

AGAINST POLANYI-CENTRISM: HAYEK AND THE RE-EMERGENCE OF “SPONTANEOUS ORDER”

JOHN P. BLADEL

F.A. Hayek is known for making a number of important contributions to economics and social thought. If, however, one had to identify a single concept that captures the thrust of Hayek’s intellectual project, one would probably have to say “spontaneous order.” The intellectual history of spontaneous order has largely been written according to one standard account. That account is, in a nutshell, as follows: The first major theorists of spontaneous order were the Scottish Enlightenment philosophers of the eighteenth century, especially Hume and Smith. This tradition was expanded upon by the Austrian School of economics, first by Carl Menger in the late nineteenth century and then by Hayek in the twentieth century. Hayek is given credit both for rediscovering spontaneous order and for naming the phenomenon.¹

Recent scholarship, however, has suggested that Hayek’s role in the revival of spontaneous order theory was equal or secondary to that of another figure: the Hungarian scientist and philosopher Michael Polanyi. Polanyi also made use of the idea and term “spontaneous order,” it has been written, only Polanyi’s usage actually *preceded* that of Hayek. Thus it appears we are now faced with that old Habsburg dilemma: when we refer to spontaneous order theory, should we call it “Austrian,” or “Austro-Hungarian”?

Struan Jacobs (1997-98, 1999) has made the revisionist argument most forcefully and extensively.² It is important that this argument be addressed. If

JOHN P. BLADEL is a Bryan MBA student at the University of North Carolina at Greensboro. An earlier draft of this paper was presented at the 2003 History of Economics Society Conference at Duke University, Durham, N.C. The author thanks Bruce Caldwell, Ronald Hamowy, Philip Mirowski, and an anonymous referee for their comments. The usual caveats apply.

¹The key histories of spontaneous order are Barry (1982) and Hamowy (1987). Hamowy and Ross (1987) give Hayek credit for coining the term “spontaneous order.” For a more recent article on Hayek and the spontaneous order tradition, see Horwitz (2001).

²Caldwell (2004, p. 294) cites Jacobs on Polanyi’s use of “spontaneous order” and related terms/concepts, but defers judgement on the issue of influence, stating, “I should think it nearly impossible to untangle questions of influence in this case.” While granting the difficulty of the question, this paper attempts a tentative answer nonetheless.

Jacobs is right, then a fairly radical rethinking of Hayek's intellectual debts and spontaneous order theory³ is required. Such a rethinking is, in this author's opinion, unwarranted. Hayek and Polanyi were of like mind on many issues, but we should not make Hayek into a follower of Polanyi. I argue that Hayek was no more a Polanyian than he was a Popperian.⁴

This paper will challenge Jacobs's three most important revisionist contentions:

- (1) Polanyi thought socialism was economically impossible and Hayek did not.
- (2) Polanyi was a major influence on Hayek's idea of spontaneous social order, having explored the topic (in articles written in 1941 and 1948) before Hayek did.
- (3) Polanyi coined the term "spontaneous order."

An alternative interpretation of the Hayek-Polanyi relationship will be presented, followed by a brief summary and conclusion.

HAYEK AND POLANYI ON SOCIALISM

One of the most striking claims made by Jacobs is that Polanyi asserted socialism was economically impossible, whereas Hayek did not. A full quotation from Jacobs (1999) is in order:

As an interesting aside, Polanyi argued that vociferous critics of central planning—von Mises, Hayek, F.H. Knight—had not gone far enough: "The rigorous free traders . . . who urgently warn against the danger of enslavement by economic planning, thereby imply (often without intending it) that economic planning is feasible, though at the price of liberty." Polanyi for his part was claiming it to be economically impossible. (p. 117)

Now to say that Ludwig von Mises and Hayek did not believe socialism to be impossible is a remarkable contention for a number of reasons. First, it was Mises who famously asserted the impossibility of a rational socialist economy

³An anonymous referee raises the following question: "To what extent does showing differences between Hayek and Polanyi support the thesis that Hayek didn't borrow the notion of spontaneous order from Polanyi?" Such differences by themselves might be taken as suggestive, but certainly not conclusive. It is *conceivable* that Hayek first borrowed spontaneous order theory from Polanyi (without giving him credit) and used it for his own rather different purposes. However, such a scenario seems highly unlikely, especially in view of the chronology presented in this paper.

⁴For a critical response to the claim that Hayek was a Popperian, see Caldwell (1992).

in the first place.⁵ Moreover, one need only glance at later writings by Mises to see that he never abandoned his position; he continued to assert the impossibility of a real, workable socialist economy throughout his career.⁶ Second, Hayek supported the Mises calculation argument and further elaborated on it, pointing out additional problems that would be faced by socialist planners such as dispersed and tacit knowledge.⁷

A direct comparison of statements made by Polanyi and Hayek on the impracticality of socialist planning makes their agreement on this issue clear. Polanyi (1948) makes the following statement:

I affirm that the central planning of production . . . is strickly [sic] impossible; the reason being that the number of relations requiring adjustment per unit of time for the functioning of an economic system of n productive units is n times greater than can be adjusted by subordinating the units to central authority. Thus if we insisted in placing 100,000 business units of a major industrial country under a single technocratic control, replacing all market operations by central allocations of materials to each plant, the rate of economic adjustments would be reduced to about 1:100,000 of its usual value and the rate of production would be reduced to the same extent.

