

Naturalizing the market on the road to revisionism: Bruce Caldwell's *Hayek's challenge* and the challenge of Hayek interpretation

PHILIP MIROWSKI*

Department of Economics and Policy Studies, University of Notre Dame

Abstract: Bruce Caldwell's *Hayek's Challenge* should be welcomed as the first serious book on one of the most important thinkers of the twentieth century. However, this review begins by pointing out a number of curious omissions and silences concerning Hayek's career in the book. We propose that the key to understanding the turns and reversals in his thought lay in his politics, and not as Caldwell has it, in some abstract philosophical doctrines. Central to that thesis is Hayek's fostering the development of Neoliberalism through such institutional structures as the Mont Pèlerin Society.

Friedrich Hayek (1899–1992) was one of the most important figures in twentieth century economics and politics, and so it is with no small sense of gratitude and relief that we greet the appearance of Bruce Caldwell's *Hayek's Challenge* (2004) [henceforth cited as HC]. This is the book we had been waiting for, one that we could in good conscience give to our students, our colleagues and friends in order to provide them with a solid grounding in what Hayek was all about. Caldwell's gloss is the result of intense immersion in the archives and struggle with all the relevant texts – a forbidding mass, which some of us have known for some time – which were by no means transparently open to comprehension and engagement. For example, I personally have watched some of the UCLA Oral History interview tapes that Bruce mentions in his Introduction (HC: 6), and had despaired of figuring out what to make of the autobiographical account proffered therein. The situation has been further occluded by the fact that Hayek had become the object of glowing hagiography for some and fervid damnation by others, so consultation of the secondary literature had become akin

*Correspondence to: Department of Economics and Policy Studies, University of Notre Dame. Email: mirowski.1@nd.edu

I should like to thank both Bruce Caldwell and Wade Hands for their reactions, without implicating them in anything inscribed here. Bruce and I have been fruitfully disputing interpretations of Hayek for some time now. Intellectual compadres are hard to find in the modern information society. Without their help and forbearance, I think I would end up just another geriatric blogger: a real danger when it comes to Hayek commentary.

to tiptoeing through a minefield. Caldwell's book broaches the possibility that the situation might be rectified through a calmer and more measured consideration of a wider range of evidence; and that meditation upon Hayek's legacy may even help us understand our own current predicament better. His conversational style has rendered the book more friendly and accessible to a wider audience: few other writers of similar 'contrarian interests' (HC: 7) could have crafted such a hospitable intellectual atmosphere from within which to conduct an investigation into issues so charged with passion. I came away from the book with the impression that it managed to come off as 'medium cool', a virtue that may register favorably upon persons of a certain age cohort and shared heritage.

Of course, a price must be paid for such amiable open-mindedness; and here I think the price starts to be exacted with the selection of a very narrow range of writers who are upbraided for their misrepresentations of Hayek's intentions and significance. For anyone aware of his background and previous work, it would be expected that Caldwell's attention would just naturally tend to become more engaged with his philosophical interlocutors than by the ranks of the more-or-less orthodox economists; but there abides a distinct pattern in this text, in that a particular set of philosophers come in for direct reprimand – say, John Gray, Erik Angner, and Thomas Uebel – whereas a whole raft of economists who badly mangle Hayek's legacy are treated with kid gloves: for instance Louis Makowski and Joseph Ostroy (2001) (HC: 339), Vernon Smith (1982, 2003) (HC: 335), Robert Lucas (HC: 229) and Oskar Morgenstern (HC: 212).¹ But then I began to really worry when, in chapter 14 and the 'Epilogue', Bruce testifies to his own belief in something called 'basic economic reasoning', which is glossed by suggesting 'an economist is someone who knows demand curves slope downwards' (HC: 381), and, furthermore, it is hinted that Hayek believed something like this as well. Given that I persist unwillingly to concede I am not an economist, even though I do not subscribe to that particular tenet of the Creed, I began to really wonder about the frame tale that organizes the rest of this account. Were we being bequeathed a Hayek rendered more palatable for orthodox consumption? On page 336, Caldwell asserts that Hayek's 'central question' was the following:

How is it that, in a world of many interacting human beings, each possessing only limited knowledge, we are generally able to obtain outcomes that, *in our models*, require agents with full knowledge and perfect rationality?

Now, if this were a gloss on the career of Vernon Smith, I could readily believe it, but *Friedrich Hayek*? It was that nagging 'in our models' that stuck in

¹ Bruce has explained to me in personal correspondence that the existing roster of targets of critique were in part a function of the request by the University of Chicago Press to cut roughly 10K words from an earlier draft. So let it be acknowledged that here I am describing the reactions of a reader coming to the book innocent of such knowledge, as most readers will.

my crawl: it had seemed to me that Hayek's commitment to formal neoclassical price theory had always been rather ambivalent, and with good reason, given his objectives. In any event, True Blue Demand Curves may constitute the mainstay of introductory textbooks, but one could seriously dispute whether they play any role at all in contemporary 'high theory'. Once I had lighted upon what seemed to me a disturbing anomaly, I began to think I noticed a certain pattern to events, ideas and interactions in Hayek's life that I felt were being neglected, or at minimum not sufficiently appreciated in this book. In particular, I felt the suspicion flower within that the intimate interplay of historically situated politics and images of science in the life of Hayek was not being accorded its due.² In particular, I find it almost inexplicable that Hayek's role in the founding of the Mont Pèlerin Society and convening and contributing to the thought collective which was responsible for the most important development in political theory of recent decades, viz., Neoliberalism, was given such short shrift in HC as to essentially occupy an epsilon of attention in the book.³ In other words, the role of Hayek in institution-building and institutional theorizing stands as a glaring omission in an otherwise rich intellectual biography, something that would concern readers of this journal. The rest of this paper tries to argue, *sans* benefit of the decade in the archives that Bruce Caldwell has under his belt, that the documentary materials could potentially be organized along a different, rival, frame tale. Since I plead guilty to the accusations of hubris, if not the impudence, that such a proposal invites, especially since I would never call myself a Hayek specialist, I offer the following in the spirit of (yes!) conjecture and refutation. I would be very interested to learn what Bruce would say about my alternative sketch of an intellectual biography of Friedrich Hayek.

Bruce has said that he intended the original title to be *Hayek's Challenge: F.A. Hayek and the Limits of Social Science*, but that was vetoed at the Chicago editorial office. He reveals his own position towards the middle of the volume: 'In an age of scientism, the hardest task of reason is to understand its own limitations. . . [Hayek] remained to the end a believer in science' [HC: 252, 260]. While this might indeed stand as a précis of Bruce's book, I shall argue it ends up being a poor representation of Hayek the historical personage. The question, after all, is how our paltry capacity for reason can begin to make sense of something so multiform as a life, or to engage in a little Hayekian terminology, collapse a cosmos to a taxis. This review is concerned not so much with the overweening hubris of the modern social scientist, as the pitfalls of writing an

² Of course, everyone reads texts through their own spectacles, and some readers will loudly complain I am doing that here. I plead guilty, but what motivates this paper is that I came to this book thinking Caldwell would do something similar, and I was nonplussed that he chose to avoid it.

