HAYEK’S EPISTEMIC THEORY OF INDUSTRIAL FLUCTUATIONS

SCOTT SCHEALL[[1]](#footnote-1)\*

*Arizona State University at the Polytechnic Campus*

*Department of Science, Technology, and Society*

F.A.Hayek essentially quit the study of industrial fluctuations as an explicit object of theoretical investigation following the publication of 1941’s *The Pure Theory of Capital*. Nonetheless, several of Hayek’s subsequent methodologically oriented writings bear important implications for economic phenomena, *especially* those of industrial fluctuations. Decisions (usually, for Hayek, of a political nature) taken on the basis of a ‘pretence’ of knowledge impede the operation of the price system’s belief-coordinating function and thereby contribute to episodes of economic disequilibrium. Moreover, this later account – which I call Hayek’s *epistemic theory of industrial fluctuations* – implies certain aspects of his earlier theory. The two accounts are connected in virtue of the role that the limits of human knowledge play in each. Indeed, it turns out that – in a sense defined in the paper – Hayek’s early theory of the cycle is a special case of his more general epistemic account. The concluding section addresses the implications of the main arguments of the paper for certain themes in the secondary literature on Hayek.

1. INTRODUCTION

Among the many things for which F.A. Hayek will long be remembered is the business cycle theory that he developed in the first two decades of his academic career. Hayek’s theory of industrial fluctuations made his initial reputation as an economist and provided the basis from which he engaged John Maynard Keynes in their famous debate of the early 1930s. However, Hayek essentially quit economic theory and the phenomena of industrial fluctuations as an explicit object of theoretical investigation following the publication of his last work in technical economics, 1941’s *The Pure Theory of Capital* (Hayek 2007 [1941]). Nonetheless, several of Hayek’s more methodologically oriented writings bear important implications for economic phenomena, *especially* those of industrial fluctuations. In particular, the conjunction of the price theory that Hayek developed in the 1940s and his later arguments concerning the methods appropriate to the investigation of complex economic orders implies a broad, though by no means universal, explanation of economic-cyclical phenomena. Decisions taken on the basis of a «pretence of knowledge»[[2]](#footnote-2) that the (usually, for Hayek, political) actor does not in fact possess impede the operation of the price system’s belief-coordinating function and thereby contribute to episodes of economic disequilibrium.[[3]](#footnote-3) Moreover, this later account – which, because of the central role it assigns to *beliefs*, I call Hayek’s *epistemic theory of industrial fluctuations*[[4]](#footnote-4) – implies certain aspects of his earlier explanation of the cycle and, thus, the two theories are related. More to the point, the two accounts are connected in virtue of the role that ignorance and the limits of human knowledge play in each. Indeed, it turns out that, in a sense to be defined later, Hayek’s early theory of the cycle is a special case of the more general epistemic account.

 For the purposes of the present paper, Hayek’s early theory of industrial fluctuations is the one associated with *Monetary Theory and the Trade Cycle* (Hayek 2008 [1933]) and *Prices and Production* (Hayek 2008 [1931, 1935]), and subsequently refined throughout the 1930s (in the works, some of them responses to criticisms of *Prices and Production*, anthologized in *Profits, Interest and Investment* (Hayek 1939)) and into the 1940s (in, e.g., *The Pure Theory of Capital* (Hayek 2007 [1941]) and «The Ricardo Effect» (Hayek 1948 [1942])).

Epistemic considerations became more pronounced as Hayek developed this early project. It was in response to criticisms of *Prices and Production* that *explicit* epistemic considerations first appear in Hayek’s work on the cycle.[[5]](#footnote-5) In particular, Hayek’s (1939 [1933]) response to Gunnar Myrdal (1933) in «Price Expectations, Monetary Disturbances, and Malinvestments» leads directly to the argument of «Economics and Knowledge» (Hayek 1948 [1937]), and, from there, to so many of the more philosophical concerns that occupied Hayek over the remainder of his career, including his mid-to-late methodological writings, which are of prime significance for (what I’m calling) the «epistemic theory of industrial fluctuations». Thus, epistemic issues became more central as Hayek’s thought concerning fluctuations evolved over time.

However, it is part of the argument of the present paper that considerations of ignorance and the limits of human knowledge arepresent even in Hayek’s earliest formulations of his early theory of the cycle (i.e., in *Monetary Theory and the Trade Cycle* and *Prices and Production*), albeit not emphasized to the same degree that they would come to be; and, moreover, that it is in virtue of these considerations that Hayek’s initial formulations of his cycle theory are connected with his «Pretence of Knowledge»-era explanation of disequilibrium. Whether explicit or not, ignorance and the limits of knowledge were always present in Hayek’s writings, in economics and beyond. In this respect, Hayek’s «epistemic turn»[[6]](#footnote-6) was less a *turn* than an *enlargement* of elements that were always present in his thought.

1. HAYEK’S EPISTEMIC THEORY OF INDUSTRIAL FLUCTUATIONS

Hayek’s later theory of industrial fluctuationsis *epistemic* in several interrelated respects. In the first place, the theory is built upon a conception of economic equilibrium as a condition of well-coordinated knowledge. That is, as Hayek argued in «Economics and Knowledge» (Hayek 1948 [1937]), equilibrium exists to the extent that economically relevant beliefs of individual market participants are mutually consistent and accurate with respect to the external facts. Though a *state* of equilibrium is a fiction, Hayek took it to be a fact verifiable by observation that a *tendency* for the relevant beliefs of economic agents to become better harmonized is operative under normal circumstances.[[7]](#footnote-7) Thus, Hayek makes economic equilibrium a social-epistemological concept.[[8]](#footnote-8) The solution to the economic problem is the answer to the question of the various means by which this tendency toward equilibrium may be either facilitated or inhibited (*Ibidem*, 50-51).

Hayek (1948 [1945]) answers this question to the effect that the operation of the tendency toward coordination of the relevant beliefs of market participants requires an epistemic device, a system of signals that conveys to economic agents the data they need to adjust their activities to the circumstances prevailing in the wider economic order. In Hayek’s system, this epistemic device is a network of freely-adjusting prices.[[9]](#footnote-9) Thus, Hayek’s later theory of the cycle is epistemic in the sense of the central place it assigns to *beliefs*, their effective coordination, and the means by which this coordination is either promoted or prevented.

But the theory is epistemic in a further sense: Hayek’s epistemic theory explains industrial fluctuations in terms of humans (typically, for Hayek, policymakers) acting *on the basis of knowledge that they don’t in fact possess* in such a way that interferes with the functioning of a freely-adjusting price system, and which thus hampers the operation of the tendency toward economic equilibrium.[[10]](#footnote-10), [[11]](#footnote-11) It is clear from Hayek’s conceptions of both equilibrium and the price system that whatever encumbers the normal operation of the latter will, other things equal, retard the tendency toward the former. Hayek makes these concepts relevant to the problem of industrial fluctuations with the claim that the price system is frequently so adversely affected because certain decisions – often, but not necessarily, of an economic-political nature – which influence the structure of prices are made on the basis of false beliefs.

Hayek’s explanation of how these false beliefs arise and come to be acted upon concerns the divide that separates the knowledge that effective political management of economic equilibrium requires and the knowledge that is actually available to policymakers, and, especially, the ignorance of policymakers with respect to their ignorance of this latter cleavage: economic policymakers *don’t know* *that they don’t know* how to effectively administer economic equilibrium. Indeed, quite to the contrary, the policymaker typically believes she can possess the knowledge both necessary and sufficient for effective political management of economic equilibrium—but she is wrong, or so Hayek argues.

