenomena to manifest.

If my distinction is valid, culture does not evolve "just like the market," because while price signals are central to the market process, they comprise only one of many signals that collectively weave together the broad cultural patterns within which we live and to which we contribute. Moral traditions and culture evolve, but they have no single signal for success or failure equivalent to prices on the market, votes in democracies, or agreement among specialists in science. They are central to civil society, but they respond to no single set kind of feedback.

Palmberg's economic approach to our topic is also evident in her endorsement of methodological individualism. Methodological individualism is only one of three dimensions an adequate analysis of complex social processes needs to incorporate, as Paul Lewis (2010) demonstrates. Peter Berger and Thomas Luckmann (1996) capture this point in their distillation of the argument to three statements: society is a human creation (methodological individualism), humans are social creations, and society is an objective reality. Analyzing emergent orders clearly goes far beyond a traditional Austrian approach, for we can grasp how they both reflect and shape the desires and actions of individuals.

Hayek (1973; 1988) was already exploring this insight, as with his argument that reason itself was a emergent result of people whose thinking and behavior were initially shaped by customs that had arisen due to other causes. Once reason emerged that to some degree enabled us to separate ourselves from society and think critically about it.

Coming from an economic perspective, Palmberg argues that "market prices transfer only relevant information to market participants," and credits Hayek with this view as well. I disagree and think Hayek would as well, for he recommended measures such as guaranteed income floors to replace the community-based mutual assistance networks that large-scale markets weaken. More fundamentally, much information participants might regard as vitally relevant need not be reflected in prices because prices are shaped by how specific property rights are defined. For example, if genetically modified food were required to be labeled as such, many consumers would not buy it, which is why food corporations refuse to label it and oppose being required to do so.

I also suggest thinking about market entrepreneurship as systemically akin to Thomas Kuhn's ordinary and revolutionary science would help her analysis. Entrepreneurship can be both equilibrating and disequilibrating, depending on the context of analysis and the specific entrepreneurial act involved. We are dealing with patterns of adaptation that are never at equilibrium.

But I do not want to sound only critical. Palmberg's analysis in my view is a step forward, enabling us better to appreciate dimensions of place in the real world of human life. I agree with her analysis of externalities and knowledge spillovers, and that Jane Jacobs' analysis is superior to that of the other approaches she considers. My point is that treating economic theory as a subset of a larger paradigm will deepen her analysis, not rebut it. I believe her doing so would sensitize her to insights from other areas of research on emergence.

For example, I think Steven Kauffman's analysis of adaptation in emergent systems adds weight to her critique of both the Marshall-Arrow-Romer and Porter models. Too many links, as in explicit responsibility for all negative externalities and internalization of all positive externalities, slows down systemic adaptation (Johnson, 2001: 78). The takeaway is that while the worst negative externalities should be internalized because adaptation in human societies should be for the benefit of humans, internalizing most positive externalities is less important and might be counterproductive.

JASON POTTS

I like Potts' description of emergent social orders as examples of seeing rule-based cooperation as evolution and his argument that imitation is the primary path by which rules capable of generating complex social orders arise. Imitation leads to cooperation, and evolution is the result. Much competition from this perspective seems to be an emergent quality. This emphasis is an important corrective from what I regard as too much emphasis on competition and the almost complete neglect of cooperation in many kinds of evolutionary studies. And not just in the social sciences. So I am happy we both admire E. O. Wilson's *The Social Conquest of the Earth.*

Potts approaches these issues from a different perspective than I do and illuminates different aspects of the phenomena. Whereas my own approach emphasizes, as Hayek put it, the use of knowledge in society, Potts suggests we can learn much from approaching the subject as the use of society in knowledge, as described in Hayek's theory of cultural evolution.

I agree. Potts' point is very important.