The actual figure and even the precise form of the mathematical relationship is unimportant. My point is that it can be demonstrated that an overwhelming reduction, amounting to a standstill in the possible rate of production must arise from the administrative limitations of a system of central direction. (p. 237)

Compare the above quote to the following one taken from Hayek (1935):

And yet these decisions [made by central planners] would not only have to be made continuously, but they would have to be conveyed continuously to those who had to execute them. . . . The essential thing about the present [unplanned] economic system is that it does react to some extent to all those small changes and differences which would have to be deliberately disregarded under the [planned] system we are discussing if the calculations were to be manageable. In this way rational decision would be impossible in all these questions of detail, which in the aggregate decide the success of productive effort. (pp. 212-13)

Even if a planned socialist economy could calculate—and Hayek did not believe it could—it would not be able to adapt with the speed and precision of the unplanned market economy. The planned economy will always be a day

⁵Mises (1920), reprinted in Hayek (1935).

⁶For examples of Mises's later antisocialist writings, see Mises (2000), an article originally written in the late 1930s; and also *Human Action* (1949a).

⁷Boettke (1990) stresses the importance of Mises's writings for Hayek's research program.

late and a dollar short. The burden of central administration makes a reasonably efficient allocation of resources and timely rate of production “strictly impossible.”⁸

Moreover, Hayek actually reiterated this point to Polanyi himself. While it is true that Hayek never responded *publicly* to Polanyi’s critique, he did address it in their private correspondence. In a letter to Polanyi, dated November 15, 1948, Hayek wrote:

I have read with the greatest interest your new article on planning in the last Manchester School. Of course I agree with you that planning of the kind that the planners imagine is just impossible. I have argued this many times and I believe even hinted at the point which you now so brilliantly elaborate . . . there is no difference between us on this point, and . . . your argument beautifully supplements mine. . . . I do not believe there is any contradiction between the argument that planning is impossible and my argument in the “Road to Serfdom” that an attempt in that direction produces something altogether different from what the planners expect.

Hayek continued to believe the impossibility of socialism as much as Polanyi did. The only difference is that Hayek’s public statements on the matter *preceded* Polanyi’s by over a decade.

How, then, did Polanyi come to such an erroneous interpretation of the views of Mises and Hayek on socialism? At least in part, Polanyi’s mistake seems to have been the result of Frank Knight’s acceptance of socialism as an economically feasible system. Knight (1936) conceded to the socialists that a collectivist economy would face no problems not already faced by capitalist ones. Only ethical considerations, not economic ones, were obstacles to the socialist utopia.⁹ Polanyi wrongly interpreted Mises and Hayek to be making the same concession as Knight when they changed the focus of their critiques to the ethics of collectivism rather than the pure economics of socialism.¹⁰ However, Mises and Hayek never conceded that socialism was economically possible. Both viewed socialism as economically *and* ethically impossible.¹¹

⁸As an anonymous referee suggests, Mises and Hayek could continue to refer to Soviet-style “socialist planning” without abandoning the calculation argument, since Soviet planners had access to world market prices. Polanyi, on the other hand, refused to even grant the “socialist” label to the Soviet economy, since he thought the label inappropriate for any existing, and therefore clearly “possible,” economic system. For a Polanyian analysis of the polycentric Soviet economy, see Paul Craig Roberts’s *Alienation and the Soviet Economy* (1971).

⁹Knight would later qualify his position in “Socialism: The Nature of the Problem” (1999, p. 105) by conceding the possibility of a rational socialism only in a static society, but not in a dynamic one, as socialism is not capable of anticipating and adapting to economic change. Thanks to an anonymous referee for the reference.

¹⁰The works Polanyi (1948, pp. 253–54) refers to in this context are Hayek’s *Road to Serfdom* (1944) and Mises’s *Planned Chaos* (1947).

¹¹Boettke (1998) and Horwitz (1998) stress the compatibility of the anti-socialist positions of Mises and Hayek.

The switch to ethical critique was not the mere “fallback” position for Mises-Hayek that it was for Knight. Rather, it was yet another advance against the enemy position in the struggle against collectivism. Socialist planning had already been discredited as an economic system in the minds of Mises and Hayek. By highlighting the affinity of economic centralization with political totalitarianism, Mises and Hayek merely intended to drive the final nail in the collectivist coffin. Once Knight and Mises-Hayek are properly dehomogenized, it becomes clear that (*contra* Jacobs) Hayek and Polanyi were in complete agreement on the impossibility of a rational socialist economy.

HAYEK AND “SPONTANEOUS” ORDERS

Hayek’s rejection of the possibility of socialist calculation and central planning was based on the inability of the collectivist economy to make the dynamic, spontaneous adjustments that occur in a market economy. This fact alone suggests that Jacobs’s priority claim for Polanyi in the matter of spontaneous order theory is an overstatement. Still, one could argue that Hayek was simply addressing an important economic issue of the day and was not really aware of the broader implications of his arguments for social theory. Perhaps Polanyi was second in criticizing socialism, but first to place that criticism in the context of spontaneous order.