According to Hayek (1967 [1955], 18n), effective political control of the economy is predicated on predictive ability. However, only the most limited and, thus, least policy-relevant predictions are possible with respect to complex phenomena like those of the macroeconomy. Policy-relevant predictions require knowledge both of economic conditions and of the effects of policy machinations.[[12]](#footnote-12) The latter kind of knowledge requires an adequate theory; the former requires sufficient data.[[13]](#footnote-13) Hayek argues, however, that the policymaker possesses neither a theory adequate to the task nor the necessary empirical knowledge.

The theories relevant to economic equilibrium – in particular, the Walrasian theory of general equilibrium and the macroeconomic theory associated with the followers of Keynes – are, according to Hayek, meager policy tools. Hayek argues that the Walrasian explanation of general equilibrium *explains* no such thing. The conditions which, for Hayek (1978 [1975], 25-26), *constitute* a state of equilibrium are the *assumptions* of general equilibrium theory.[[14]](#footnote-14) The problem that confronts the economic policymaker is how to engender (*inter alia*) a condition of «[c]omplete knowledge of the relevant factors on the part of all participants in the market» (Hayek 1948 [1946], 95). A theory that assumes the presence of this condition from the outset, as general equilibrium theory does, is of little instruction to the policymaker.[[15]](#footnote-15)

Moreover, the posit that Hayek attributes to the followers of Keynes[[16]](#footnote-16) that there is a «simple positive correlation between total employment and the size of the aggregate demand for goods and services [, and which] leads to the belief that we can permanently assure full employment by maintaining total money expenditure at an appropriate level» may at best, «only be approximate, but as it is the *only* one on which we have quantitative data, it is accepted as the only causal connection that counts» (Hayek 1978 [1975], 25; italics in the original). Thus, according to Hayek, the theoretical knowledge that effective political administration of economic equilibrium requires – if it exists at all – has not yet been discovered. The available theoretical knowledge is not relevant to the problem that confronts the economic policymaker and the relevant theoretical knowledge is not available.

But, whatever the theoretical understanding of policymakers with respect to the economy, the empirical data required is, according to Hayek (1948 [1937]; 1948 [1945]), necessarily *subjective*, i.e., dispersed across and fragmented within the minds of all of the individual market participants, each of whom acquires via the price system such knowledge as is necessary to adapt her particular economic plan to changes in economic circumstances. That is, provided the price structure is not artificially manipulated (directly or indirectly) on the basis of considerations exogenous to the guidance provided by price signals, the knowledge relevant to the effective operation of the tendency toward equilibrium *is* available to individual market participants. However, the dispersed and fragmented knowledge of the latter cannot be conveyed in an easily-digestible form to – much less comprehended by – a committee of policymakers.[[17]](#footnote-17) That is, it is not possible to measure the dis-coordination prevailing with respect to people’s beliefs relative both to each other and to external circumstances. Of course, knowledge of this sort is required if economic management is to be effective: if the policymaker is to craft policy so as to effectively engender a state of economic equilibrium, she must know the extent to which existing beliefs are both uncoordinated and inaccurate. However, it is not merely that the knowledge necessary to consciously manage economic equilibrium cannot be communicated to policymakers, as Hayek (1978b [1968b]) emphasizes in «Competition as a Discovery Procedure», much of the relevant knowledge is created by the very competitive process that deliberate economic administration (at least partially) displaces.[[18]](#footnote-18) Thus, in part because such empirical knowledge as does exist and is relevant to the problem cannot be communicated, and in part because much of the relevant knowledge does not exist in the absence of the competitive process, the policymaker is ignorant of the empirical knowledge that effective political administration of economic equilibrium requires.

More importantly, the policymaker is also ignorant of this latter ignorance.[[19]](#footnote-19) That is, the policymaker is convinced that she both possesses an adequate theory and can acquire the relevant data. The source of this (according to Hayek, misplaced) optimism is the prevailing opinion regarding scientific method (Hayek 1978 [1975], 30). The «scientistic» methodology that holds sway over many macroeconomists, their political advisees, and a large swath of the latter’s public constituency, treats «as important [that] which happens to be accessible to measurement» (*Ibidem*, 24). Scientism reifies the techniques of quantitative measurement of the physical sciences to the level of exemplars for all other fields to follow.[[20]](#footnote-20) The methods of these disciplines are to be applied in all areas of scientific inquiry without consideration of their aptness for the investigation of non-physical phenomena.

The aforementioned macroeconomic theory of Keynes’ followers makes the economically-relevant variables those that just happen to be measurable. The policymaker is convinced by the conjunction of scientism and macroeconomic theory that the theoretical understanding required to make management of equilibrium effective is within her cognitive grasp. What’s more, the scientistic attitude persuades the policymaker that she can also possess the necessary empirical knowledge. That is, in virtue of both its quantitative nature and its very successful application in the sciences of less complex phenomena, the statistical method appears the quintessence of scientific virtue. However, statistical data ignore precisely the information that effective countercyclical policymaking requires:

Information about aggregates or statistical collectives is of little use for deciding what particular people should do at particular moments which is what they would have to be told by the central authority. The statistician, in order to arrive at his aggregates, must largely abstract from those very details which will decide what particular individuals ought to do

(Hayek 2014 [1961]).[[21]](#footnote-21)

The empirical data that is available to the policymaker is not relevant to the task of the political administration of economic equilibrium.

In short, blinded by a false methodology, the economic policymaker is led into a «pretence of knowledge» upon which she acts, unawares – indeed, convinced otherwise – of the irrelevance and inadequacy of her epistemic position. Policymakers are misled into the false belief that they can possess both the theoretical and empirical knowledge required of effective macroeconomic management by the combination of a methodology that accords special status to measurable parameters, a theory that makes the relevant parameters those that just happen to be measurable, and the statistical techniques for the analysis of the aggregative variables in which the latter theory trucks.

What’s more, when policymakers pretend to possess the relevant economic knowledge and make policy on the basis of this pretence, their decisions typically impede, either directly or indirectly, the price system’s knowledge-coordinating function.[[22]](#footnote-22) It suffices to hamper the operation of the tendency toward equilibrium for those in a position to do so to intervene on the basis of knowledge that they don’t in fact possess in a way that fetters the adjustment of the price system to changes in economic circumstances. Such is Hayek’s epistemic theory of industrial fluctuations.

1. THE ROLE OF EPISTEMIC CONSIDERATIONS IN HAYEK’S EARLY THEORY

The origins of Hayek’s epistemic treatments of both economic equilibrium and the price system are subject to some debate. Bruce Caldwell (1988, 2004) has argued that the latter concepts are, for the most part, artifacts of Hayek’s engagement in the English-language socialist calculation debate of the mid-1930s. On the other hand, Gerald O’Driscoll (1977, 102) has argued that these notions are «interconnected» with Hayek’s work on the business cycle.[[23]](#footnote-23) In any case, it is not necessary to take a firm stance on this latter question in order to appreciate the extent to which considerations of the limits of human cognition connect the early account with Hayek’s later epistemic theory of industrial fluctuations.

Hayek’s early account explains economic disequilibrium in terms of the discombobulating effect that credit expansion has on the delicate links between consumption and production decisions. Credit expansion – a supply of bank loans that exceeds the supply of voluntary savings or, in Hayek’s technical verbiage, a rate of interest on loans below the «natural» rate of interest that would equilibrate the demand for loans with the supply of voluntary savings – prevents the re-adjustment of the economy to changes in the economic data.[[24]](#footnote-24)

Importantly for our purposes, considerations of the limits of human knowledge enter into the early theory in ways that are markedly similar to the roles they play in the later, more purely epistemic, account. In particular, epistemic concerns figure in both as *motives for* and *causal factors in* Hayek’s explanation.