But at the same time I am concerned that in pursuing his project a crucial distinction between social emergence and spontaneous order has been obscured. Potts uses spontaneous order and emergent social processes interchangeably. I do not, and think it is important that we be more "splitters" to use Potts' delightful term, than even he is.

I argue we gain considerably by confining spontaneous orders to the kinds of phenomena to which Hayek and Polanyi first applied the term: science and the market. They are sufficiently distinct from other emergent processes, like common law or custom, so as to deserve being distinguished. Centrally, science and the market are rooted in equality of formal status among participants and simplified feedback signals reflecting the values implicit in their generative rules, values which are very simplified compared to the values motivating human beings to act within them. In addition, they are creatures of the modern world, which I hold to be significant.

Spontaneous orders grow out of the institutionalization of liberal values of equality of legal status and protection of spheres of voluntary private action. Thus, to the market and science I add liberal democracy and the worldwide web. Of course markets preceded modernity, as curious investigators like Aristotle preceded modern science, but nothing like a worldwide integrated network of impersonal exchanges did.

It is this impersonality that can remove markets from immersion in civil society.

Consequently, unlike Potts, I argue it is important to distinguish families, law, religion, and the arts from spontaneous orders. They are also emergent phenomena but lack impersonal feedback systems and often equality of status as well as often operating within contexts of far "thicker" values than spontaneous orders.

So from my perspective what Potts has done is very valuable but a bit different from what he describes. He has helped provide a deeper framework for understanding social emergence and integrated it more clearly into evolutionary processes that are distinct from simply coordinating information. Spontaneous orders are a subset of emergent social orders.

What follows are a few more focused discussions of the issues that he raises where my view is different, but are tangential to his project.

1. Potts argues that spontaneous orders are not expressions of individual power over others. Here my more focused approach comes to his aid, for all families are characterized by inequalities of power, minimally between parents and children. Law is scarcely equalitarian. Even within spontaneous orders like the market, while in a formal sense power is never exercised "over" others, the concrete reality is often quite different. Once rules become explicit, apply to all equally, and are subject to modification, those with more resources are able to influence decision-making and will have more power to shape the rules in their favor. The rules may still apply to everyone equally, but they lock in or even exacerbate power inequalities. Consider changes in bankruptcy law, tort reform, modifications of copyright law, and specific definitions of what constitute property rights as examples.

2. I also take issue with Potts' argument that spontaneous orders are "better understood as rule systems than as communication systems." I think they are importantly both. As spontaneous orders, the market, science, democracy, and the web attain enormous size and impersonality, because the rules generating them manifest in people's plans equally as simplified communicative feedback signals. Perhaps there is no disagreement among us here, but I have become very averse to presenting systems of social analysis in terms of dichotomies. Perhaps this is why I emphasize Habermas more than does Potts whereas, with his emphasis on evolution, he leans towards Oakeshott (whom I also admire).

3. If my distinction between the class of social emergence and spontaneous orders as a part of that class is taken seriously I think it allows us to identify another kind of emergence that Potts seems to either deny or ignore. He writes of organizations that they "serve the purposes of those who constructed them." At the moment of their creation this is true, but upon their creation they often take on a life of their own and begin redefining themselves and their hierarchy of goals, often in ways their initial creators would have opposed. Organizations also have emergent properties.

To sum up, Potts has done a service in emphasizing the evolutionary dimensions of social emergence and as such contributes another dimension to an approach focusing on information coordination. He has encouraged me to better appreciate the distinction, and the importance of exploring the distinction, between these two approaches to studying emergent social phenomena. For example, in writing this response I came to a more explicit awareness of how spontaneous orders, by virtue of their equality of status and more focused feedback, are genuinely modern phenomena with only hints from earlier times, whereas emergence has been a continual factor in human life.

ERIC SCHEFFEL

I think I have more basic disagreements with Eric Scheffel's paper, but due to our being in different disciplines with different technical vocabularies, I may be wrong.