³ One need only consult the literature on the history of the MPS and Neoliberalism to realize Hayek was the pivotal actor in this arena (Cockett, 1995; Hartwell, 1995; Plehwe and Walpen, 2005; Harvey, 2005).

individualist-oriented intellectual biography about someone who can be better understood as a key player within the political and social networks of his era.

1. The cunning of unreason

Trying to understand what seemed a whole succession of pulled punches while I was reading *Hayek's Challenge*, I began to wonder exactly what sort of *genre* it was that Bruce was contriving to construct. I know he is well aware that when you try to please everyone you end up pleasing almost no one; some species of discipline must undergird a work like this one, conditioning authorial choices as what should be highlighted and what to omit or elide. Striving to capture the essence of a particular human being is an endless task, which is why most of us give up on the chore so early in the game; usually we rest satisfied in propounding the significance of a person's life activities for some well-defined artificial subset of purposes.

I think readers should be forewarned this is not the elaborate kind of intellectual *biography* that one savors in Robert Skidelsky's life of Keynes, Ray Monk's life of Wittgenstein, or Adrian Desmond and James Moore's life of Darwin. Hayek the person comes off a little listless in this text, in part because he does not weave and bob through the dense thickets of contextualized history that the figures of Keynes *et al.* negotiate in the above biographies. Indeed, one gets the (misleading) impression that Hayek never engaged in the baroque and sullied world of political activity from HC. So then, maybe this was intended as an *intellectual* biography instead, chiefly an account of the life of a mind happening largely in an abstract space where ideas collide, collapse and recombine. That would be fine for some purposes, except that whole swathes of Hayek's writings are then given rather short shrift herein, such as the business cycle theory, the *Pure Theory of Capital*, the 'Ricardo Effect', his work on the history of British classical economics, the relationship to Popper's work, the role of the corporation in society, the denationalization of money, the optimal organization of scientific inquiry, the attempt to alter the referent and content of the term 'democracy', and the denial of the cogency of the very concept of social justice. Indeed, I will argue in subsequent sections that major themes characteristic of certain phases of Hayek's career are downplayed to the point of deliquescence in this book. Yet as Caldwell informs us towards the middle of the volume, it was not his intention to compose a comprehensive intellectual biography (HC: 177fn). Indeed, there he confesses to downsizing any consideration of Hayek's capital theory because it had little salience for the later Hayek, and it might be considered to actually contradict some of his later doctrines. While I would not dispute either observation, these admissions raise the question of whether Caldwell seeks to present a 'Hayek' that was more tidy and coherent and internally consistent in his research than was the actual historical personage – this even though Caldwell has

been well known as advocate of the thesis of ‘Hayek’s transformation’ in the 1930s.

Again, I would wish to stress that a biographer cannot help but infuse a bit of consistency into any intellectual figure worth the effort to reconstruct – it is nearly unavoidable, given something adhesive must hold the narrative together, and only the dull and inconsequential remain doggedly consistent throughout their careers.⁴ But when the biographer fortifies their subject with a little backbone, the source is usually the bone they have to pick with some of their own contemporaries. So whence originates the stiffening agent in Caldwell’s compendium? My conjecture is that Caldwell ended up with three objectives in HC: (1) to reconfigure the internal canon of the Austrian school of economics; (2), to produce a Hayek who would be considered a precursor to a particular subset of *avant-garde* orthodox economics in contemporary America, perhaps associated with Vernon Smith-style experimental economics, and the prognostications on complexity found at the Santa Fe Institute (HC: 362); and (3), to show that Hayek somehow ‘explains’ the trajectory of the postwar neoclassical orthodoxy, both in its successes and its failures, because Hayek has presciently identified some (ontological?) limits to social science.

I should think the first objective should not be too controversial: after all, Caldwell spends the first 130 pages constructing his genealogy of the Austrian school before he ever gets to Hayek. Among other things, Caldwell is concerned there to establish the school’s anti-positivist credentials; but this (curiously enough) seldom gets much further than the precept of the theory-ladenness of observation. The modern movement of historians of philosophy concerned with the logical empiricist movement paints a more dizzying and kaleidoscopic picture.⁵ There is some difficulty in making such a diverse cast of characters such as Menger, Wieser, Böhm-Bawerk, Weber, Schumpeter, Mises and a host of others agree on much of anything, but Caldwell does us a service in summarizing the Viennese milieu. In this book, Hayek tends to perform the function of litmus test: what did he take from each of them, and what did he cast aside? (The question of when he did so, and the extent of his fidelity to these enrollments, gets rather less attention.) The problem which is left hanging from a structural point of view is why we should subsequently accredit the Austrians as a coherent school of economics, and by implication, what constitutes the ‘true’ heritage bequeathed to the modern Austrian school?

If this biography were merely an expression of an in-house Austrian dispute over their bequest, then HC would not be nearly the significant work that

4 Another reason to renounce neoclassical choice theory, as if the existing bill of indictment were not long enough.

5 I am perplexed that Bruce did not make better use of the phenomenon of philosophers writing real history of thought (finally!) with regard to the Vienna Circle (Giere and Richardson, 1996; Uebel, 1995; Stadler, 2001; Hardcastle and Richardson, 2003; Mirowski, 2004).

it actually is. I conjecture that Caldwell has larger ambitions, having to do with shaping the revival of Hayekian themes within the parts of the economics profession that would tend to identify themselves to a greater or lesser degree with the orthodox neoclassical program. This is a much more treacherous project, not the least because of the ingrained hostility of the orthodoxy to serious history of economic thought; but also because modern economists are contemptuous of the idea that their prognostications have any limits whatsoever. Who should admit to being the ‘positivists’ in modern economics, by contrast with *fin de siècle* Vienna? But further, the most substantial obstacle to this sort of integration of ‘Hayek’s Challenge’ into the modern orthodoxy is the range of sheer incongruities it might involve. For instance, how was it that the advocates of the *a priori* truth of subjectivist economics, not to mention hostility to inductive inference from the facts of economic experience, managed to become a major inspiration for the construction of a lab-based ‘experimental economics’? How did the enemies of ‘scientism’ come to embrace a modern gaggle of physicists and evolutionists, such as those at the Santa Fe Institute, seeking to import more up-to-date physical models into economics?⁶ How did one of the patron saints of the ineffability of human knowledge come to be a cultural icon of the ‘information economy’ and its fundamental thingification of knowledge? And, although Hayek’s *Sensory Order* was initially taken as inspirational by some elements of the early cybernetics movement, how could his precept that the brain would never understand itself be reconciled with the more explicitly computational orientation of so much of the modern ‘cognitive turn’ in economics? Indeed, I would argue that Caldwell’s book circumnavigates these incongruities more than it illuminates them, and treads lightly over the major reason why Hayek has enjoyed the revival he has in the last few decades, viz., his politics.