We’ve already seen that the «Pretence of Knowledge» argument that figures so centrally in the epistemic theory was largely motivated by Hayek’s contention of the inadequacy of the epistemic devices available to the economic policymaker. This same kind of concern was a central motivation for the development of his earlier theory of fluctuations. Hayek’s early business cycle arguments were directed against a pretence of knowledge of the requirements of adequate countercyclical monetary policy, in particular, the then-popular belief that the stabilization of the general level of prices is both necessary and sufficient to ensure equilibrium, and that knowledge of the value of some price index (together with the capacity for its indirect control via monetary policy) suffices for the purposes of political administration.[[25]](#footnote-25) As early as 1925, Hayek wrote that such a method «seeks to solve the problem under discussion in what is certainly too simple a fashion» (Hayek 1984 [1925], 18). Three years later, Hayek wrote that any attempt to stabilize the general price level as indicated by some index brings about erroneous signals that undermine the price system: such «monetary influences […] hinder the establishment of the natural price structure» (Hayek 1984 [1928], 102).[[26]](#footnote-26)

In the 1925 paper, Hayek also considered the suggestion that «cycle barometers» might supply the knowledge necessary for effective countercyclical policy; but, though he considered them to be better tools than price statistics, concluded that «the economic situation is not revealed by the movement of any one of the factors that they take as their indicator» (Hayek 1984 [1925], 20). Hayek was arguing very early in his academic career that the empirical data available to the economic policymaker are not relevant to the task the latter confronts in the practice of administering economic equilibrium.

In the last lecture of *Prices and Production*, his early business cycle *magnum opus*, Hayek (2008 [1931, 1935]) offers further arguments against the belief that stability in the general level of prices is both necessary and sufficient for economic equilibrium. Hayek’s theoretical considerations instead support the view that, in order to neutralize the effects of money on prices, the «stream» of the circulating medium (i.e., the stock of money multiplied by the velocity of circulation) should not vary. However, in his characteristic fashion, Hayek (*Ibidem*, 292) emphasizes the «enormous» practical difficulties confronting such a policy, «difficulties which monetary reformers are always so inclined to underrate». Strict monetary neutrality requires the establishment of all of the conditions that the theory says are necessary, but it is «very probable that this is practically impossible» (*Ibidem*, 303). In particular, securing a constant flow of the money stream requires complete price and wage flexibility, and, relatedly, correct foresight with respect to future price fluctuations. Such ‘frictions’ obstruct the smooth and rapid adaptation of the price system to changes in the economic data that is assumed by general equilibrium theory (upon which, despite his later resistance to the standard conception of economic equilibrium, Hayek’s early account of the cycle is based) and which is necessary for the effectiveness of monetary neutrality. If the conditions required for the perfect adaptation of the price system to changed circumstances are not secured, the ideal of monetary neutrality «could not be realized by any kind of monetary policy» (*Ibidem*, 304).[[27]](#footnote-27) Monetary neutrality provides no actionable criterion of rational policy. Thus, Hayek’s early theory of the cycle is driven by the same sort of concern that motivates his later account: his belief in the inadequacy of the knowledge available to policymakers in the form of price statistics and cycle barometers, and, conversely, of the inaccessibility of the relevant knowledge that monetary neutrality requires.

But, more than this, as does Hayek’s epistemic theory of fluctuations, his early account assigns ignorance a causal role with respect to the cycle. Hayek’s technical-economic explanation attributes industrial fluctuations to *a particular kind of action in the economy on the basis of knowledge that the actor does not possess*:

The situation in which the money rate of interest [on loans] is below the natural rate need not […] originate in a *deliberate lowering* of the rate of interest by the banks. The same effect is obviously produced by an improvement in the expectations of profit or a diminution in the rate of saving, which may drive the ‘natural rate’ (at which the demand for, and the supply of, savings are equal) above its previous level; while the banks refrain from raising their rate of interest to a proportionate extent, but continue to lend at the previous rate, and thus enable a greater demand for loans to be satisfied than would be possible by the exclusive use of the available supply of savings

(Hayek 2008 [1933], 78; italics in the original)

The latter case is important, not because it is the only way in which the cycle can manifest on Hayek’s early theory, but due to the fact that it is «probably the commonest in practice, [and] to the fact that it *must inevitably recur* under the existing credit organization» (*Ibidem*, 78; italics in the original).

The purportedly inevitable recurrence of this case is a consequence of bankers’ ignorance of the data necessary to ensure monetary neutrality.[[28]](#footnote-28) Hayek (*Ibidem*, 87) argues that it is *impossible* for bankers to know whether they are at any time creating additional credit or lending on the basis of voluntary savings: «As credit created on the basis of additional deposits does not normally appear in the accounts of the same bank that granted the credit, it is fundamentally impossible to distinguish, in individual cases, between» deposits based on savings and those that result from the granting of credit by other banks.[[29]](#footnote-29) With respect to any particular loan, the lending institution is typically not where the loaned funds are ultimately deposited (because the loan recipient either deposits the funds in another bank or spends the money with a merchant who deposits the funds in another bank) and, because incoming deposits don’t arrive marked either ‘savings-based’ or ‘credit-based’, it is impossible for bankers at the depository institution to know whether they are receiving (and subsequently lending on the basis of) savings or credit.[[30]](#footnote-30) «[T]his consideration rules out, *a priori*, the possibility of bankers limiting the amount of credit granted by them to the amount of ‘real’ accumulated deposits» (*Ibidem*, 87).

In effect, Hayek’s early theory shows how epistemic deficiencies can creep into a general equilibrium system in which such deficiencies are otherwise assumed away. The addition of indirect exchange (money) to the barter framework of general equilibrium introduces all of the aforementioned knowledge problems, the effects of which then emanate out from the market for money to the broader economy.

Thus it is that, despite the differences in the theoretical frameworks in which they’re explicated – in particular, the absence in the later epistemic theory of the Walrasian conception of equilibrium (not to mention the Böhm-Bawerkian theory of capital that caused Hayek so much consternation over the course of the decade following the publication of *Prices and Production*) – Hayek’s explanations of industrial fluctuations are closely related. Both accounts are driven by a concern for the implications of the inadequacies of human cognition, i.e., the inaccessibility to human minds of relevant knowledge and the consequences of acting on the basis of a mere pretence of knowledge. What’s more, both accounts posit as a cause of fluctuations human action under a veil of ignorance of the knowledge required to make such action effective.

It is interesting to further note the relation the two theories bear, if we strip away their theoretical and methodological ephemera, and focus solely on the causal role that each assigns to considerations of the limits of knowledge. Ignorance enters the economy, according to Hayek’s early theory, through loan markets. It is only price distortions in these markets that are attributed to action in the absence of the requisite knowledge. Though it is of course possible on Hayek’s early account for price distortions to arise in markets other than loan markets, the theory attributes none of *these* distortions to ignorance-based action.[[31]](#footnote-31) However, according to Hayek’s epistemic theory (and this is, naturally, part of what makes it *epistemic*) ignorance can enter the economy, at least potentially, via any market, including through the loan market—wherever the policymakers’ pretence of knowledge is aimed. The later theory thus attributes to ignorance a wider range of disequilibrating actions, including those that the earlier theory also assigns to inadequate knowledge. In this sense, with respect to the causal role that each assigns to action under a veil of ignorance, the later theory includes the earlier one. That is, the epistemic account according to which fluctuations are a consequence of ignorance-based interferences into the price system, including in loan markets, obviously encompasses the theory according to which fluctuations are a consequence of ignorance-based interferences in loan markets, but not the other way around. Stated another way, with respect to the causal role that each assigns to actions based on inadequate knowledge, the early theory is a special case of the later theory.