Evidence culled from Hayek’s writings of the early and mid-1930s does not support that hypothesis. As early as 1933, Hayek was explicitly addressing the subject of spontaneous social orders in his important and frequently overlooked article “The Trend of Economic Thinking.”¹² It was in this article that Hayek first began contemplating the challenges involved in studying “complicated phenomena” (Hayek 1933, p. 25) and the economic system as “the product of a highly complicated organism which we could only hope to understand by the intense mental effort of systematic inquiry” (p. 19). Hayek credits Hume and Smith for being among the first to show that

The coordination of individual efforts in society is not the product of deliberate planning, but has been brought about, and in many cases could only have been brought about, by means which nobody wanted or understood, and which in isolation might be regarded as some of the most objectionable features of the system. . . . Even now, when we begin to understand their working, we discover again and again that necessary functions are discharged by *spontaneous* institutions. (p. 26; emphasis added)

Hayek further explains that this kind of unplanned social coordination has never been “given a title which would secure it an adequate and permanent

¹²Caldwell (1988) notes the value of this article for understanding Hayek’s thought. See also Caldwell’s article “Hayek’s Transformation” (Winter 1988).

place in our thinking” (p. 27). Adam Smith’s “invisible hand” may appear a humorous and unfortunate metaphor to the modern mind, but it is no better to make the opposite mistake of attributing intentions to actors with no such intentions in mind. It is the “spontaneous interplay” of individual actions that so often leads to the formation of institutions, which means that, following Mises, we should categorize society as “an organism and not an organization” (p. 27).

The Scottish Enlightenment influence on Hayek’s thought here is clear, and the citation of Mises is also telling. The missing piece of the puzzle, though, is Carl Menger. Hayek returned to the founding father of Austrian economics in the early 1930s when he edited several volumes of Menger’s important but neglected economic writings. Hayek also wrote a biographical sketch of Menger that appeared in *Economica* in 1934. The influence of Menger’s thoughts on social science and unintended consequences on Hayek is obvious throughout the latter’s mature writings, and it is equally obvious that “The Trend of Economic Thinking” is where that influence really began.¹³

Hayek would integrate his thoughts on spontaneous order with his critique of socialist planning schemes, beginning with the pieces he wrote for his edited volume *Collectivist Economic Planning* in 1935. The downfall of the central planners was their engineering mentality. A social scientist

needs the special training of the economist to see the spontaneous forces which limit the ambitions of the engineer themselves provide a way of solving a problem which otherwise would have to be solved deliberately. (Hayek 1935, p. 8; emphasis added)

The great insight of the nineteenth-century political economists was that complex social problems were solved spontaneously in a way that almost certainly could not be duplicated surpassed by methods of rational control (pp. 25–26).

Hayek continued to play the same tune in his final word on the economics of socialism, “Socialist Calculation: The Competitive ‘Solution’” (1940). No matter how many new strategies they tried, the socialists continually failed to answer the original Misesian point about the impossibility of efficient socialism. Hayek wondered whether “such a [centrally planned] system will ever even distantly approach the efficiency of a system where the required changes are brought about immediately by the spontaneous action of those immediately concerned” (1948, p. 187). Further pleas on behalf of spontaneous social forces against interventionism were made by Hayek in his 1939 piece “Freedom and the Economic System” and his 1941 article “The Economics of Planning.”

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Conspicuously absent from Hayek’s writings is any trace of influence from Polanyi. Of course, we should not be surprised by this fact, since Jacobs

¹³For the importance of Menger’s influence on Hayek, see O’Brien (1994, pp. 348–49) and Ebenstein (2001, pp. 23–27).

has located the beginning of Polanyi's spontaneous order thought in 1941. According to Jacobs, this is the moment that the notion of spontaneous order was reintroduced to the world. Yet Hayek was repeatedly referring to the complexity of social phenomena and spontaneous order processes for almost a decade before Polanyi's "Growth of Thought in Society" (1941). We must, therefore, award Polanyi another second-place finish.

Hayek's thought turned to spontaneous order in the 1930s under the positive influence of Smith, Menger, and Mises against the backdrop of intense academic exchanges over equilibrium theory and the socialist calculation debate. By failing to examine Hayek's early works, Jacobs has mistakenly attributed priority to Polanyi's spontaneous order theory—a theory that was not developed until the following decade. To be fair to Jacobs, scholars who have assigned priority to Hayek have also failed to look at Hayek's early writings. But this simply brings to mind the rather obvious point that two historiographical wrongs do not make a right.

RÖPKE AND ORDO-LIBERALISM

I have shown in the previous two sections that Hayek preceded Polanyi both in criticizing socialist economic planning as impossible and in addressing the subject of spontaneously forming social orders. This leaves one final revisionist contention to examine: that Polanyi was the first to use the phrase "spontaneous order" in print.¹⁴ This is a relatively minor point, but it would still be interesting to know who first used the term. I refer not only to the obvious antiquarian interest we might have in such knowledge, but also to the fact that this knowledge might point to which intellectual genealogy (Hayekian or Polanyian) of spontaneous order thought was the most important in reviving this social theory.