My conjecture is that Hayek resonates with many in the contemporary economics profession because he provided not one, but at least *three* distinct justifications for the supposed superiority of market organization over its left-wing alternatives. These individual justifications are strongly conflicting, if not baldly inconsistent, and have not heretofore been juxtaposed in such a way as to critically interrogate the coherence of Hayek’s own quest; and it is this situation that I believe is not adequately addressed in Caldwell’s book. Instead, Caldwell opts to present Hayek’s intellectual journey as if it were substantially coherent, and to play down the dominant role of his relatively invariant political stance in his otherwise nonlinear trajectory through various philosophical stances and intellectual disciplines. One consequence (whether Caldwell consciously intended it or not) is that the modern economic orthodoxy could be cajoled to feel more comfortable with the Hayek portrayed in this book as a precursor. By contrast, I would argue that in the past it was precisely his implacable politics embedded within his larger conceptual inconsistency which has served to sustain

⁶ We here avoid the question as to whether the infatuation is mutual.

his popularity: economists in particular have felt free to pick and choose whatever potted version of Hayek's legacy they found convenient, without worrying about the ways in which his other writings might create severe problems for their own enthusiasms. Hayek himself was partly at fault in fostering this relatively instrumentalist attitude towards what he, after all, considered the most consequential issue facing intellectuals, namely the refutation of socialist ideals. As he reminisced in his inaugural lecture at Freiburg, students at the LSE in the 1930s were surprised to learn he did not share their socialist views, and then stated, 'Today I ask myself whether, rather than being proud of my impartiality, I ought not to have a bad conscience when I discovered how successfully I had hidden the presuppositions which had guided me at least in the choice of problems I thought to be important' (1967: 254).

It is important to keep in mind Hayek was never visibly conflicted about discrediting and demolishing socialism; the open issue was *how best to do it*. Hayek changed his mind over time on this key issue, hence the rather nonlinear trajectory through the world of ideas over the course of his lifetime. Nevertheless, he did finally adhere to the principle that one thinker alone would never have a prayer of achieving the objective, and that this meant that he must innovate what seemed a gaggle of oxymorons: to convene a set of consciously wrought organizations to promote the notion of spontaneous organization, to start a club of 'organized individualists', and to forge a neoliberal doctrine that made pact with state power to 'limit' the state. It was the set of institutions which encapsulated these oxymoronic insights which constitutes Hayek's enduring bequest to economics; and not some grand philosophical system concerning the inherent limits of social science, about which most economists remain blissfully ignorant, and anyway would denounce if they knew of them.

In my own view, one of the tasks of intellectual biography should be to unearth the hidden presuppositions beneath the published texts, in the interests of illuminating our own predicaments and concerns, not to render contemporary orthodoxies more secure in their convictions, but rather to probe the foundations of our supposed common knowledge. I worry that Caldwell himself is sometimes so immersed in neoliberal doctrine that he ends up attempting to recount *Hamlet* without once visiting Elsinore. The castle is not to be found in Vienna; rather it transmigrated between the shores of Lakes Lemman and Michigan. In what follows, I personally find it very difficult to imagine that Hayek was ever as 'impartial' as Caldwell portends; rather, I would urge the framing of his problem instead as a quest for intellectual legitimation of what had been from early days a visceral disdain. One of the most pivotal points was the root causes of his hostility to what he considered to be the threat of socialist ideas: his problem was to become clearer on the exact character of the threat.

Caldwell (HC: 141) suggests that Hayek started out with sympathies for the Left, but that Marxism poisoned the wells. Without being very explicit, he also suggests that the anti-socialist turn came from his association with Mises.

The portrait thus conveyed is that of someone who began life with socialist sympathies, but was weaned off them by reasoned arguments. The problem with treating the issue in this fashion is that Hayek's *published* work almost never engaged with Marxian economics on an analytical level; and, further, that his later writings bore little in common with the Misesian condemnations of the irrationality of socialism. Consequently, I think the story might be told in a reverse manner: here, our protagonist starts out feeling distinctly queasy about a political doctrine, which is held in high esteem by many of his contemporaries; and the search for the intellectual underpinnings of his squeamishness ends up becoming a lifelong quest, which only supplies real relief relatively late in life. Along the way, he is distressed to find that a number of his supposed allies, the neoclassical economists, comprise a fifth column within the anti-socialist camp. As time goes on, he is informed that the *idée fixe* that has come to dominate his intellectual career renders him 'not an economist'; but in the forced choice between 'economic legitimacy' and the personal quest, it turns out to be no contest which one will get jettisoned first. But vindication comes in the format of building a different sort of intellectual formation, one which did not depend for its power upon postwar disciplinary professions like 'economics' or recourse to existing institutions of scientific discourse.

I hope the reader of what follows understands that I can sympathize with *this* protagonist's quandary at a very basic level, even if I might not subscribe to his actual arguments.

2. The three phases of Friedrich H

I will explore the possibility that Hayek's intellectual career can more adequately be organized around his visceral hostility to socialism and the need to fortify it with intellectual underpinnings. The irony in this story is that, in his most intellectually productive period, Hayek was demonstrably unsuccessful in this quest; moreover, I believe that he himself realized this, and that this realization spurred him onwards to further efforts and ever-wider departures from his previous disciplinary identity as an 'economist'. This fact alone, that – contrary to their reputations – economists make for lousy apologists, would itself serve as a deterrent in presenting a portrait of Hayek sweetly amenable to the modern economic orthodoxy.

To a first approximation, I would suggest Hayek's intellectual career could be divided up into three relatively discrete periods: (i) the Normal Science Austrian Economist; (ii) the Abuse of Reason project; and (iii) the Evolutionary Proto-cyberneticist.

Normal Science Austrian Economist

Without becoming embroiled in the question of what legitimately counted as Austrian economics circa 1925, I would suggest that Hayek was an exemplary

member of this social group. He was deeply concerned with macroeconomic issues of inflation and unemployment, as were many who lived through the economic cataclysms of *Mitteleuropa* of the 1920s. He attempted to address those issues through what the Austrian school believed was one of its most cherished doctrines, the relationship between capital in its temporal existence and the operation of markets. In a way that was readily recognizable, Hayek modeled capital as a ‘substance’ which was highly constrained in how it might flow through time; the temporal obstacles and bottlenecks would create problems for the suitable distribution and investment of resources in a manner which would, in a well-functioning world, absorb the available workforce. While individual investors might make ‘mistakes’, their cumulative effect was deemed transitory; the real villains were governments and their monetary authorities, who through the ill-advised expansion of credit forced capital into unsustainable channels. I believe it is important to note that already in the 1920s, Hayek was pursuing a research program which bore as its major implication the essential inability of governments to successfully plan and control economies; in other words, the over-arching heuristic of Hayek’s quest was already situated firmly in place. I am surprised that Caldwell opts to play down this facet of Hayek’s career, for it indicates that our protagonist was already casting about for an intellectual justification for his hostility to socialism.