What really separates the two theories, in the relevant sense – i.e., what licenses the move from an explanation of the causes and effects of ignorance on loan markets to an account of the causes and effects of ignorance on markets in general – is the claim that the policymaker’s pretence of knowledge encourages constant ignorance-based interference with the price system. Hayek started with a theory in which only price distortions emanating from loan markets could be explicitly attributed to ignorance but, with the development of the pretence-of-knowledge explanation of interferences in markets, discovered a theory in which any price distortion, including but not limited to those emanating from loan markets, could be attributed to ignorance.

1. CONCLUDING REMARKS

The present paper defends three main theses:

1. Hayek has an «epistemic theory of industrial fluctuations» (or, at least, a sketch of one) that consists of
	1. his epistemic conception of equilibrium, according to which, equilibrium exists to the extent that economically-relevant beliefs of individual market participants are mutually consistent and accurate with respect to the external facts;
	2. his treatment of a freely-adjusting price system as the mechanism that serves to coordinate the relevant beliefs; and
	3. his empirical claim that policymakers are constantly interfering with the price system because, subscribing as they do to a scientistic methodology, policymakers convince themselves that they possess knowledge, which would facilitate the making of effective countercyclical policies, which they do not in fact possess, and (because of the complexity of the phenomena and their own cognitive limitations) cannot acquire.

In effect, my argument here is that if one combines the relevant parts of «The Pretence of Knowledge» (Hayek 1978 [1975]), «Economics and Knowledge» (Hayek 1948 [1937]), and «The Use of Knowledge in Society» (Hayek 1948 [1945]), the result is a (sketch of a) theory of industrial fluctuations.

1. Considerations of the limits of human knowledge play a similar role in Hayek’s early theory as they do in the later epistemic theory. In particular, epistemic concerns figure in both as motives for and causal factors in Hayek’s explanation.
2. With respect to the causal role that each assigns to actions based on inadequate knowledge, the early theory is a special case of the later theory.

It remains to say a few words about the relevance of the arguments of the present paper for certain themes prevalent in the secondary literature on Hayek. I am happy to acknowledge various similarities, and certain crucial differences, between my arguments and those of other authors.

In particular, Ulrich Witt (1997) also considers the relation between Hayek’s writings on spontaneous orders and the cycle problem, and concludes that the two represent «different and basically incompatible research programs» (*Ibidem*, 57). Provided that the analysis is limited to the methodological and theoretical assumptions of the relevant arguments, there is nothing in the present paper that undermines this conclusion: it is indeed true that Hayek’s early theory of the cycle, with its general equilibrium assumptions concerning complete knowledge (outside of loan markets), is incompatible with the assumption of limited knowledge that underlies Hayek’s writings on spontaneous orders. However, the present paper has tried to show that, in focusing on these methodological and theoretical ephemera, one runs the risk of losing the forest for the trees. It is true that Hayek’s early theory is based on the assumptions of Walrasian equilibrium (and the Böhm-Bawerkian theory of capital), and that the epistemic theory is not, but – the paper in effect asks – so what? If we focus too exclusively on these matters, we run the risk of missing what the later theory has in common with the early one, which is, if the argument of the present paper is sound, quite a lot. Both theories are motivated by Hayek’s concern for the consequences of acting on the basis of inadequate knowledge, and both theories posit ignorance of the knowledge required to facilitate equilibrium as a prime mover of economic fluctuations.

Thus, my objection to Witt’s argument is not that it is wrong as far as it goes, but that it doesn’t go very far: Witt’s argument is focused narrowly on the frameworks within which the early business cycle account and the theory of spontaneous order are explicated, and ignores the – to my mind, more interesting – questions of whether Hayek’s early and later thinking concerning fluctuations was motivated by similar concerns, and of the extent to which ignorance was always, for Hayek, the main source of economic fluctuations.

Moreover, though Witt’s (*Ibidem*, 54-56) reinterpretation of the early theory in the light of Hayek’s theory of spontaneous order is original and insightful, it is perhaps too original to express Hayek’s later thought on industrial fluctuations. That is, there is more textual evidence that supports the interpretation of the present paper as an exemplification of Hayek’s later thought than there is evidence that Hayek accepted something like Witt’s reinterpretation. Witt’s reconciliation may be successful, but he offers no evidence that it evinces Hayek’s actual thought on the matter; on the other hand, though my account may be sketchy, and perhaps, ultimately unsuccessful as an explanation of fluctuations, Hayek did put the relevant parts of his epistemic theory *forward*, even though (as per footnote 3 above) he never explicitly put these parts *together*.

Matters are somewhat different with respect to the relationship between the present paper and O’Driscoll’s well-known arguments in *Economics as a Coordination Problem* (1977). Here, I believe, the relevant arguments are complementary and mutually reinforcing, although, strictly speaking, they occupy slightly different territory. O’Driscoll’s main argument is that Hayek’s work in economics «forms a unified whole and must be appreciated as such» in the sense that «[t]o Hayek, the price system, by disseminating available information to market participants at the least cost, tended to make mutually compatible the initially incompatible plans of individual actors in that system» (*Ibidem*, 5-6). The current paper can be interpreted as addressing, on the assumption of a framework in which equilibrium is a matter of plan coordination and a freely-adjusting price system is the primary means by which such coordination is effected, one of the ways in which the tendency of the price system to facilitate coordination might be impeded (i.e., in virtue of price manipulation in the presence of ignorance of what is required to deliberately promote the coordinating tendency of the price system). However, O’Driscoll’s analysis ends at the point when, in the 1940s, Hayek «fairly abruptly ceased writing on monetary theory proper» (*Ibidem*, 140). O’Driscoll’s book is thus silent on the main issue addressed in the present paper, namely, the relationship between Hayek’s later «Pretence of Knowledge»-era explanation of disequilibrium and his earlier *Prices and Production*-era account of industrial fluctuations. So, the present paper might be interpreted as an extension of O’Driscoll’s thesis concerning the essential unity of Hayek’s economics: Hayek’s work through the 1940s *and beyond* «forms a unified whole and must be appreciated as such».

This being said, although the paper does point to one respect in which Hayek’s thought is continuous over time – namely, in his focus on the implications of ignorance and the limits of human knowledge – it also recognizes other respects in which his approach changed, i.e., his movement away from both the Walrasian equilibrium construct and the Böhm-Bawerkian theory of capital. Thus, I want to resist the notion that the present paper bears significant implications for the questions whether and to what extent Hayek’s thought ‘transformed’ over time, or whether there might be multiple ‘Hayeks’ distinguishable in terms of various views that Hayek accepted or emphasized at one point, but rejected or downplayed at some other time.[[32]](#footnote-32) More exactly, if the present essay establishes anything about these questions, it is their futility. It should be apparent as soon as it is stated that in a scholarly career as long as Hayek’s – spanning nearly three-quarters of history’s most tumultuous century – one should expect to encounter neither complete continuity nor (absent a clinical diagnosis of schizophrenia) utter discontinuity. Thus, any attempt to interpret Hayek’s thought as maximally consistent over time will confront some obvious counterexamples; but, so too will any attempt to draw strict lines of division between different ‘Hayeks’.

Moreover, the ultimate justification for a particular demarcation between various ‘Hayeks’ can be nothing more substantive than (usually implicit) value judgments about the importance of competing definitions of continuity. For example, the arguments of the present paper imply that, at least with respect to industrial fluctuations, certain elements of Hayek’s thought were consistent over time (the emphasis on ignorance as a source of price disturbances), but others were not (Walrasian equilibrium, Böhm-Bawerk’s theory of capital). Stated another way, the conclusions of Hayek’s cycle arguments were mostly continuous, though he supported them with different premises over time. Whether this means that Hayek’s career was *more* continuous than discontinuous requires some value judgment as to whether continuity-of-conclusions is more reflective of general continuity than discontinuity-of-premises is reflective of general discontinuity. That is, we would be more or less equally justified in insisting that Hayek’s career displayed remarkable continuity, because his conclusions were essentially consistent over time, as we would be in insisting that his career displayed remarkable *dis*continuity, because different premises supported his conclusions at different times. There is no fact of the matter here; there are only competing definitions of continuity according to which the question is answered in different ways, and judgments of value as to which definitions are more acceptable than others. Such arguments are more likely to reflect the interests of the individual scholars who defend them than anything of significance for Hayek’s career.

