MARTIN BEDDELEEM
Canadian Center for German and European Studies (CCGES)
Université de Montréal

MICHAEL POLANYI: PIVOTAL FIGURE OF EARLY NEOLIBERALISM

Michael Polanyi's part in the creation of neoliberalism is an unlikely one. Born in Budapest in 1891, he emigrated a first time from Hungary to Germany, before leaving the Continent to seek a more open and tolerant workplace in England, arriving in Manchester in 1933 from the famous Kaiser-Wilhelm Institute in Berlin-Dahlem. Between his pamphlet on the Soviet Union in 1936 and the publication of *The Logic of Liberty* in 1951, Polanyi progressively lost interest in chemistry and started to investigate the political and sociological circumstances required for free science and the pursuit of truth. In doing so, he became involved with a group of scholars who equally perceived the collapse of Europe as a wake-up call for a new understanding of its liberal tradition. Rejecting the "sterile" alternative between Fascism or Communism, this fringe of scientists, intellectuals and politicians across the ideological spectrum willed to give a new lease of life to a reformed, renascent, or "neo-" liberalism.[1] Despite significant differences in their analytical approach, early neoliberals[2] were united in their effort to reject the common interpretation of the hitherto most severe crisis of the capitalist economy as proof of the failure of liberalism. Whereas the values of individual decency and social progress it carried were needed then more than ever, they agreed that the *method* to achieve these ideals was now obsolete.[3]

[1] Renascent liberalism is from John Dewey`s *Liberalism and Social Action* which participates in this common debate of how to save liberalism in the face of its collapse. Dewey's solution is to be found in a democratic polis enlightened by an experimental knowledge of itself. See Dewey (2008[1935]).
[2] "Early neoliberalism" is a denomination some recent researchers on the history of neoliberalism give the first period of the development of neoliberalism ranging from the 1930s to the late 1960s/early 1970s.
[3] "Mankind," observed Dewey in the same lecture, "now has in its possession a new method, that of cooperative and experimental science which expresses the method of intelligence" (2008, 58).

Early neoliberalism owed its scientific identity to the strong contingent of philosophers of science who participated to its elaboration. Many were refugees and exiles from Austria and Hungary who were immersed in the scientific world of Interwar Vienna and Berlin. The intellectual and political turmoil in Austria and Hungary became the formative political experiences for economists, philosophers and scientists as they could not ignore neither the politicization of science in totalitarian countries, nor the progressive disintegration of Western society. Michael Polanyi, Alfred Schutz, Felix Kaufmann, Karl Popper, Ludwig von Mises, among others, were all assimilated and secularized Jews under the cosmopolitan Habsburg monarchy and many perceived its dissolution as a sheer disaster, responsible for the rise of antagonistic politics with nationalism and social conservatism fiercely opposed to the growing Communist movement.[4]

Confronting the Great Depression, progressive and liberal reformers of the 1930s all looked towards one unassailable source of progress and legitimacy, one which commanded public trust and respect: science—in particular, the natural sciences and their methods. Polanyi's nascent liberal thought was deeply entrenched in the political quarrel over the nature of knowledge, and the conception of what science is, and does. Polanyi became an important public figure in the debate around the increase of state oversight in scientific research. In this dispute, questions of how to organize the community of researchers became relevant to the kind of political system one wished to defend and promote. Conflicting visions of the nature of science, its historical development and its relation to truth, became entangled with economic positions and programs. Most visibly, concerns about the role of science in society were tied up with the most pressing political question of the day: the rise of fascism and totalitarianism. Only at this contingent moment when the science of social order and the politics of scientific organization were searching for new footings were a new doctrine of liberalism and a nascent philosophy of science forged together. Rescuing liberalism from its "debacle," where it had become a "dismal science" (Lippmann 2005[1937]) required an epistemological effort which sought to address the lack of scientific credibility for which *laissez-faire* liberalism had been justly criticized in the 1920s and 1930s.

This intellectual endeavour was fomented at the margins of some academic institutions, among which the London School of Economics (Friedrich Hayek, Lionel Robbins, Karl Popper), the University of Manchester (Michael Polanyi, John Jewkes), the *Institut Universitaire des Hautes Études Internationales* in Geneva (William Rappard, Wilhelm Röpke, Ludwig von Mises), the University of Chicago (Frank Knight, Henry Simons), Freiburg University (Walter Eucken) are the most important. In its early years, neoliberalism understood itself as a *scientific project* to renovate the political economy of liberalism while fighting against a new "socialism from the chair" and a totalitarian

[4] Popper writes in his autobiography that "the breakdown of the Austrian Empire and the aftermath of the First World War, the famine, the hunger riots in Vienna, and the runaway inflation […] destroyed the world in which I had grown up" (Popper 2002[1974], 31).