It should be pointed out first that neither Hayek nor Polanyi was the first to use the phrase "spontaneous order" throughout all of history. We know that the nineteenth-century English philosopher John Stuart Mill referred to "spontaneity" and "spontaneous order" in his writings (Forget 2001, p. 194), having borrowed the concept of spontaneity from Humboldt to inject some poetry into the rather dry, mathematical philosophy of utilitarian liberalism (Bloom 1987, p. 161). Strictly speaking, then, the philological question we are posing here is not who coined "spontaneous order," but who re-coined it. There is no direct evidence that Mill's influence led to the reintroduction of the term into the language, but there is some circumstantial evidence, as we shall soon see.

¹⁴Jacobs (1997–98, 1999) and Petsoulas (2001) are among the most recent authors to give Polanyi credit for "spontaneous order." Jacobs points out that Don Lavoie's books (1985a, 1985b) do not address the priority question; however, he has missed Lavoie (1989), which gives Polanyi credit for coining the term.

Hayek had the opportunity to identify twentieth-century contemporaries who were pioneers in the study of social order, and it is interesting that he did not name Polanyi among them. Instead, Hayek pointed to some of his colleagues in the economics profession. We have already seen how the thought of Mises was important to Hayek. Hayek identified another scholar as well, in the following footnote from his 1964 article “Kinds of Order in Society”:

The concept of order has recently achieved a central position in the social sciences largely through the work of Walter Eucken and his friends and pupils, known as the Ordo-circle from the yearbook *Ordo* issued by them. (1964a, p. 457)

Eucken and the Ordo-liberals did indeed place high importance on the concept of order, and Eucken worked with Hayek in building up the Mont Pelerin Society and promoting the ideals of classical liberalism (Hayek 1983, p. 190). However, it is also true that while they were social order theorists, the Ordo-liberals were not *spontaneous* social order theorists. As a result, their liberalism was, in Hayek’s memorable words, “a restrained liberalism” (ibid.).

Hayek attributed this in part to a failure to follow Eucken closely enough, but Eucken’s writings suggest that he was too staunch an opponent of spontaneous order thought to ever be considered a Hayekian liberal. Eucken insisted that we cannot just let “economic systems grow up spontaneously. . . . The economic system has to be consciously shaped.” This is an “obvious” fact of “the modern industrialized world” (Eucken 1951, pp. 314-15). Hayek respected Eucken greatly, but Eucken and the Ordo-liberals were too inclined towards rationalist constructivism to embrace spontaneous order.¹⁵

Have we come to a dead end? As it turns out, not at all. For Hayek mentions that he first came into contact with Eucken through his friend and fellow academic economist, Wilhelm Röpke. Perhaps it is because they had a falling out of sorts in later years (Hartwell 1995, pp. 100-33) that the intellectual relationship between Hayek and Röpke has been ignored. Whatever the reason, it has evidently been an obstacle to writing a good history of spontaneous order. Hayek recalled first meeting Röpke, probably at a meeting in Vienna in 1926, and beginning a close relationship with him (Hayek 1983, p. 188). Röpke and Hayek not only agreed on matters of economics and political philosophy, but agreed so closely that it becomes a problem for the historian of thought to determine what should be attributed to whom. In a tribute to Röpke, Hayek (1959) explained:

Having pursued parallel paths for over thirty and in fact almost forty years, having fought for the same ideals and struggled with the same tasks and problems each according to his personal capacity and disposition, I do not find it easy to delineate in its full rich distinctiveness the figure of

¹⁵See Sally (1998, pp. 105-17) for an overview of Ordo-liberalism and a critique from the Hayekian perspective.

a fellow combatant and age mate. One absorbs unconsciously whatever fits into one's own thinking at a given stage when a friend and fellow combatant discovers the answer and the right response to problems which one has tried to solve oneself! How often has it happened that Wilhelm Röpke expressed vividly what was still grey theory for the rest of us or when we had at the very least not yet discovered how to convert a general principle in a relevant response to the problem of the moment! (p. 195)

The intellectual affinity between Hayek and Röpke is significant in the context of this paper *because it was Röpke, not Polanyi, who first named spontaneous order in print*. In the first edition of his textbook, printed in 1937 but not translated into English until 1962 (*Economics of the Free Society*), Röpke explained that the market economy is a “spontaneous order” rather than a “commanded order,” and that the ironic fact is that the “anarchy” of the capitalist system is superior to the command system advocated by the collectivists (pp. 4-5). This passage—indeed, the whole book—has a distinctly Misesian-Hayekian flavor.

The appeal to spontaneity was not a rarity in Röpke's writings. He frequently used the term in his articles and books throughout the 1930s and 40s.¹⁶ Making matters all the more difficult for the intellectual historian, Röpke and Hayek shared a number of common sources of thought. Mill, whom we have previously noted was the first to use “spontaneous order,” was one of them; other nineteenth-century liberals drawn upon were Humboldt, Burke, Tocqueville, and Burckhardt. Röpke was undoubtedly influenced by both Mises and Hayek, but he also frequently cited the contemporary Spanish philosopher Jose Ortega y Gasset. Ortega himself contrasted the state with “spontaneous social action” and drew on classical liberalism in his writings, (Ortega y Gasset 1932, pp. 120-21) and Hayek cited Ortega approvingly in *The Constitution of Liberty* (Hayek 1960, pp. 148, 442, 452-53).