The current paper emphasizes the ever-present, but ever-expanding, role that ignorance played in Hayek’s thinking about industrial fluctuations. However, I resist the temptation to defend ignorance as *the* consideration that unifies Hayek’s diverse canon. To do so would be to act on a pretence of knowledge – the pretence that I know my own scholarly interests in the economic effects of inadequate knowledge to have been shared by Hayek to an extent sufficient to justify a claim of continuity – and we all know how action on the basis of inadequate knowledge tends to turn out.

**References**

BIRNER J. 1999, «The surprising place of cognitive psychology in the work of F.A. Hayek», *History of Economic Ideas*,7, 1-2, 43-84.

BRONK R. 2013, «Hayek on the wisdom of prices: a reassessment», *Erasmus Journal for Philosophy and Economics*, 6, 1, 82-107.

CALDWELL B. 1988, «Hayek’s transformation», *History of Political Economy*, 20, 4, 513-542.

CALDWELL B. 2004, *Hayek’s Challenge: An Intellectual Biography of F.A. Hayek*, Chicago, University of Chicago Press.

COLONNA M. and HAGEMANN H. 1994, *Money and Business Cycles, Volume 1 of* *the Economics of F.A. Hayek*, Aldershot, U.K., Edward Elgar.

COTTRELL A. 1994, «Hayek’s early cycle theory reexamined», *Cambridge Journal of Economics*, 18, 2, 197-212.

FLEETWOOD S. 1995, *Hayek's Political Economy: The Socio-economics of Order*, London, Routledge.

FOSS N. J. 1995, «More on ‘Hayek’s transformation’», *History of Political Economy*, 27, 2, 345-364.

GARRISON R. 2000, *Time and Money: The Macroeconomics of Capital Structure*, London, Routledge.

HABERLER G. 1986, «Reflections on Hayek’s business cycle theory», *Cato Journal*, 6, 2, 421-35.

HAYEK F. A. 1939 [1933], «Price expectations, monetary disturbances, and malinvestments», in HAYEK 1939, 135-156; originally a lecture delivered in Copenhagen on December 7, 1933 in the *Sozialökonomisk Samfund* andpublished as «Preiserwartungen, monetäre Störungen und Fehlinvestionen», *Nationaløkonomisk Tidsskrift*,73, 3, 176–191.

HAYEK F. A. 1939, *Profits, Interest and Investment*, London, Routledge.

HAYEK F. A. 1942, «Scientism and the study of society, part I», *Economica*, 9, 35, 267-291.

HAYEK F. A. 1948 [1937], «Economics and knowledge», in *Individualism and Economic Order*, Chicago, University of Chicago Press, 33-56; originally published in *Economica*,4, new series, 33-54.

HAYEK F. A. 1948 [1942], «The Ricardo effect», in *Individualism and Economic Order*, Chicago, University of Chicago Press, 220-254; originally published in *Economica*,9, 34 new series, 127-152.

HAYEK F. A. 1948 [1945], «The use of knowledge in society», in *Individualism and Economic Order*, Chicago, University of Chicago Press, 77-91; originally published in *American Economic Review*, XXXV, 519-30.

 HAYEK F. A. 1948 [1946], «The meaning of competition», in *Individualism and Economic Order*, Chicago, University of Chicago Press, 92-106; originally delivered as the Stafford Little Lecture at Princeton University on May 20, 1946.

HAYEK F. A. 1952, *The Sensory Order: An Inquiry into the Foundations of Theoretical Psychology*, Chicago, University of Chicago Press.

HAYEK F. A. 1967 [1955], «Degrees of explanation», in *Studies in Philosophy, Politics, and Economics*, Chicago, University of Chicago Press, 3-21; originally published in the *British Journal for the Philosophy of Science*, VI, 209-225.

HAYEK F. A. 1967 [1963], «Rules, perception and intelligibility», in *Studies in Philosophy, Politics, and Economics*, Chicago, University of Chicago Press, 43-65; originally published in the *Proceedings of the British Academy*, XLVIII, 321-344.

HAYEK F. A. 1977, «Foreword», in O’DRISCOLL 1977, *ix*-*x*.

HAYEK F. A. 1978 [1966], «Personal recollections of Keynes and the ‘Keynesian revolution’», in *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, Chicago, University of Chicago Press, 283-289; originally published in the *Oriental Economist*, 34, 663, 78-80.

HAYEK F. A. 1978 [1968a], «The primacy of the abstract», in *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, Chicago, University of Chicago Press, 35-49; originally published in A. KOESTLER and J.R. SMYTHIES 1968, *The Alpbach Symposium 1968: Beyond Reductionism: New Perspectives in the Life Sciences*, London, Hutchison.

HAYEK F. A. 1978b [1968b], «Competition as a discovery procedure», in *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, Chicago, University of Chicago Press, 179-196; originally published in «Kieler Vorträge», new series, 56, 1-20.

HAYEK F. A. 1978 [1970], «The errors of constructivism», in *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, Chicago, University of Chicago Press, 3-22; originally published as *Die Irrtümer des Konstruktivismus und die Grundlagen legitimer Kritik gesellschaftlicher Gebilde*, Munich, Wilhelm Fink.

HAYEK F. A. 1978 [1975], «The pretence of knowledge», in *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, Chicago, University of Chicago Press, 23-34; originally a lecture delivered in Stockholm, Sweden on December 11, 1974 upon receipt of The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel and published in the *Swedish Journal of Economics*, 77, 433-442.

HAYEK F. A. 1978 [1976], *The Denationalization of Money, 2nd edition*, London, Institute of Economic Affairs; originally published in October 1976, London, Institute of Economic Affairs.

HAYEK F. A. 1984 [1925], «The monetary policy of the United States after the recovery from the 1920 crisis», in R. McCLOUGHRY (ed) 1984, *Money, Capital, and Fluctuations: Early Essays*, Chicago, University of Chicago Press, 5-32; originally published as «Die Währungspolitik der Vereinigten Staaten seit der Überwindung der Krise von 1920», *Zeitschrift für Volkswirtschaft und Sozialpolitik*, new series, 5, 1 and 2, 25-63 and 254-317.

HAYEK F. A. 1984 [1928], «Intertemporal price equilibrium and movements in the value of money», in R. McCLOUGHRY (ed) 1984, *Money, Capital, and Fluctuations: Early Essays*, Chicago, University of Chicago Press, 71-117; originally published as «Das intertemporale Gleichgewichtssystem der Preise und die Bewegungen des ‘Geldwertes’» in *Weltwirtschaftliches Archiv*, 28, 33-76.

HAYEK F. A. 1984 [1929], «The exchange value of money: a review», in R. McCLOUGHRY (ed) 1984, *Money, Capital, and Fluctuations: Early Essays*, Chicago, University of Chicago Press, 190-194; a review of H. Neisser, 1928, *Der Tauschwert der Geldes*, Jena, Fischer; originally published in *Weltwirtschaftliches Archiv*, 29, 103-106.

HAYEK F. A. 1984 [1933], «On ‘neutral money’» in R. McCLOUGHRY (ed) 1984, *Money, Capital, and Fluctuations: Early Essays*, Chicago, University of Chicago Press, 159-162; originally published as «Über ‘neutrales Geld’» in *Zeitschrift für Nationolökonomie*, 4, 659.