Scheffel suggests that a spontaneous order is a homeostatic system. I disagree. A living organism, particularly an adult, is a homeostatic system. It exists far from equilibrium, but with a stable set of properties that define a boundary. Interestingly, a homeostatic system can be described teleologically. An organism has a goal or end of health and survival, and it can either succeed or fail.

It is difficult to use this terminology for a market, which is more like an ecosystem that does maintain a kind of pattern if we consider it abstractly enough, but in which every component is changing not just in the sense of an organism's metabolism, but more dramatically and fundamentally. Ecosystems do not have boundaries analogous to that of an organism, unless perhaps it is that of the earth considered as

Gaia. By contrast, an organization, a taxis, could perhaps be treated as a homeostatic system.

This disagreement in our approaches points to a deeper difference in studying emergent phenomena. In my opening paper I contrasted two contrasting approaches, one rooted in the physical sciences and epitomized by the work of Albert-Laszlo Barabasi and Steven Kauffman, the other in biology and epitomized by Evelyn Fox Keller's approach. I sided with Keller. The first approach, insightful and valuable as it can be, is inadequate for understanding emergent living systems. Scheffel seems to side with Kauffman's and Barabasi's approach. I wish he had explored his reasons for doing so and contrasted them with my counter-argument. Had he done so I would be more confident that I understand him and that my criticisms are valid, or I would have a different understanding and perhaps far less disagreement, if any.

As it is, Scheffel compares the laws of motion of gas nebulae in physics with "social actors [who] perceive, adapt, and act concurrently in real-time." But unlike gas nebulae, social actors also interpret what they perceive and those interpretations then influence the adaptive strategies they pursue. Consequently, because interpretation emerges out of the context of a mind encountering a situation, a situation which often involves continuous contact with other minds themselves similarly situated, actors can surprise us in ways purely physical systems cannot.

An emergent social order involves more than "rich and varied knowledge exchanges," even though he is correct that these exchanges are important and the models he criticizes do not give them the attention they deserve. To refer to my opening paper, Scheffel is describing a world from within "normal science" and what I call Kirznerian rather than Schumpeterian entrepreneurship.

Emergent social orders also exhibit frequent but unpredictable interpretations and reinterpretations of knowledge, and even entirely unforeseen discoveries, such that new knowledge emerges, knowledge that is context-specific in its origins, unpredictable in its content or impact, and not reducible to what was previously known. It is creative. As Keller observed, sometimes it is the statistically least anticipated outcomes that are most adaptive. We cannot program for new discoveries, but new discoveries are a central dimension of spontaneous orders. They exist within a very abstract pattern to be sure, but this pattern gives us no secure guidance as to which prospective discoveries will be made, let alone which will work out better than others.

More generally, I am unconvinced that any theory which gives equilibrium preferential status is very useful for shedding light on the operation of spontaneous orders. Consequently I am unconvinced that the attention paid to Walrasian analyses is particularly useful for shedding light on spontaneous orders of any sort.

I think these criticisms are on the mark, but Scheffel writes as an economist to economists, employing a technical vocabulary not often encountered in other fields. I would have greatly appreciated more attention by him to definitional issues such as what he means by spontaneous order, and also to making his more specialized terminology more accessible to non-specialists.

REFERENCES

Berger, P. and Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge.* London: Penguin Books.

Hayek, F. A. (1973). *Law, Legislation and Liberty, Vol. 1: Rules and Order.* Chicago: University of Chicago Press.

Hayek, F. A. (1988). *The Fatal Conceit* (Ed. W. W. Bartley). Chicago: University of Chicago Press.

Johnson, S. (2001). *Emergence: The Connected Lives of Ants, Brains, Cities, and Software*. New York: Scribner.

Lewis, P. (2010). Peter Berger and his critics: The significance of emergence. *Society*, 47(3): 207-13.

Wilson, E. O. (2012). *The Social Conquest of the Earth.* New York: W. W. Norton.