All this means that both the idea and nomenclature of spontaneous order seem to have reemerged within the Austrian-classical liberal tradition well before Polanyi's key articles on “dynamic” and “spontaneous” order (1941, 1948, 1951) made it into print. Did Hayek or Röpke influence Polanyi to abandon dynamic order in favor of spontaneous order? It is hard to say whether or not Polanyi might have absorbed spontaneous order from the intellectual atmosphere of the day,¹⁷ but if he did, it was largely an atmosphere created jointly by Hayek and Röpke. It may be significant, though, that Polanyi found himself in close quarters with Hayek and Röpke (and Mises) when he attended the first Mont Pelerin Society meeting in 1947 (Hayek 1947,

¹⁶Such as (1935, p. 100); (1936, p. 323); (1942, p. 162); and (1948, pp. 91, 106, 112-16, 133). See also (1959, p. 309), in which Röpke seems to fuse Hayekian “spontaneous order” and Misesian “social cooperation” into one rubric: “spontaneous cooperation.”

¹⁷A possibility Jacobs (1997-98, p. 26) suggests.

p. 237). It was there that Hayek, in his opening address, stated that “the essence of the true liberalism . . . regards with reverence those spontaneous social forces through which the individual creates things greater than he knows” (p. 244).

The following quote from Polanyi’s “Manageability of Social Tasks” in *The Logic of Liberty* (1951,) ¹⁸ might provide us with a further clue:

There is a wide range of such systems in nature exhibiting similar types of order. They have been called systems of “dynamic order” by Kohler, whose designation I followed in an earlier writing; but I think it will be simpler to refer to them as systems of *spontaneous order*. (p. 154; emphasis in original)

Why would Polanyi have thought “spontaneous order” to be any simpler than “dynamic order?” By simpler, I here take Polanyi to mean something like “more convenient” or “more sensible.” What would lead Polanyi to think “spontaneous order” the most convenient rubric to use? The chronological sequence of events outlined above may provide the basis for our answer.

I suspect that Polanyi made the terminological change from dynamic order to the “simpler” spontaneous order in 1948 (and 1951) because he had attended the first meeting of the Mont Pelerin Society in 1947 and everyone there—especially the triumvirate of Hayek, Röpke, and Mises¹⁹—was talking about the spontaneous nature of the free market economy and liberal social institutions. Add to this the fact that the spontaneous order theorists had been using their terminology for over a decade, and we can see why Polanyi would think it expedient to make his terminological switch. In an isolated world, Polanyi might have preferred his original designation, but the penetration of “spontaneous order” into academic discourse made Hayek’s preferred designation the most practical and effective one to use in communicating with the scholarly community. Based on this plausible explanation for Polanyi’s switch, we can say that Hayek was probably as much if not more of an influence on Polanyi before 1950 than the other way around.

POLANYI’S “POLYCENTRISM”

Following Caldwell (2000), we can construct an alternative interpretation of Polanyi’s influence on, or at least agreement with, Hayek. To the extent that Polanyi’s thought influenced Hayek, that influence did not *really* begin until the 1950s. It was during that decade that Hayek decisively turned away from

¹⁸This chapter from *The Logic of Liberty* is based on Polanyi’s earlier article titled “Planning and Spontaneous Order” (1948).

¹⁹Mises used the term “spontaneous” briefly during the 1940s (1949b, p. 43), but he seems to have switched to the word “autonomous” (1949a, p. 731).

economics and towards the study of psychology,²⁰ cultural evolution,²¹ and complexity theory.²² Polanyi's "polycentric order" and his later work on "discovery" and "tacit knowledge" may have been especially helpful to Hayek as he attempted to formulate his unique brand of scientific subjectivism.²³

Even if Polanyi did exert some kind of influence on Hayek's later thought, though, there are several good reasons to doubt that it was ever a strong one. First, Hayek's later, possibly Polanyi-influenced thought is remarkably compatible with his earlier thought. If Hayek borrowed from Polanyi, he probably limited his borrowing to Polanyi's terminology, not his concepts. Polycentrism, tacit knowledge, and discovery are all hinted at in Hayek's early works, but Hayek seems not to have had the right vocabulary to express them effectively. Polanyi thus helped to make explicit what was previously only tacit in Hayek's thought.²⁴

Second, Jacobs (1999, pp. 125–26) has identified a number of fairly important differences between Polanyi and Hayek's concepts of liberalism and spontaneous order.²⁵ This suggests that these two men developed their ideas more or less independently. Rather than influence, Hayek's frequent citations of Polanyi are probably best explained in terms of two larger patterns we can detect in Hayek's later work:

²⁰For recent examinations of Hayek's psychology and its relationship to his other work, see Horwitz (2000) and De Vecchi (2003). De Vecchi argues for the importance of Gestalt psychology to Hayek's thought. Furthermore, as an anonymous referee points out, Hayek was himself acquainted with one of Polanyi's acknowledged sources, the psychologist Kohler. It is possible, therefore, that Polanyi influenced Hayek by drawing his attention to Kohler and the Gestalt School. However, this would still probably have to be considered only a marginal influence, as Hayek's academic interest in psychology dated back at least to 1920—long before Hayek had any association with Polanyi.