HAYEK F. A. 1991 [1920], «Contributions to a theory of how consciousness develops», G. HEINZ (trans), Hoover Institution, Hayek Archives, box 92, folder 1.

HAYEK F. A. 1992 [1967], «Ernst Mach (1838-1916) and the social sciences in Vienna», in P. KLEIN (ed) 1992, *The Collected Works of F.A. Hayek, Volume 4, The Fortunes of Liberalism: Essays on Austrian Economics and the Ideal of Freedom*, London, Routledge, 172-175; originally published as «Diskussionsbemerkungen über Ernst Mach und das sozialwissenschaftliche Denken in Wien» in *Symposium aus Anslass des 50. Todestages von Ernst Mach*, Freiburg, Ernst Mach Institut.

HAYEK F. A. 1995 [1931], «Reflections on the pure theory of money of Mr. J.M. Keynes», in B. CALDWELL (ed) 1995, *The Collected Works of F.A. Hayek, Volume 9, Contra Keynes and Cambridge: Essays, Correspondence*, Chicago, University of Chicago Press, 121-146; originally published in *Economica*, 35, 22-44.

HAYEK F. A. 2007 [1941], *The Pure Theory of Capital*, in L. WHITE (ed) 2007, *The Collected Works of F.A. Hayek, Volume 12, The Pure Theory of Capital*, Chicago, University of Chicago Press; originally published in 1941, Chicago, University of Chicago Press.

HAYEK F. A. 2008 [1931, 1935], *Prices and Production*, in J. SALERNO (ed) 2008, *Prices and Production and Other Works*, Auburn, AL, Ludwig von Mises Institute, 189-329; originally published in 1931, London, Routledge; second (revised and enlarged) edition published in 1935, London, Routledge.

HAYEK F. A. 2008 [1933], *Monetary Theory and the Trade Cycle*, in J. SALERNO (ed) 2008, *Prices and Production and Other Works*, Auburn, AL, Ludwig von Mises Institute, 1-130; originally published in 1929 as *Geldtheorie und Konjunkturtheorie*, Vienna and Leipzig, Hölder-Pichler-Tempsky; first published in English in N. KALDOR and H. M. CROOME (trans) 1933, London, Jonathan Cape.

HAYEK F. A. 2012a, *Business Cycles, Part I*, in H. KLAUSINGER (ed) 2012, *The Collected Works of F.A. Hayek, Volume 7, Business Cycles, Part I*, Chicago, University of Chicago Press.

HAYEK F. A. 2012b, *Business Cycles, Part II*, in H. KLAUSINGER (ed) 2012, *The Collected Works of F.A. Hayek, Volume 8, Business Cycles, Part II*, Chicago, University of Chicago Press.

HAYEK F. A. 2014 [1961], «A new look at economic theory», in B. CALDWELL (ed) 2014, *The Collected Works of F.A. Hayek, Volume 15, The Market and Other Orders*, Chicago, University of Chicago Press, 373-426; originally a lecture delivered at the Thomas Jefferson Center for Studies in Political Economy at the University of Virginia on February 20, 1961.

HOOVER K. 2006, «Doctor Keynes: economic theory in a diagnostic science», in R. BACKHOUSE and B. BATEMAN (eds) 2006, *The Cambridge Companion to Keynes*, Cambridge, Cambridge University Press, 78-97.

HUTCHISON T.W. 1981, *The Politics and Philosophy of Economics: Marxians, Keynesians, and Austrians*, New York, New York University Press.

KLAUSINGER H. 2012a, «Introduction», in H. KLAUSINGER (ed) 2012, *The Collected Works of F.A. Hayek, Volume 7, Business Cycles, Part I*, Chicago, University of Chicago Press, 1-51.

KLAUSINGER H. 2012b, «Introduction», in H. KLAUSINGER (ed) 2012, *The Collected Works of F.A. Hayek, Volume 8, Business Cycles, Part II*, Chicago, University of Chicago Press, 1-43.

MYRDAL G. 1933, «Der Gleichgewichtsbegriff als Instrument des geldtheoretischen Analyse», in F.A. HAYEK (ed) 1933, *Beiträge zur Geldtheorie*, Vienna, Julius Springer, 361–487; English translation, 1939, *Monetary Equilibrium*, London, William Hodge.

O’DRISCOLL G. 1977, *Economics as a Coordination Problem*, Menlo Park, CA, Institute for Humane Studies.

REPAPIS C. 2011, «Hayek’s business cycle theory during the 1930s: a critical account of its development», *History of Political Economy*, 43, 4, 699-742.

STEELE G.R. 1992, «Hayek’s contribution to business cycle theory: a modern assessment», *History of Political Economy*, 24, 2, 477-491.

VAUGHN K. I. 1999, «Hayek’s implicit economics: rules and the problem of order», *Review of Austrian Economics*, 11, 1, 129-144.

VAUGHN K. I. 2013, «Hayek, equilibrium and the role of institutions in economic order», *Critical Review*, 25, 3-4, 473-496.

WHITE L. H. 1999a, «Hayek’s monetary theory and policy: a critical reconstruction», *Journal of Money, Credit, and Banking*, 31, 1, 109-120.

WHITE L. H. 1999b, «Why didn’t Hayek favor laissez-faire in banking?», *History of Political Economy*, 31, 4, 753-769.

WITT U. 1997, «The Hayekian puzzle: spontaneous order and the business cycle», *Scottish Journal of Political Economy*, 44, 1, 44- 58.

ZAPPIA C. 1999, «The assumption of perfect foresight and Hayek’s theory of knowledge», *Revue d’economie politique*, 109, 6, 833-846.