Whatever the motives for developing the Austrian program in this direction in the 1920s, and irrespective of the fact that it was responsible for the bestowal of the economics chair at the LSE to Hayek, I think it fair to say that this program was on its last legs by the middle of the 1930s. This has recently been depicted in nice detail by (Klausinger, 2006). As he writes, ‘at the end of the period in question, there appears to have been a split among the Austrian economists, not so much in their continuing support for a liberal economic policy, but more so with regard to the theoretical framework from which such a defense of liberalism could be derived’ (pp. 655–6). The endless wrangling in the secondary literature about why Hayek lost out to Keynes in the British context essentially overlooks this fact. Models of capital substances sluiced through different time-phased pipes in velocities disproportional to the equilibrium requirements of the economy were coming to seem more and more contrived, especially as the grave and widespread disruption of the Great Depression became ever more apparent.⁷ But even more importantly, it had lost any resonance with contemporary notions of ‘science’ then prevalent in either Austria or England. Substance notions of value were on the wane, physical notions of dynamics were not accessed, and Austrian models were not expressed in the conventional scientific idiom of the mathematics of classical mechanics or hydrodynamics. Hayek and his comrades could prattle on and on about ‘equilibrium’ all they liked, but increasingly they looked like

⁷ While Caldwell does concede this point (HC: 163), it seems to me he is unwilling to lend it the significance which we propose here.

imposters in the larger culture. And worse, the supposed ‘home base’ in Vienna had been vacated of allies by 1934 (Klausinger, 2006: 622). On many fronts, but particularly as a bulwark against socialism, Austrian normal science was coming up a loser in the mid-1930s sweepstakes for intellectual legitimacy.

This is where the significance of Oskar Morgenstern comes into play for my revisionist narrative. I believe that Morgenstern was the first Austrian economist to realize this impasse, and to innovate a viable escape from it; and by so doing, he paved the way for Hayek to follow later on.⁸ As early as the late 1920s, Morgenstern argued that the central topic of Austrian economics should be the epistemology of the economic agent over time, and that once the analyst would come to acknowledge the limits to reason and prediction encapsulated in the doctrines of modern logic, they would come to abjure the portrait of cognition encapsulated within orthodox economics. Moreover, Morgenstern insisted upon an *interactive* epistemology, and not the crude Crusoe accounts of the isolated monads then prevalent in philosophical circles. I believe Morgenstern does not get the credit he deserves in Caldwell’s account because he creates all sorts of problems for the triple objectives we identified in our previous section: Morgenstern cannot be dragooned as a team player in Caldwell’s reconfiguration of the Austrian canon, nor does he fit especially well into the attempt to recruit the modern orthodoxy to an appreciation for Hayek, nor is he a stalking-horse for an anti-positivist movement.

The spanner in the works is the historical fact that Hayek refused to acknowledge Morgenstern’s pioneering efforts, I conjecture in part, because he could not be made to fit the overall heuristic of hostility to socialism. Worse still, Morgenstern rapidly decided that Hayek’s ‘transformation’ was a badly garbled realization of his own conception of the future of Austrian economics. Both facts can be illustrated by passages from Morgenstern’s unpublished diaries:⁹

[12 January 1945]: Yesterday a discussion at the Weyl’s, with also Lutz, Neumanns. Theme: Hayek’s ‘Road to Serfdom’. It was just verbal and I found the book unbearable, blurred and full of contradictions. But it was very neat.

[19 April 1945] Hayek is here for ten days. I gave a party. He is clearly unchanged; It is a pity he is in the hands of [üblen Gesellschaft]. I heard him in a colloquium after a dinner. I can’t stand it any longer. Neither him, nor his opponents; that’s no science. I could predict all the answers.

⁸ Caldwell does notice that Morgenstern may have played some role in ‘Hayek’s Transformation’, but still accords it minor status (HC: 211–212). Morgenstern’s significance far outweighed his critique of ‘equilibrium’; he effectively set the tone for the subsequent cognitive turn in Austrian economics.

⁹ Morgenstern Papers, Duke University Archives. Entries are here identified by date. Translations from the German are the work of Peter-Wim Zuidhof. Klausinger also quotes from a letter of Morgenstern to Frank Knight dated 4 January 1935: ‘I myself am very critical of the orthodox opinions of the Viennese school’ (2006: 625).

[22 May 1946] Need to write another time more, especially about ‘Schmonzologie’ (Johnny [von Neumann] about Hayek’s presentation). . .

[23 May 1946] in the evening Hayek delivered the Stafford Little Lecture about competition. Weak, literary, and scholastic. Although there were 200 people in the Frick Auditorium, it was no success . . . H is enormously self-centered; what is done by others doesn’t interest him. He never started reading the ‘Games’, but he is ‘against it’. What he said about epistemological questions was very primitive.

[26 May 1946] Once, Utopia was an economic proposition. Nowadays these speculations are only heard in the natural sciences. What can be done there in 50 years, can only be dreamt of by economists. The prospect of wealth is very good, even within reach. It makes political problems the thorn, or the enslavement, as Hayek thinks of it, etc.

A survey which took Morgenstern more concertedly into account might raise the issue of whether Hayek really deserves his reputation as such a stunning innovator in the area of the ‘economics of knowledge’. Without here rendering any judgment about the success or failure of game theory,¹⁰ I think it indisputable that it was another Austrian who deserves the laurels as ‘precursor’ of advocacy of the centrality of knowledge to economics, as well as the limits to its predictive ambitions, and, furthermore, had the developed sensibilities to seek out collaboration with the one figure most responsible for the late-twentieth century cognitive turn in the *natural* sciences, namely, John von Neumann. Finally, what this counter-narrative suggests is that *there was nothing ‘natural’ about the anti-socialist politics of the construct of the market as an information processor*. That required much more work.

The above quotes raise a further disturbing issue: to what extent was Hayek such a lone voice in the wilderness in the 1930s? When Hayek was called to the LSE in 1931, this was intended to bring the Austrian tradition to Albion, something that did not quite pan out the way Lionel Robbins had anticipated. In our rival narrative, it would not at all be obvious to someone situated in that era that the middle-aged Hayek would one day be lionized as such an epoch-making thinker.

The Abuse of Reason Project and the Anti-Scientism Crusade

One thing that struck me about *Hayek’s Challenge* is the way in which it so systematically sought to historicize what was happening in economics in the period of concern, but resisted doing so in the case of the natural sciences, psychology, and even in philosophy itself. It occurred to me that this was not simply an oversight – I have independent evidence that Caldwell is quite sophisticated in his appreciation for the histories of these other fields. Rather,

¹⁰ But see (Mirowski, 2002a: 6).

I believe that Caldwell found himself poised between a rock and a hard place in his quest to ‘historicize’ a protagonist who so loudly denounced historicists during the latter two-thirds of his career. The rock in this instance was his own admiration for Hayek’s thought, and the hard place was the relative contempt that Hayek betrayed for historical understanding. I realize that some might find the latter description *outré*, given that in this second phase of his intellectual career, Hayek himself dabbled in writing intellectual history; but I also believe that his entire attempt to deny any real legitimacy to historical understanding comes across fairly clearly in his writings. ‘Only those who have really mastered one science – and in spite of all the respect I have for history, I am inclined to say one theoretical science – know what science is’ (Hayek, 1967: 266). Therefore, it has occurred to me that Caldwell essentially skirts the issue of the quality of Hayek’s works on intellectual history, and, more to the point, neglects the role of the philosophical context in shaping the roster of Hayek’s perceived enemies and allies. This then results in the curious asymmetry in the text broached at the beginning of this paper: some philosophers get reprimanded for their readings of Hayek, whereas most economists get let off the hook with almost no rebuke.