²¹For a response to criticisms made of Hayek's theory of cultural evolution, see Caldwell (2001).

²²Hayek's key early articles on the subject being "Degrees of Explanation" (1955) and "The Theory of Complex Phenomena" (1964).

1955 not
in ref.

²³The notions of discovery and tacit knowledge would seem especially important to Hayek (1984), "Competition as a Discovery Procedure." For the distinction between Hayekian knowledge and neoclassical information, see Caldwell (1997).

²⁴It was evidently part of Polanyi's intention to aid Hayek in his later research efforts. In a letter to Hayek dated February 19, 1963, he wrote: "I hope that you will find your ideas of the organization of fragmentary knowledge confirmed and generalised in my treatment of the Republic of Science."

²⁵Also particularly troubling from the Hayekian liberal's point of view is Polanyi's advocacy of government determination of "the entire distribution of national income, as well as levels of monetary circulation and of unemployment" (Jacobs 1999, p. 114). For a full exposition of Polanyi's Keynesian-style interventionism, see his book *Full Employment and Free Trade* (1945).

- (1) a tendency to be generous to old friends and colleagues by citing their work whenever possible,²⁶ and
- (2) a strategy of lending scientific credibility to spontaneous social order theory by suggesting that it is a specific case of the general scientific phenomenon of complexity.²⁷

Finally, I should like to note that Hayek's allegedly telling citation of Polanyi in relation to spontaneous order in *The Constitution of Liberty* (1960, p. 160) does not place the term "spontaneous" in quotes, but rather, "polycentric order." It is reasonable to infer from this that the more general concept of polycentricity is what Hayek judged most original in Polanyi's work, and not spontaneous order. This means that, contrary to Jacobs (1997-98, p. 14), previous scholars such as Hamowy (1987) did not fail to notice Hayek's citation of Polanyi; they simply did not infer (incorrectly, it turns out) from that citation that Hayek borrowed the concept of spontaneous social order from Polanyi.

CONCLUSION

Hayek had a well-developed idea of spontaneous social order long before Polanyi's first article on the subject appeared in 1948. It was Hayek's study of the Scottish Enlightenment philosophers and other classical liberal thinkers, as well as Menger, Mises, and the context of the socialist calculation debate, which first prompted him to explore the topic and make it the core of his life-long research program. Hayek's economist colleague, Wilhelm Röpke, first used the term "spontaneous order" over a decade before Polanyi did. Hayek may have influenced Röpke in reviving the term, or *vice versa*, or both; the close intellectual affinity between the two makes it hard to separate them. The claim that Polanyi influenced Hayek is more credible when restricted to the 1950s and after, when Hayek developed his ideas on complexity theory and

²⁶As William F. Buckley, Jr. (1976, p. 95), put it:

Hayek has always taken scrupulous care to give credit, if it is faintly plausible to do so, to others who articulated ideas before he did, and indeed sometimes, on reading the footnotes to *The Constitution of Liberty*, one almost has the feeling that the book is a collection of after-dinner toasts by Hayek to great philosophers, political thinkers, and economists, from Thales to Ludwig von Mises.

²⁷This generalization is based on the account presented by Caldwell (2000). As an aside, Hayek seems to have been successful in associating his own theory of spontaneous order with science. See Ames (1989), a professional scientist who cites Hayek on science as a spontaneous order and the general study of spontaneous order, but (curiously) does not cite Polanyi.

tacit knowledge. However, the evidence suggests that Polanyi's influence on Hayek's notion of spontaneous order was never a central one. Hayek's frequent citations of Polanyi can be explained by his overall pattern of citing friends and colleagues wherever possible and his growing interest in the general science of complex phenomena.

Polanyi's legacy is an important one for both science and liberalism. This paper should not be used to claim otherwise. However, it is also important to get the legacies of Hayek and Polanyi *right*, or else we run the risk of misunderstanding their ideas and the relationship of those ideas to their different contexts. Indeed, getting the history right could itself demonstrate the importance of their ideas. I would argue that the historical account I have presented actually supports the theory of spontaneous order that Hayek and Polanyi both worked so hard to develop. The mutually-determining and -reinforcing, but still essentially independent, nature of their arguments reflects the polycentric nature of social discourse. In other words, the reemergence of "spontaneous order" in the twentieth century was not the product of any one mind's design but the social consequence of many individual actions.