1. \* Previous iterations of the paper were presented in Fall 2013 at the Duke University Center for the History of Political Economy, the Workshop in Philosophy, Politics, and Economics at George Mason University, and the Colloquium on Market Institutions and Economic Processes at New York University. I am greatly indebted to these audiences and to Bruce Caldwell, Kevin Hoover, Roy Weintraub, Gerardo Serra, Alex Gill, Pete Boettke, Karen Vaughn, Solomon Stein, David Harper, Gene Callahan, and two anonymous referees, all of whom offered extensive criticisms and suggestions for improvement. Any remaining errors are, of course, unfortunately, my own. Address for correspondence: Scott Scheall (Lecturer at Arizona State University at the Polytechnic Campus), 230 Santa Catalina Hall, 7271 E. Sonoran Arroyo Mall, Mesa, AZ (U.S.A.) 85212; e-mail: scott.scheall@asu.edu [↑](#footnote-ref-1)
2. Hayek’s 1974 Nobel Prize lecture is entitled «The Pretence of Knowledge» (HAYEK 1978 [1975]) and it is the work in which he came closest to plainly stating the theory of fluctuations sketched here. Hayek «began a project on scientific methodology in the early 1940s, and he has moved further in this direction in his interests ever since. His Nobel Laureate lecture represents the culmination of this intellectual phase. Nowhere else has he more clearly spelled out his disagreement with macroeconomic thinking as fundamental and methodological» (O’DRISCOLL 1977, 140-141). [↑](#footnote-ref-2)
3. I use the terms *industrial fluctuations*, *business (trade) cycles*, and *episodes of* *disequilibrium* interchangeably in the present paper. Unfortunately, none of these phrases is ideal by itself, and the reader should be aware of technical differences between fluctuations / cycles and disequilibria. The former are typically conceived as instances of the latter in which many economic agents make the same kind of error at the same time. But, there can be – and, in fact, often are – disequilibria that are not such episodes of common error. However, the reader should also be aware that, though ‘cycle’-talk remains prevalent in discussions of these instances of agglomerated error, the economics profession long ago stopped theorizing about such events in terms of rhythmic *cycles* of regularly alternating periods of expansion and recession. In choosing to refer to «episodes of disequilibrium» in spite of the aforementioned distinction, I’m trying to talk about recessions and inflations without appearing committed to the notion that these alternate with sinusoidal regularity. In short, references to «episodes of disequilibrium» in the present paper should be read as shorthand for «possibly singular – i.e., non-sinusoidal – episodes of inflation and / or recession». The economics profession needs a new locution that better expresses the modern conception of these events as more often singular than wave-like. Until such an expression is developed, one has little choice but to adopt the inexact conventional parlance. That is, one must either talk about ‘cycles’ and ‘fluctuations’ even though, strictly speaking, the relevant phenomena are neither cyclical nor fluctuating, or talk about ‘disequilibria’ even though, strictly speaking, only a subset of these are instances of coincident mass error. [↑](#footnote-ref-3)
4. The current essay explicates a mere sketch of an epistemic theory of industrial fluctuations. It is no part of the argument that Hayek *intended* to construct an epistemic theory of the cycle; indeed, it is not obvious that Hayek would have unhesitatingly approved of the present synthesis of the relevant aspects of his work. For this reason, the shortcomings of this synthesis, such as they undoubtedly are, should be attributed to the author rather than to Hayek. [↑](#footnote-ref-4)
5. By this time, Hayek had developed, but not published, arguments of epistemological significance in non-economic contexts. In particular, Hayek’s (1991 [1920]) early theory of consciousness, written in 1920 (and still unpublished in English at the time of this writing), formed the basis for his much later *The Sensory Order* (HAYEK 1952), and bears many of the same epistemological implications. Hayek wrote on problems of epistemological import before he turned his pen to the problems of economics proper. [↑](#footnote-ref-5)
6. The earliest reference to the phrase «epistemic turn» that I’ve been able to uncover in the secondary literature appears in Birner (1999). [↑](#footnote-ref-6)
7. «Experience shows us that something of this sort does happen, since the empirical observation that prices tend to correspond to costs was the beginning of our science» (HAYEK 1948 [1937], 51). [↑](#footnote-ref-7)
8. Hayek’s epistemic conception of equilibrium is «subversive to conventional economics» (VAUGHN 2013, 478). [↑](#footnote-ref-8)
9. Knowledge of relevant prices is necessary but, of course, not sufficient for the adaptation of individual plans to changing circumstances. The operation of the tendency toward equilibrium also requires that market participants possess relevant scientific knowledge, knowledge of the given social- and legal-institutional context, as well as some knowledge of their fellow market participants and of other external circumstances (HAYEK 2014 [1961]; also see VAUGHN 1999). For a mostly sympathetic critique of Hayek’s theory of the «wisdom of prices», see Bronk (2013). I’m inclined to think that Bronk’s criticisms of Hayek’s account are a bit overstated. In particular, though it may require some supplementation, there’s nothing in Hayek’s epistemic treatment of the price system that contradicts the possibility of the sorts of endogenous price distortions that Bronk highlights. Moreover, there’s room to dispute the implication of Bronk’s argument that the price system in the lead-up to the 2008 financial crisis was mostly undistorted by political considerations. [↑](#footnote-ref-9)
10. «[I]t is not […] the progress of science which threatens our civilisation, but scientific error, based usually on the presumption of knowledge which we do not possess» (HAYEK 1978 [1970], 20). [↑](#footnote-ref-10)
11. It is important to remember that a freely-adjusting price system is not necessarily an instantaneously-adjusting or even a rapidly-adjusting price system. The standard against which the operation of the price system in the real world is to be judged is not the perfectly competitive system of the economist’s imagination, but an economic system *sans* such a mechanism (HAYEK 1948 [1946]; 2014 [1961]; 1978 [1968b], 184-186). The relevant question is not whether an unfettered price system can bring about a state of economic equilibrium – no system can – but whether the tendency toward the coordination of individuals’ economic plans is more or less effective under a system of freely-adjusting prices than «what we could achieve by any other method» (HAYEK 1978 [1968b], 185). [↑](#footnote-ref-11)
12. Hayek’s epistemology treats all knowledge as of one of two kinds, namely, either theoretical, i.e, knowledge of general rules, or empirical, i.e., knowledge of «the particular circumstances of time and place» (HAYEK 1948 [1945]). There is also, for Hayek (1952, 19), *tacit* knowledgeor knowledge with regard to which we may not be «explicitly aware», but which we «merely manifest…in the discriminations which we perform». However, this tacit knowledge does not constitute a third class of knowledge. Rather, it seems that, for Hayek, we can have either explicit or tacit knowledge of general rules (HAYEK 1967 [1963]; 1978 [1968a], 38-39), and either explicitly or only tacitly recognize the particular circumstances in which these general rules are relevant (HAYEK 1948 [1945], 79-83). [↑](#footnote-ref-12)
13. By itself – in the absence of the relevant data – an otherwise adequate theory yields what Hayek calls «pattern predictions», which, though they may permit the «cultivation» of the circumstances necessary for equilibrium, do not suffice for the kind of conscious and continuous administration of economic equilibrium to which policymakers often aspire (HAYEK 1967 [1955], 18-19). [↑](#footnote-ref-13)
14. «Hayek believed that his contemporaries were not always in touch with the ‘fictions’ and limitations inherent in general equilibrium theory and were prone to confuse statements about equilibrium with the theory of the approach to equilibrium» (O’DRISCOLL 1977, 19; also see ZAPPIA 1999). [↑](#footnote-ref-14)
15. This same criticism, a tenet of Hayek’s later thought on the value of equilibrium theorizing, applies equally to Hayek’s own early theory of the cycle, which is built on general equilibrium assumptions. [↑](#footnote-ref-15)
16. Whether this posit can also be attributed to Keynes himself is at least doubtable. Indeed, there are many respects in which Keynes’ conception of economic phenomena as complex is remarkably similar to Hayek’s. See Hoover (2006, 92): «Keynes’s vision of the economy is that it is complex and our knowledge of it is bound to be incomplete and frequently qualitative only […] Keynes would have [been skeptical of] the ‘Keynesian’ efforts to use macroeconometric models to ‘fine-tune’ the economy». [↑](#footnote-ref-16)
17. «[O]ur modern economic system […] rests on the use of knowledge (and of skills in obtaining relevant information) which no one possesses in its entirety […] Certainly, we ought not to succumb to the false belief, or delusion, that we can replace it with a different kind of order, which presupposes that all this knowledge can be concentrated in a central brain, or group of brains of any practicable size» (HAYEK 1978 [1970], 13). [↑](#footnote-ref-17)