As Caldwell mentions, Hayek’s philosophical career began steeped in the positivism of Ernst Mach (HC: 137).¹¹ What he does not adequately emphasize, in my view, is the fact that most of the positivists whom Hayek encountered in Vienna were avid socialists: ‘Most of us [in the Vienna Circle], myself included, were socialists. But we liked to keep our philosophical work separated from our political claims’ (Carnap, 1963: 23). The one exception to this latter reticence was Otto Neurath, who openly championed positivism as a means to socialist (but not conventionally Marxist) ends.¹² At the other end of the spectrum stood Ludwig Wittgenstein, with whom Hayek was acquainted, and who was claimed by the Vienna Circle as one of their own, but was left cold by socialism and harbored a deep streak of what Neurath disparaged as the ‘philosophy of the ineffable’: for Wittgenstein, ‘A language which had not grown organically seemed to him not only useless, but despicable’ (Carnap, 1963: 26). If we entertain the premise that Hayek’s politics were of paramount consideration in his development, then this must have created a very uncomfortable situation for one who regarded himself as subscribing to the project of a scientific understanding of society.

While resident in Vienna, this lurking contradiction might not chafe so insistently, and Caldwell does an excellent job of situating Hayek in the context of the ‘socialist calculation controversy’, and the various methodological positions then promoted by his economist colleagues. However, I feel he does

11 Mach’s politics and economics have not been the subject of adequate exploration. For a beginning, see (Uebel, 1995) and fn 5 above.

12 Caldwell tends to treat Neurath as though his ideas were so outlandish that they didn’t even deserve refutation; a more disturbing interpretation sees a fair amount of shared ground between Neurath and Hayek (O’Neill, 2003).

not sufficiently explicate the ways in which what was a minor irritation in Vienna became a debilitating syndrome in London. There, the issue was not so much the dominance of positivism as a philosophical position, as it was the almost ubiquitous association of the ‘scientific method’ with socialist ambitions. Although Caldwell does point to some of the major players in this drama (HC: 235–240), he tends to omit some of Hayek’s formative political activities in this period, which were not aimed at Marxists *per se* as they were at *scientists* who were promoting socialism and planning as the logical extrapolation of a scientific world-view. Among other activities, which I would cite as pivotal, there was Hayek’s participation in the founding of the ‘Society for Freedom in Science’, and his attempt to ally himself with Michael Polanyi to argue for an entirely different portrait of the operation of science.¹³

I believe it is no accident that the period of Hayek’s Transformation (first pointed out by Bruce) and his oft-quoted ur-text ‘Economics and Knowledge’ coincides with his ‘Abuse of Reason’ project, for they are more closely connected than Caldwell would concede. In ridiculously telegraphed summary, Hayek had recourse to a cobbled-together ‘philosophy of the ineffable’ to try and square his ambition to be a scientist, his hostility to socialism, the ambition of many natural scientists to portray socialism as scientific, and the failure of his previous ‘Austrian’ macroeconomic theory. As is well known, from thenceforth Hayek argued that the market was no longer a set of pipes channeling capital through roundabout channels, but rather an information processor, organizing and conveying the appropriate information to the relevant actors, by an instrumentality that could not be fully comprehended or manipulated by any central planner.¹⁴ Just as he began to assert in this period that the mind could not come to an adequate understanding of its own operations, he also wanted to assert that ‘Reason’ could not on its own devices fully comprehend why markets are *the* superior format of social organization.

There were many severe problems with this position, but one of the most insistent was to differentiate it from a rather more hallowed and familiar ‘Mysterian’ tradition within conservative thought that praised Tradition as the unquestionable font of social stability. Hayek might have appealed to the ‘ineffable’ after the manner of Wittgenstein, but instead he opted for recourse

13 ‘I attach very great importance to these pseudo-scientific arguments on social organization being effectively met and I am getting more and more alarmed by the effect of the propaganda of the Haldanes, Hogbens, Needhams, etc. I don’t know whether you’ve seen the latest instance, C.H. Waddington’s Pelican on *The Scientific Attitude*. I think this last specimen is really quite contemptible’ Hayek to Michael Polanyi, 7/1/41; Box 4, folder 7, Michael Polanyi papers, Regenstein library, University of Chicago. An important source on these matters, which is unaccountably not cited by Caldwell, is (McGucken, 1984).

14 This sketch rapidly skips over the fact that in this intermediate period, Hayek may have conflated the two images in his own mind, particularly in the *Sensory Order*. See (Hayek, 1982: 291). Klausinger suggests Hayek’s turn was prompted by the fact that, ‘the pure theory of capital, even in his own view, constituted in a sense a dead end’ (2006: 631).

to the long Germanic philosophical tradition which sought to differentiate the *Naturwissenschaften* from the *Geisteswissenschaften*, particularly the neo-Kantian school of Heinrich Rickert (1863–1936) and Wilhelm Windelband (1848–1915), as filtered through Dilthey, Weber and their students. I am at a loss to understand why Caldwell neglects to examine this extremely important influence on Hayek's thought. In this period, Hayek began to denounce 'scientism' in terms recognizable to those steeped in neo-Kantian Germanic philosophy, but one rather less familiar to his new English audience. In Rickert's terminology, the natural sciences were 'nomothetic' (i.e., looking for trans-temporal natural laws), whereas the social sciences were intrinsically 'idiographic' (treating individual phenomena in their unique aspects, especially with regard to their historical rootedness and distinctive 'complexity'). Hayek, in the essays collected together in his *Counter-revolution of Science*, sought to explain the enthusiasm of the natural scientists for social planning as an illegitimate conflation of the two distinct projects.¹⁵ Because the 'engineers' were treating the economy as a natural object subject to prediction and control, they were not in any position to understand the kind of information-mediation functions that Hayek was now insisting were the mainstay of market functions: since no mind could fully encompass the operations of the Market, neither could the cognitive capacities of the scientists.¹⁶ This was a garbled reprise of the anti-positivist German precept that prediction and control were inappropriate goals for the *Geisteswissenschaften*, since they would violate human freedom and epistemological novelty. Furthermore, the natural scientists' putative instrumentalist orientation precluded any appreciation for the notion that traditional practices might have grown up to ameliorate societal problems about which the analyst might not be aware. This error was traced by Hayek back to certain biases of the Continental Rationalist philosophies, as represented there by figures such as Saint-Simon and Comte.

This is not the place to question the details of the 'historical' reconstruction as presented by Hayek to motivate his own idiosyncratic construct of 'scientism'.¹⁷ It is enough to note that his attempt to identify 'scientism' with 'historicism' would have dumbfounded most of his Anglophone audience; his historical account of the errors of historicism would have nonplussed them; and given the 'abuse of reason' project tended to peter out before reaching the writers

15 See, for instance, Hayek (1979: 170–171).

16 It has occurred to me that Caldwell's fundamental sympathy with this position encouraged him to present it as more continuous with what came later in Hayek's career, but also prevented him from delving deeper into its philosophical provenance.