REFERENCES

- Ames, Bruce. 1989. *Science and Spontaneous Order*. Bowling Green, Ohio: Social Philosophy and Policy Center.
- Barry, Norman. 1982. "The Tradition of Spontaneous Order." *Literature of Liberty* 5: 7-52.
- Bloom, Allan. 1987. *The Closing of the American Mind*. New York: Simon and Schuster.
- Boettke, Peter J. 1998. "Economic Calculation: The Austrian Contribution to Political Economy." *Advances in Austrian Economics* 5: 131-58. Reprinted in *Calculation and Coordination: Essays on Socialism and Transitional Political Economy*. Peter Boettke. London: Routledge, 2001. Pp. 29-47.
- . 1990. "The Theory of Spontaneous Order and Cultural Evolution in the Social Theory of F.A. Hayek." *Cultural Dynamics* 3 (1): 61-83.
- Buckley Jr., William F. "The Road to Serfdom: The Intellectuals and Socialism." *Essays on Hayek*. Fritz Machlup, ed. Hillsdale, Mich.: Hillsdale College Press. Pp. 95-106.
- Caldwell, Bruce. 2004. *Hayek's Challenge: An Intellectual Biography of F.A. Hayek*. Chicago: University of Chicago Press.
- . 2001. "Hodgson on Hayek: A Critique." *Cambridge Journal of Economics* 25: 539-53.
- . 2000. "The Emergence of Hayek's Ideas on Cultural Evolution." *Review of Austrian Economics* 13: 5-22.
- . 1997. "Hayek and Socialism." *Journal of Economic Literature* 35 (December): 1856-90.
- . 1992. "Hayek the Falsificationist? A Refutation." *Research in the History of Economic Thought and Methodology* 6: 1-15.

- . 1988. "Hayek's 'The Trend of Economic Thinking'." *Review of Austrian Economics* 2: 175-78.
- De Vecchi, Nicolò. 2003. "The Place of Gestalt Psychology in the Making of Hayek's Thought." *History of Political Economy* 35 (1): 135-62.
- Ebenstein, Alan. 2001. *Friedrich Hayek: A Biography*. New York: Palgrave.
- Eucken, Walter. 1951. *The Foundations of Economics: History and Theory in the Analysis of Economic Reality*. Translated by T.W. Hutchison. Chicago: University of Chicago Press.
- Forget, Evelyn L. 2001. "Jean-Baptiste Say and Spontaneous Order." *History of Political Economy* 33: 193-218.
- Hamowy, Ronald. 1987. *The Scottish Enlightenment and the Theory of Spontaneous Order*. Carbondale, Ill.: Southern Illinois University Press.
- Hartwell, R.M. 1995. *A History of the Mont Pelerin Society*. Indianapolis: Liberty Fund.
- Hayek, F.A. [1944] 1994. *The Road to Serfdom*. Chicago: University of Chicago Press.
- . 1984. "Competition as a Discovery Procedure." *The Essence of Hayek*. Chiaki Nishiyama and Kurt Leube, eds. Stanford, Calif.: Hoover Institution Press. Pp. 254-65.
- . 1983. "The Rediscovery of Freedom: Personal Recollections." Reprinted in *The Collected Works of F.A. Hayek*, Vol. IV: *The Fortunes of Liberalism: Essays on Austrian Economics and Ideal of Freedom*. Peter G. Klein, ed. Chicago: University of Chicago Press, 1992. Pp. 185-95.
- . 1964. "Kinds of Order in Society." *New Individualist Review* 3(2): 3-12. In *New Individualist Review*. Indianapolis: Liberty Press, 1981. Pp. 457-66.
- . 1964. "The Theory of Complex Phenomena." *The Critical Approach to Science and Philosophy: Essays in Honor of K.R. Popper*. M. Bunge, ed. New York: Free Press. In Hayek, *Studies in Politics, Philosophy, and Economics*. By Hayek. Chicago: University of Chicago Press, 1967.
- . 1960. *The Constitution of Liberty*. Chicago: University of Chicago.
- . 1959. "Tribute to Röpke." In *The Collected Works of F.A. Hayek*, Vol. IV: *The Fortunes of Liberalism: Essays on Austrian Economics and Ideal of Freedom*. Peter G. Klein, ed. Chicago: University of Chicago Press, 1992. Pp. 195-97.
- . 1948. Letter to M. Polanyi. Dated November 15. Located in Box 78, Number 36, in the Hayek Archives, Hoover Institution, Stanford, Calif. University of North Carolina-Greensboro. Microfilm, reel 60.
- . 1947. "Opening Address to a Conference at Mont Pelerin." Reprinted in *The Collected Works of F.A. Hayek*, Vol. IV: *The Fortunes of Liberalism: Essays on Austrian Economics and Ideal of Freedom*. Peter G. Klein, ed. Chicago: University of Chicago Press, 1992. Pp. 237-48.
- . 1941. "The Economics of Planning." *The Liberal Review* 1: 5-11. Reprinted in *The Collected Works of F.A. Hayek*, Vol. X: *Socialism and War: Essays, Documents, Reviews*. Bruce Caldwell, ed. Chicago: University of Chicago Press, 1997. Pp. 141-47.