"revolt of the masses." Until the 1950s, this project of renewing liberalism, away from *laissez-faire* and against economic planning, shared many grounds with Keynesian economics and middle-of-the-road interventionism. It constituted one of many discourses situated on a large spectrum from full-scale planning to limited interventionism, from the removal of the market to its institutional safeguard. Polanyi attended the two formative meetings of neoliberalism, situated at either side of the Second World War: the Walter-Lippmann Colloquium in Paris in 1938, and the inauguration of the Mont-Pèlerin Society in Switzerland in 1947. Ultimately the most successful of the early neoliberal projects, the Mont-Pèlerin Society was but a late-comer in a movement which had begun more than a decade earlier.

Retracing Michael Polanyi's orbiting course in and around the neoliberal core, we will focus on the engagement of Polanyi with other early neoliberals. In the first part, we will reconstruct his trajectory from Budapest to Manchester and the elaboration of his own liberalism as a critique of scientific and economic planning. In the second part, we will examine the parallel critiques of other early neoliberals such as Friedrich Hayek, Walter Lippmann and Louis Rougier. Early neoliberalism consolidated itself around their shared critique of the scientific claims of collectivism and their recoding of liberal values through an updated epistemological framework. Finally, during the Second World War, early neoliberals continued to work through a larger scientific rebuilding of liberalism, articulating together dynamic orders, tacit knowledge, and tradition.

PART 1: FROM BUDAPEST TO MANCHESTER

A polymath, twice exiled, Michael Polanyi's fate belonged to that of the exceptional generation of Hungarian scientists born at the turn of the century (Frank 2009). In Budapest's liberal circles, Michael Polanyi's brother Karl Polanyi had been the founder of the Galileo Circle while Oscar Jászi, a friend of the family, was the editor of the first Hungarian review of sociology and political science *The Twentieth Century*. Around the same time, Michael Polanyi met Karl Mannheim and Georg Lukács in a Sunday circle led by Béla Balázs discussing ethical problems in literature. The Polanyis participated in the short-lived radical government which succeeded the monarchy, hoping to transform Hungary into a liberal and multinational republic. After the short-lived Hungarian Soviet Republic led by Béla Kun, Polanyi was removed from his post at the University of Budapest by the Horthy regime in September 1919 and moved to Karlsruhe, eventually taking a position in Berlin in 1920 at the Kaiser Wilhelm Institute. Polanyi thrived there as a chemist in Fritz Haber's laboratory, who received substantial grants from the Rockefeller Foundation for new equipment and foreign guest researchers.[5] Among

[5] Cf. Nye (2011, 62-4). It is interesting to note that the Rockefeller Foundation moneys devoted to physical chemistry in the mid-30s had to be reoriented towards biochemical and medical research, especially quantitative

Polanyi's close friends in Berlin were Leo Szilard, Eugene Wigner, and John Von Neumann, all instrumental to the development of the Manhattan Project,[6] who participated a study group set up by Polanyi which brought natural scientists and economists together.[7]

J. G. Crowther, science correspondent of *The Manchester Guardian*, was struck by the academic atmosphere of Berlin where existed a "division of the high intellectual life from the brutal rumblings underneath" (Crowther 1970, 66).[8] Polanyi's later exposition of scientific freedom rooted in specific social and institutional preconditions – where tightly-knit scientific communities autonomously decided on their line of work thanks to generous funding from private and public donors – became the crucial experience which modelled his idealist vision of science.[9] His laboratory experiences were translated in the description of the ordinary scientist who is at the heart of everyday scientific practice. Polanyi's personal reflection on the workings of science "led him to sociological explanation, rather than logical explanation, for the mechanism by which scientific priority and recognition are accorded within the structure of scientific authority" (Nye 2012-13: 9-10). Polanyi interpreted this political and scientific independence as a form of trust from society towards its scholars, whom it charged with the special task of pursuing truth, regardless of any social imperative (Polanyi 1939; 1941, 442). He left his chemistry laboratory in Berlin dissatisfied with the lack of public engagement of fellow scientists – Fritz Haber in particular – in speaking out either for their Jewish colleagues being dismissed, or against the dramatic evolution of the political situation. During his first decade in Manchester however, England herself was facing a grave economic and moral crisis, questioning the very foundations of its long-standing traditions