17 For this, see (Pickering, 1993; Stonier, 1943). An example of Hayek's tendentious interpretation of Rickert is his (1962). Caldwell tries to explicate the curious package of objectivism, collectivism and historicism in (HC: 247ff). The reader might appreciate from my own work that I share Bruce's conviction that fully understanding the role of scientism in economics is one of the great lacunae of modern social science; where we disagree is in our assessment of Hayek's success in this regard.

of the middle of the nineteenth century, it did almost nothing to upbraid those modern scientists, such as J.D. Bernal, whom were the real target of its critique. The conviction that the social and natural sciences were unified, and not distinct, was almost taken as *a priori* truth in the Anglophone world of the mid-twentieth century: this was not a local quirk of the positivists. Hence the disconnect between Hayek and his potential audience was huge. Thus I would argue that the second phase of Hayek's career was an abysmal failure, when evaluated from the vantage point of the attempt to recruit philosophy to try and split the alliance between the natural scientists and the socialists. Furthermore, there were other nascent attempts to treat markets as akin to information-processors, which had the virtue of seeming substantially less vague and more resonant with contemporary scientific developments – Morgenstern's, for one, or that of the American Walrasians¹⁸ – but they were not so openly hostile to socialist doctrines. Therefore, as a consequence of his 'Abuse of Reason' project, in this period Hayek became saddled with the reputation of being 'not an economist.' If 'Reason' was impotent to demonstrate the actual superiority of market operation, then whatever was the purpose of a series of turgid papers attempting to locate the historical genealogy of 'constructivist' ambitions in some half-forgotten Continental authors?¹⁹

Caldwell's volume would instead seek to accentuate the positive: first by downplaying the 1930s rupture in Hayek's career concerning the meaning and significance of 'science' in the quest to undermine socialism; and then by suggesting that he finally arrived at the goal which he had been aiming at all along in his third, and final, phase: 'the key to understanding his sudden abandonment of the Abuse of Reason project is that he saw a new way to defeat his scientific opponents with what he thought were truly scientific arguments' (HC: 260). But by that time, Hayek was in no position to lecture anyone on what was and was not 'truly scientific'.

The evolutionary proto-cyberneticist and compleat strategist

I heartily endorse Caldwell's thesis that sometime after 1945 Hayek finally decided that he would employ natural science to 'naturalize' the Market and therefore paint socialist planning as 'unnatural'; but, in opting for this stratagem, I would argue instead that Hayek was not at all innovative or imaginative in this regard. Rather, by jumping on someone else's Natural Science bandwagon, he was finally conceding that all his earlier attempts at refutation of socialists had been for naught. I think this second intellectual transformation was comprised

18 For an account, see (Mirowski, 2002a: chap. 5).

19 The twenty first century connotations of the term 'constructivist' in science studies and philosophy in general diverge so radically from Hayek's usage, that straightforward appreciation of this point has become almost impossible for contemporaries.

of at least three components:

- (a) Hayek would now concede the portrait of a single ‘unified science’, which he had been resisting for at least a decade or more. There was no open renunciation of his prior position; instead, he simply began to rely upon Karl Popper to inform people on what ‘real science’ looked like (Hacohen, 2000).
- (b) Hayek began to endorse various aspects of the ‘cybernetics’ project, which sought to reduce thought to mechanism. This was the source of his embrace of the ‘sciences of complexity’, which he derived from Warren Weaver (Mirowski, 2002a: 175).
- (c) With a lag, Hayek began to appeal to ‘evolution’ to explain how an ineffable complex order, which he simply equated with The Market, could have come about. The onus for ineffability was thus shifted from Germanic philosophy to biologicistic metaphor.

Here is where I might diverge most dramatically from the narrative as related by Caldwell. It seems that in the book Caldwell wants to portray Phases (ii) and (iii) as if they were essentially continuous and coterminous, whereas I would instead stress the dramatic nature of the rupture. Admittedly, Caldwell does mention the importance of certain key cybernetic figures (HC: 299–303), that Hayek found his ‘spontaneous order’ amongst cyberneticists (HC: 362); he acknowledges by 1955 Hayek replaces the natural science/social science distinction with the simple/complex distinction (HC: 301), and that Hayek’s acceptance of (b) allowed him to come closer to Popper (HC: 346), and even that testimonials to ‘evolution’ came to outweigh his endorsements of ‘individualism’ (HC: 306). But what he does not entertain is the idea that the defense of the Market has been altered radically.

To put the matter with a certain crude concision: for Hayek, the proposition that ‘Markets do the thinking that people cannot’ was extricated from its relatively Mysterian status in Phase (ii) to assume its more concertedly Naturalistic status in Phase (iii) by means of an endorsement of the proposition that ‘Matter can think’. While this move was forward-looking (and became the hallmark of the neoclassical orthodoxy in the later twentieth century: Mirowski 2002a), it was not particularly original with Hayek, nor was it developed much beyond the original insight. The ontological flattening of the ‘Thing that thinks’ allowed him to blur the level that his analysis operated upon, be it ‘brains’ or ‘individuals’ or ‘groups’. ‘It is more than a metaphor to describe the price system as a kind of machinery for registering change, or a system of telecommunications’ (1972: 87). The reason that he could distribute cognition in this manner was that he was concurrently describing the individual mind equally as a machine for registering change. Thus I cannot accept Caldwell’s assertion that, at least in Phase (iii), Hayek’s ‘agent is a real human being who inhabits a specific social space, not some atomistic and asocial automaton’ (HC: 286).

The secondary literature on Hayek the evolutionist has already become dauntingly massive, so I will not even venture to comment upon it here, except

to suggest that in light of the above periodization, some of Geoffrey Hodgson's strictures on Hayek begin to make more sense than Caldwell has been willing to concede (Caldwell, 2001; Hodgson, 2004). The conviction that a 'non-Darwinian evolution' could still support a Naturalistic defense of the market was a precept more or less lifted from some of the cyberneticists, who were rather thick on the ground in postwar Chicago. The idea that evolution displays an unambiguous 'arrow of time' in the direction of greater complexity was another of their favored doctrines. Hayek sought to package together the ontology of cybernetics with a special version of 'evolution' so as to maintain that not only were markets adaptive, but that

It is impossible, not only to replace spontaneous order by organization and at the same time utilize as much of the dispersed knowledge in all of its members as possible, but also to improve or correct this order by interfering in it by direct commands. Such a combination of spontaneous order and organization can never be rational to adopt. (1973: 51)

Here Hayek's thesis that the brain will never fully comprehend itself became wedded to the parallel thesis that Science informs us that we ourselves will never fully comprehend the evolved Natural Order.²⁰ Finally, we observe that Hayek in Phase (iii) sought to Naturalize the Market and thus refute socialists by committing something very akin to the 'Naturalistic Fallacy' (Angner, 2004).²¹ Hence, we can also not accept Caldwell's assertion that Hayek's 'evolutionary thought had no teleology attached to it' (HC: 357). It may not be nice to 'fool Mother Nature', but how would we know that we had transgressed, except through a self-referential tissue of natural science metaphors? After all, why accord Hayek special status in interpreting what Nature meant for us?

But in the final analysis, all the sound and fury over natural philosophy was not the most important legacy of Hayek's Third Period. That instead came with his project to mobilize a cadre of scholars to come up with a New- or Neo-Liberalism to rally the anti-socialist cause at its post-WWII nadir.²² The organization Hayek

20 Hayek tended to make misleading citations to Gödel's Theorems late in his career, probably because he had come to depend upon the proposition that Science Itself can inform us of the 'limits to science'. I cannot explore here how this position links up with his late-career hostility to democracy, but see (Mirowski, 2004).