- . 1940. "Socialist Calculation: The Competitive 'Solution'." *Economica New Series* 7.26 (May): 125-49. Reprinted in *Individualism and Economic Order*. Chicago: University of Chicago Press, 1948. Pp. 181-208.
- . 1935. "The Present State of the Debate." In *Collectivist Economic Planning*. Hayek, ed. Clifton, N.J.: Augustus M. Kelley. Pp. 201-43.
- . 1934. "Carl Menger." *Economica* 1 (November): 393-420. Reprinted in Menger *Principles of Economics*. Grove City, Penn.: Libertarian Press, 1994.
- . 1933. "The Trend of Economic Thinking." *Economica* 13 (May 1933): 121-37. Reprinted in *The Collected Works of F.A. Hayek*, Vol. III: *The Trend of Economic Thinking: Essays on Political Economists and Economic History*. W.W. Bartley III and Stephen Kresge, eds. Chicago: University of Chicago Press, 1989. Pp. 17-34.
- Horwitz, Steven. 2001. "From Smith to Menger to Hayek: Liberalism in the Spontaneous Order Tradition." *Independent Review* 6 no. 1 (Summer): 81-97.
- . 2000. "From The Sensory Order to the Liberal Order: Hayek's Non-Rationalist Liberalism." *Review of Austrian Economics* 13: 23-40.
- . 1998. "Monetary Calculation and Mises's Critique of Planning." *History of Political Economy* 30 (Fall): 427-50.
- Jacobs, Struan. 1999. "Michael Polanyi's Theory of Spontaneous Orders." *Review of Austrian Economics* 11 (1999): 111-27.
- . 1997-98. "Michael Polanyi and Spontaneous Order, 1941-51." *Tradition and Discovery: The Polanyi Society Periodical* 24 (2): 14-27.
- Knight, Frank H. 1940. "Socialism: The Nature of the Problem." *Ethics* 50 (April): 253-89. Reprinted in *Selected Essays by Frank H. Knight*, Vol. 2: *Laissez-faire: Pro and Con*. Ross B. Emmett, ed. Chicago: University of Chicago Press, 1999. Pp. 76-106.
- . 1936. "The Place of Marginal Economics in a Collectivist System." *American Economic Review* 26: 255-66.
- Lavoie, Don. 1989. "Economic Chaos or Spontaneous Order? Implications for Political Economy of the New View of Science." *Cato Journal* 8: 613-35.
- . 1985a. *National Economic Planning: What is Left?* Cambridge, Mass.: Ballinger.
- . 1985b. *Rivalry and Central Planning*. New York: Cambridge University Press, 1985b.
- Menger, Carl. 1934. "Carl Menger." *Economica* (November): 393-420.
- Mises, Ludwig von. 2000. "The Equations of Mathematical Economics and the Problem of Economic Calculation." *Quarterly Journal of Austrian Economics* 3: 27-32.
- . 1920. "Economic Calculation in the Socialist Commonwealth." Reprinted in *Collectivist Economic Planning*. F.A. Hayek, ed. Clifton, N.J.: Augustus M. Kelley. 1975. Pp. 87-130.
- . [1949a] 1963. *Human Action: A Treatise on Economics*. San Francisco: Fox and Wilkes.
- . 1949b. "Laissez Faire or Dictatorship." *Plain Talk*, January. Reprinted in *Planning for Freedom*. Grove City, Penn.: Libertarian Press, [1952] 1980. Pp. 34-47.

- . 1947. Planned Chaos. Reprinted in *Socialism*. Indianapolis: Liberty Fund, 1981. Pp. 483-540.
- O'Brien, D.P. 1994. "Hayek as an Intellectual Historian." In *Hayek, Co-ordination and Evolution*. Jack Birner and Rudy Van Zijp, eds. London: Routledge. Pp. 343-74.
- Ortega y Gasset, Jose. 1932. *The Revolt of the Masses*. New York: W.W. Norton.
- Petsoulas, Christina. 2001. *Hayek's Liberalism and its Origins: His Idea of Spontaneous Order and the Scottish Enlightenment*. London: Routledge.
- Polanyi, Michael. 1963. Letter to F.A. Hayek. Dated February 19. Located in Box 43, Number 35, in the Hayek Archives, Hoover Institution, Stanford Calif. Reprinted by University of North Carolina-Greensboro. Microfilm, reel 33.
- . 1951. *The Logic of Liberty*. Chicago: University of Chicago Press.
- . 1948. "Planning and Spontaneous Order." *The Manchester School of Economic and Social Studies* 16: 237-68.
- . 1945. *Full Employment and Free Trade*. Cambridge: Cambridge University Press.
- . 1941. "The Growth of Thought in Society." *Economica* 8 (November): 428-56.
- Röpke, Wilhelm. [1948] 1996. *The Moral Foundations of Civil Society*. New Brunswick, N.J.: Transaction.
- . 1994. *Die Lehre von der Wirtschaft*. Vienna: Julius Springer Verlag. In *Economics of the Free Society*. Trans. Patrick M. Boorman. Grove City, Penn.: Libertarian Press.
- . [1942] 1992. *The Social Crisis of Our Time*. New Brunswick, N.J.: Transaction.
- . 1959. "The Economic Necessity of Freedom." *Modern Age* (Summer): 227-336. In *The March of Freedom: Modern Classics in Conservative Thought*. Edwin J. Feulner, Jr., ed. Dallas: Spence, 1998. Pp. 300-16.
- . 1936. "Socialism, Planning, and the Business Cycle." *Journal of Political Economy* 44 (June): 318-38.
- . 1935. "Fascist Economics." *Economica* 2 (February): 85-100.
- Roberts, Paul Craig. 1971. *Alienation and the Soviet Economy*. Albuquerque: University of New Mexico Press.
- Ross, Ian. 1987. "Forward." Ronald Hamowy. In *The Scottish Enlightenment and the Theory of Spontaneous Order*. Carbondale, Ill.: Southern Illinois University Press.
- Sally, Razeen. 1998. *Classical Liberalism and International Economic Order: Studies in Theory and Intellectual History*. London: Routledge.