18. «[*W*]*herever* competition can be rationally justified, it is on the ground that we do *not* know in advance the facts that determine the actions of competitors […] [C]ompetition is valuable *only* because, and so far as, its results are unpredictable and on the whole different from those anyone has, or could have, deliberately aimed at» (HAYEK 1978 [1968b], 179-180; italics in the original). [↑](#footnote-ref-18)
19. The policymaker’s ignorance of the relevant theoretical and empirical considerations is typically denied by those «who have hoped that our increasing power of prediction and control, generally regarded as the characteristic result of scientific advance, applied to the processes of society, would soon enable us to mould society entirely to our liking» (HAYEK 1978 [1975], 30). Moreover, the attitude of the public toward these same possibilities exacerbates the politician’s penchant for denying her manifest ignorance: «so long as the public expects more there will always be some who will pretend, and perhaps honestly believe, that they can do more to meet popular demands than is really in their power» (*Ibidem*, 31). [↑](#footnote-ref-19)
20. According to Hayek, who is often credited with having coined the term (but who actually attributed it to Otto Neurath (HAYEK [1967] 1992, 173-4)), scientism is «an attitude which is decidedly unscientific in the true sense of the word, since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed. The scientistic as distinguished from the scientific view is not an unprejudiced but a very prejudiced approach which, before it has considered its subject, claims to know what is the most appropriate way of investigating it» (HAYEK 1942, 269). [↑](#footnote-ref-20)
21. «[T]he chief guidance which prices offer is […] *what to do*» (HAYEK 1978 [1968b], 187; italics in the original). Hayek long argued against the causal import of economic aggregates. In his original review of Keynes’ *Treatise of Money*, Hayek (1995 [1931], 128) argued that «Mr. Keynes’s aggregates conceal the most fundamental mechanisms of change». His view remained unchanged 35 years later: «the artificial simplification necessary for macro-theory […] tends to conceal nearly all that really matters» (HAYEK 1978 [1966], 289, also 285-286). On Hayek’s attitude toward aggregation, see Repapis (2011, 706-707). [↑](#footnote-ref-21)
22. «[I]n the social fields the erroneous belief that the exercise of some power would have beneficial consequences is likely to lead to a new power to coerce other men being conferred on some authority. Even if such power is not in itself bad, its exercise is likely to impede the functioning of those spontaneous ordering forces by which […] man is in fact assisted in the pursuit of his aims» (HAYEK 1978 [1975], 34). [↑](#footnote-ref-22)
23. If his foreword to O’Driscoll’s book is to be believed, Hayek (1977) himself was persuaded by O’Driscoll’s interpretation of his work on equilibrium and prices and their relation to his early explanation of the cycle. It seems clear that these epistemic considerations did not emerge in «Economics and Knowledge» *ex nihilo* and are indeed connected with the development of the early theory of industrial fluctuations. Hayek’s essay «Price Expectations, Monetary Disturbances, and Malinvestments» both is part of the early project and emphasizes the relevant epistemic considerations: «[E]xpectations existing at a particular moment will to a large extent be based on prices existing at that moment and […] we can conceive of constellations of such prices which will create expectations inevitably doomed to disappointment, and of other constellations which do not bear the germ of such disappointments and which create expectations which—at least if there are no unforeseen changes in external circumstances—may be in harmony with the actual course of events. This consideration appears to me to provide a useful starting point for further developments of the theory of industrial fluctuations» Hayek (1939 [1933], 140-141). As O’Driscoll (1977, 102) puts the point, «Hayek’s [early business cycle] theory is about the inconsistency of plans […] This point should have received wider recognition, especially after Hayek’s work on the role of prices in communicating information for the coordination of economic activity. In fact, it was in [the just-cited “Price Expectations”] lecture delivered in 1933 on cyclical fluctuations that Hayek first presented the thesis of his later “Economics and Knowledge”». On this latter point, also see Foss (1995), Zappia (1999), and Repapis (2011). Indeed, there is some reason to believe that Hayek’s conception of the epistemic function of the price system originated even earlier than 1933: see Hayek (1984 [1928]) and Repapis (2011, 704 and 711-712). [↑](#footnote-ref-23)
24. There’s no need to recapitulate Hayek’s early account at length in the present context. This ground is well covered elsewhere. Hayek’s original writings on the cycle have been anthologized in Hayek (2012a and 2012b). Vital sources in the extensive secondary literature include O’Driscoll (1977), Haberler (1986), Steele (1992), Cottrell (1994), Colonna and Hageman (1994), Garrison (2000), and Klausinger (2012a and 2012b). [↑](#footnote-ref-24)
25. See White (1999a, 110): «Hayek’s early work, up to and including *Prices and Production*,aimed at providing a theoretically well-grounded critique of the dominant monetary policy prescription of the day […] The error of the price-stabilization program was not just an abstract theoretical issue. Hayek believed that the program was inspiring the Bank of England and the U.S. Federal Reserve System between 1925 and 1929 in a harmful and ultimately futile joint effort at monetary expansion to prevent the fall in prices that should have accompanied the outflow of gold from Britain and the rapid growth of real output in the U.S. economy. Hayek subsequently considered the deep crisis of 1929-32 to have been the inevitable reaction». [↑](#footnote-ref-25)
26. Hayek (1978 [1976]) came around to the price-level stabilization argument, albeit with a typically idiosyncratic twist. In particular, «[h]e advocated allowing private firms to issue fiat-type monies chiefly on the grounds that a system of competitive issuers would more effectively achieve price-level stability than would a central bank» (WHITE 1999a, 117). In other words, Hayek came to believe that the price level might be an effective tool for the maintenance of economic order in the context of competitive issuers of money, where individual users of money would be free to search for the issuers of the most reliable circulating medium, but that the price level remained an inadequate tool when wielded by a central authority with a monopoly on the issuance of money. This said, as White (*Ibidem*) points out, Hayek discussed price-level stabilization as perhaps the most *practicable* policy norm as early as 1933 (HAYEK 1984 [1933]), though, for the reasons emphasized elsewhere in his early business cycle work, stabilization was neither necessary nor sufficient to preserve an economy in equilibrium. In any case, though Hayek modified his view regarding stabilization schemes, it is interesting for our purposes to note that he apparently did so for *epistemic* reasons: Hayek (1978 [1976], 73) came to believe that his proposal for the issuance of fiat monies by private firms would facilitate «foresight, calculation, and accounting». [↑](#footnote-ref-26)
27. «[N]eutrality of money was a policy goal in a world in which these assumptions did not and could not apply» (O’DRISCOLL 1977, 55). [↑](#footnote-ref-27)
28. White (1999b) argues that the alleged inevitability of this case is highly dubious. Be this as it may, we are not interested here in the factual correctness of Hayek’s early theory, but in the central causal role it assigns to human action under a veil of ignorance. [↑](#footnote-ref-28)
29. Also see Hayek (1984 [1929], 192). [↑](#footnote-ref-29)
30. Technically, this purportedly inevitable recurrence of credit creation is a consequence of ignorance *plus* the profit motive. That is, bankers are incentivized by profit considerations to push lending at least to the limits of their reserves (HAYEK 2008 [1933], 87-94). However, the ignorance of bankers is the more fundamental point: if Hayek’s argument is sound, then with or without the profit motive – i.e., even in a world in which bankers are motivated entirely by unadulterated altruism – so long as the currency is elastic, it is impossible for epistemic reasons to realize equilibrium between voluntary savings and the demand for loans (HAYEK 2008 [1933], 80). Witt (1997, 48) argues that, for Hayek, «credit expansion is a matter of competitive necessity». I think it’s closer to the truth to say that Hayek makes credit expansion a matter of competitive *convenience*,but of *epistemic* necessity. [↑](#footnote-ref-30)
31. More exactly, since Hayek’s early theory of the cycle is built on the assumptions of general equilibrium theory, the possibility that ignorance-based actions outside of loan markets might induce price distortions is simply assumed away. However, because we’re ignoring these methodological and theoretical details, the latter fact is beside the point in the present context. [↑](#footnote-ref-31)
32. On these latter questions, see Caldwell (1998, 2004) and the relevant literature cited therein. The tradition of distinguishing multiple ‘Hayeks’ goes back to Hutchison (1981), who distinguished between a «Hayek I», who, according to Hutchison, maintained methodological «[a]ffinities with the ideas of Austrian predecessors, notably with those of his ‘mentor’ [Ludwig von] Mises», and a «Hayek II», who, Hutchison (1981, 210–219) argued, was an empiricist influenced by Karl Popper. Caldwell (1998, 2004) rejected Hutchison’s particular taxonomy, but not the fruitfulness of taxonomizing multiple Hayeks. Fleetwood (1995) goes so far as to distinguish three different ‘Hayeks’. [↑](#footnote-ref-32)