21 Again, space considerations preclude giving this claim the attention it would require. For instance, there is much dispute over what would constitute the commission of the fallacy (Wilson, Dietrich, and Clark, 2003). Angner (2004) seeks to absolve Hayek of the fallacy by imagining that Hayek consciously inserted a normative premise in his reasoning, but just never fleshed out the case for why spontaneous orders were 'desirable'. I find this last interpretation unpersuasive, because the missing premise was always the undesirability of socialism. Caldwell and Reiss (2006) stridently deny Hayek ever committed anything approaching the fallacy, while Angner (2006) finds this unpersuasive.

22 One referee has objected to this terminology of 'neoliberalism', but at least lets me steal a good joke about Hayek founding Opus Mani Invisibili. Lord knows we are in desperate need of a better set of entertainments than the *da Vinci Code*. There is no space here to teach economists some modern history of political theory. For some references, see fn 23 below.

first convened in Mont Pèlerin on 1–10 April 1947 became by all accounts the effective zero point from which the Neoliberal Thought Collective was born.²³ It was the *institutional* resolution to the failures which had plagued Hayek's quest in the first two periods of his life.

The reason the Mont Pèlerin Society [MPS] should serve as our talisman is because it exists as part of a rather novel institutional structure of intellectual discourse, one we tend to think of as a 'Russian Doll' approach to the integration of research and *praxis* in the modern world. The Neoliberal Thought Collective was structured very differently from the other 'invisible colleges' that sought to change people's minds in the second half of the twentieth century. Unlike most intellectuals in the 1950s, the early protagonists of MPS did not look to the universities or the academic 'professions' or to interest group mobilizations as the appropriate primary instruments to achieve their goals. The early neoliberals felt, with some justification, that they were excluded from most high-profile intellectual venues in the West. Hence the MPS was constituted as a private members-only debating society whose participants were hand-picked (originally by Hayek, but later through a closed nomination procedure) and which consciously sought to remain out of the public eye. The purpose was to create a special space where people of like-minded political ideals could gather together to debate the outlines of a future movement diverging from classical liberalism, without having to suffer the indignities of ridicule for their often blue-sky proposals, but also to evade the fifth column reputation of a society closely aligned with powerful but dubious postwar interests. Even the name of the society was itself chosen to be relatively anodyne, signaling little substantive content to outsiders (Hartwell, 1995: 44). Many members would indeed hold academic posts in a range of academic disciplines, but this was not a precondition of MPS membership. MPS could thus also be expanded to encompass various powerful capitalist agents. One then might regard specific academic departments where the neoliberals came to dominate (University of Chicago Economics,²⁴ the LSE, *L'Institut Universitaire des Hautes Etudes Internationales* at Geneva, Chicago Law, St. Andrews in Scotland, Freiburg, the Virginia School) as the next outer layer of the Russian Doll, one emergent public face of the thought collective – although one often never publicly linked to the MPS. Another shell of the Russian Doll became the special-purpose foundations for the education and promotion of neoliberal doctrines, such as the Volker Fund and the Foundation for Economic Education. These institutions were often set up as philanthropic or charitable units, if only to protect their tax status

23 This set of events have been described by many historians (Cockett, 1995; Hartwell, 1995; Plehwe and Walpen, 2005; Mirowski and Plehwe, forthcoming).

24 Elsewhere I have made the historical case that it was Hayek, and not any of the usual suspects, who was most directly responsible for the founding of the Chicago School of Economics. See (Mirowski and van Horn, forthcoming.)

and seeming lack of bias.²⁵ The next shell would consist of general-purpose ‘think tanks’ (Institute for Economic Affairs,²⁶ American Enterprise Institute, *Schweizerisches Institut für Auslandsforschung* [Swiss Institute of International Studies]) who sheltered neoliberals, who themselves might or might not also be members in good standing of various academic disciplines and universities. The think tanks then developed their own next layer of protective shell, often in the guise of specialized satellite think tanks existing to get quick and timely position papers out to friendly politicians, or provide talking heads for various news media and opinion periodicals. Further outer shells have been innovated as we get closer to the present – for instance, ‘astroturfed’ organizations consisting of supposedly local grass-roots members, frequently organized around religious or single-issue campaigns.²⁷ Outsiders would rarely perceive the extent to which individual protagonists embedded in a particular shell served multiple roles, or the strength and pervasiveness of network ties, since they could never see beyond the particular shell of the Russian Doll right before their noses. This also tended to foster the impression of those ‘spontaneous orders’ so beloved by the neoliberals, although they were frequently nothing of the sort. Yet the loose coupling defeated most attempts to paint the thought collective as a strict conspiracy.

It is a shame that Caldwell so neglects the MPS, since it is the culmination of Hayek’s own third-period prognostications. It is the obverse face of his late period works on law and the state. No single mind could comprehend itself, therefore no single mind could oppose the anti-market *Weltanschauung* which so oppressed Hayek and his comrades in the 1940s. To oppose those despised ‘second-hand dealers in ideas’, he realized one had to nurture his own battalion of dealers, as well as some of the ideas they would retail. Hayek thus conjured a Groupthink congenial to what he considered to be the Truth, since it would not conjure itself. The Group then conjured a State that fostered a Market, since it would not conjure itself. Hayek realized that one had to embrace and revel in the contradiction of an ‘organized’ spontaneous order, and create an *entire set of institutions* to generate and promote the sort of social science (and even natural science!) he felt would stand as a bulwark against creeping totalitarianism. No conventional ‘intellectual history’ can begin to do justice to the extent to which his vision has been successful at the dawn of the twenty-first century – which is

25 See the letter from Smedley to Anthony Fisher dated 25 June 1956, quoted in (Cockett, 1995: 131): ‘[I]t is imperative we should give no indication in our literature that we are working to educate the Public along certain lines which might be interpreted as having political bias . . . it might enable our enemies to question the charitableness of our motives.’

26 Hayek’s crucial role in the formation of the IEA is discussed in (Cockett, 1995: chap. 5).

27 The various ways in which fake local grass-roots movements are co-opted by neoliberal organizations has recently become the subject of some journalistic interest. One telling example in the arcane technical area of environmental sciences was the subject of a PBS program reporting on the investigations of the journalist Paul Thacker (see the program ‘American Investigative Reporting’, program 11, 10 November 2006, accessed www.pbs.org).

why his name continues to live on, when that of other ‘economists’ rapidly slide into oblivion.

Hence we come full circle to Caldwell’s possible objectives mooted in Section 1 above. While I will not comment on the possible impact my suggested reading might have upon modern Austrian economics, it does give different answers to the attempt to portray a Hayek acceptable to modern orthodoxy, as well as use him as a stalking horse to ‘explain’ the trajectory of postwar neoclassicism. As to the former, the sheer diversity of the different ‘phases of Friedrich H’ helps broaden his appeal to various segments of the modern economics profession. Far from remaining innocent of any whiff of teleology, in the alternative narrative I have proposed here, Hayek’s entire career was driven, not by some unwavering commitment to a few scientific propositions, but rather by faithful adherence to the one unwavering teleological heuristic: namely, socialism was bogus, and there had to be some way to make a halfway decent intellectual case that this was true. That Hayek made not one, but *three conflicting* cases for that ideological proposition is part of what sustains his popularity in the present climate. There are a few neoclassical economists, such as Robert Lucas, who seem to be most enamored of Phase (i). The hermeneutic and postmodern cadres seem most attracted to Phase (ii), even though Caldwell would rather do without their company (HC: 436). And finally, there are those whom Caldwell would wish to recruit, the Vernon Smiths of the world, thinking that what economics needs is just one more purgative dose of neurological, evolutionary, experimental *hard science* to permit it to finally ascend to the Valhalla of timeless truth.

But, when we come to the diagnosis of the predicament of modern economics, the many faces of Friedrich H were not so much vindicated by subsequent events, as they were *shaped by them*. Hence, for instance, Hayek did not prophesy that economics would become ever more concerned with information processors, or might change its stance towards the Walrasian equations, or change its attitudes towards predictive adequacy, as much as he served as one possible expression of those nascent trends. He learned to go with the flow, and stop playing the unwelcome part of Cassandra. Hayek did not ‘explain’ the twists and turns of the modern orthodoxy, any more than he ‘explained’ the collapse of the Soviet Union. This itch to render Hayek as the charismatic ‘seer’ of our profession strangely contradicts much of what Hayek himself wrote.

References

- Angner, Erik (2004), ‘Did Hayek Commit the Naturalistic Fallacy?’, *Journal of the History of Economic Thought*, 26: 349–361.
- Angner, Eric (2006), ‘Response to Caldwell and Reiss’, *Journal of the History of Economic Thought*, 28: 371–373.
- Caldwell, Bruce (2001), ‘Hodgson on Hayek: A Critique’, *Cambridge Journal of Economics*, 25: 539–553.

- Caldwell, Bruce and Julien Reiss (2006), 'Did Hayek Commit the Naturalistic Fallacy?', *Journal of the History of Economic Thought*, 28: 359–370.
- Carnap, Rudolf (1963), 'Intellectual Autobiography', in Paul Schlipp (ed.), *The Philosophy of Rudolf Carnap*, La Salle: Open Court.
- Cockett, Richard (1995), *Thinking the Unthinkable: Think Tanks and the Economic Counter-Revolution, 1931–83*, London: Fontana.
- Ebenstein, Alan (2001), *Friedrich Hayek: A Biography*, New York: Palgrave.
- Giere, Ronald and Alan Richardson (eds) (1996), *Origins of Logical Empiricism*, Minnesota: University of Minnesota Press.
- Hacohen, Malachi (2000), *Karl Popper: The Formative Years, 1902–45*, New York: Cambridge University Press.
- Hardcastle, Gary and Alan Richardson (eds) (2003), *Logical Empiricism in North America*, Minnesota: University of Minnesota Press.
- Hartwell, R. Max (1995), *A History of the Mont Pèlerin Society*, Indianapolis: Liberty Fund.
- Harvey, David (2005), *A Brief History of Neoliberalism*, New York: Oxford University Press.
- Hayek, Friedrich (1962), Preface to English Language Edition of Heinrich Rickert, *Science and History*, New York: Van Nostrand.
- Hayek, Friedrich (1967), *Studies in Philosophy, Politics and Economics*, New York: Simon & Schuster.
- Hayek, Friedrich (1972), *Individualism and Economic Order*, Chicago: Gateway.
- Hayek, Friedrich (1973), *Law, Legislation and Liberty*, Vol. 1, London: Routledge & Kegan Paul.
- Hayek, Friedrich (1979 [1952]), *The Counter-Revolution of Science*, Indianapolis: Liberty Press.
- Hayek, Friedrich (1982), 'The Sensory Order after 25 Years', in W. Weimer and D. Palermo (eds), *Cognition and the Symbolic Process*, Hillsdale: Erlbaum.
- Hodgson, Geoffrey (2004), 'Hayekian evolution reconsidered: a response to Caldwell', *Cambridge Journal of Economics*, 28: 291–300.
- Klausinger, HansJorg (2006), 'In the Wilderness: Emigration and Decline of the Austrian School', *History of Political Economy*, 38: 617–664.
- Makowski, Louis and Joseph Ostroy (2001), 'Perfect Competition and the Creativity of the Market', *Journal of Economic Literature*, 39: 479–535.
- McGucken, William (1984), *Scientists, Society and the State*, Columbus: Ohio State University Press.
- Mirowski, Philip (2002a) *Machine Dreams: Economics Becomes a Cyborg Science*, New York: Cambridge University Press.
- Mirowski, Philip (2002b), Review of Malachi Hacohen's *Karl Popper*, *Isis* (June): 324–325.
- Mirowski, Philip (2004), 'The Scientific Dimensions of Social Thought and Their Distant Echoes in American 20th Century Philosophy of Science', *Studies in the History and Philosophy of Science*, 35: 283–326.
- Mirowski, Philip and Plehwe, Dieter (eds) (forthcoming), *The Making of the Neoliberal Thought Collective*, Cambridge, MA: Harvard University Press.
- Mirowski, Philip and Robert vanHorn (forthcoming), 'The Origins of the Chicago School', in Mirowski and Plehwe (forthcoming).
- O'Neill, John (2003), 'Socialism, Associations and the Market', *Economy and Society*, 32: 184–206.
- Pickering, Mary (1993), *Auguste Comte*, New York: Cambridge University Press.

- Plehwe, Dieter and Bernhard Walpen (2005), 'Between Network and Complex Organization: The Making of Neoliberal Knowledge and Hegemony', in Dieter Plehwe, Bernhard Walpen, and Gisela Neunhöffer (eds), *Neoliberal Hegemony: A Global Critique*, London: Routledge.
- Shearmur, Jeremy (1994), 'Hayek and the Case for the Market', in Jack Birner and Rudy van Zijp (eds), *Hayek, Coordination and Evolution*, London: Routledge.
- Smith, Vernon (1982), 'Markets as Economizers of Information: Experimental Examination of the Hayek hypothesis', *Economic Inquiry*, 20: 165–179.
- Smith, Vernon (2003), 'Constructivist and Ecological Rationality in Economics', *American Economic Review*, 93: 465–508.
- Stadler, Friedrich (2001), *The Vienna Circle*, Vienna: Springer Verlag.
- Stonier, Alfred (1943), 'Miscellaneous Note', *Economica* (May): 188.
- Uebel, Thomas (1995), 'Otto Neurath's Idealist Inheritance', *Synthese*, 103: 87–121.
- Uebel, Thomas (2000), 'Some Scientism, Some Historicism, Some Critics: Hayek's and Popper's Critiques Revisited', in M. Stone and J. Wolff (eds), *The Proper Ambition of Science*, London: Routledge.
- Weimer, W. and D. Palermo (eds) (1982), *Cognition and Symbolic Processes*, vol. 2, Hillsdale: Erlbaum.
- Wilson, David, Eric Dietrich, and Anne Clark (2003), 'On the Inappropriate Use of the Naturalistic Fallacy in Evolutionary Psychology', *Biology and Philosophy*, 18: 669–682.