Planning science

The 1930s proved to be a pivotal decade in the history of science, a period when "radical historicist messages from Central Europe and the new Soviet Union combined with local antiquarian cultures into historiographical and institutional changes" (Mayer 2004: 43). The inception of, and resistance to, this new historiographical point of view,

work in biology (cf. Nye 2011, 134). The Foundation kept subsidizing Polanyi after his move to Manchester although on a much smaller scale. One of the beneficiaries of this change of policy would be Lancelot Hogben whose chair in social biology at the LSE was heavily funded by the Foundation. Hogben, also a popular science writer, would be one of Hayek's most vocal adversaries at the LSE and one of the many "men of science" Hayek would denounce during the war. On Hogben's politics, cf. Werskey (1978).

[6] Cf. Frank (2009) for the emigration of refugee scientists and Palló (2005) for their implication in the Manhattan Project.

[7] 18 years later, Polanyi added a note to his 1930 diary (Scott and Moleski 2005, 122): "The *Arbeitgemeinschaft* [study group] has borne all kinds of fruit. Von Neumann has written a book on Games and Economic Theory. Szilard and I have become Professors of Social Science. I remember others of the circle: F. London, Wigner, Marschak, the Stoplers."

[8] Nye (2007: 434) aptly remarked that: "In Crowther's view the scientist's vaunted freedom from society and politics was an irresponsible and dangerous flaw in German scientific life, while for Polanyi, this alleged autonomy was a strength to be maintained"

[9] Cf. Nye (2011, 83-4) and Nye (2007).

provided the backdrop for the intellectual conflict between pure and applied science, academic freedom and social determinism. Specifically, an acknowledgement of the dependence of science upon historical and social conditions triggered a sustained inquiry into the intersubjective and collective nature of knowledge production. Scientists in Great-Britain and America ought to be credited for the recasting of this relationship between science, state, and society (Werskey 1979, Kuznick 1987, Mirowski 2011, Nye 2011).

The movement for planned science gained prominence after a surprise Russian delegation stunned the 2nd International Congress for the History of Science held in London in 1931.[10] The audience, largely scientists and amateurs, had been unprepared for the discourse of dialectical materialism applied to the history of science: what sounded like a Martian language to some was a revelation to others (Kojevnikov 2008: 123). Boris Hessen's paper "The Social and Economic Roots of Newton's 'Principia'" claimed science was but one kind of labour within the system of social production, and recast Newton's discoveries within the social (bourgeois) and industrial (capitalist) needs of his time, namely ballistics, optics, and navigation (Hessen 1971, 204). In his view, pure science was subordinated, technically and cognitively, to applied science and existing technology.

This conference, remarked Edward Shils, "led an important bloc of British scientists to support the Marxist theses that all scientific work, however 'pure' it might appear, is a witting or unwitting response to the practical problems confronting the society or the ruling classes of the society in which the scientists live" (Shils 1947: 80). Under the leadership of J. D. Bernal, P. M. S. Blackett, and a young generation of natural scientists sympathetic to socialism, the Social Relations of Science movement promoted a fuller integration of society, industry, and science, in which the latter, emancipated from capitalism, would fulfil its natural object of serving human welfare. "Science has social roots and social consequences," wrote Hyman Levy (1933, 38-9) and the scientist himself was "no longer a free-lance" (Bernal 1975[1935], 49). They made theirs the conclusion of Boris Hessen that: "Only in a socialist society will science genuinely belong to all mankind" (Hessen 1971[1931], 212).[11] The current economic crisis, all agreed, was not due to an excess of science, but a default. The birth pangs of the externalist account in science aimed at repairing the lost connection between scientific practice

[10] The papers given by the Russian delegation were published together a couple of days after the end of the Congress and were widely disseminated (Werskey 1971, Werskey 1979).

[11] The origins of science themselves pointed to the complete interdependence of social labour and scientific activity: "The great historical significance of the method created by Marx lies in the fact that knowledge is not regarded as the passive, contemplative perception of reality, but as the means for actively reconstructing it. For the proletariat science is a means and instrument for this reconstruction. That is why we are not afraid to expose the "worldly origin" of science, its close connection to the mode of production of material existence. Only such a conception of science can truly liberate it from those fetters in which it is inevitably trapped in bourgeois class society. […] [B]y reconstructing social relations we reconstruct science" (Hessen 1971, 211-2).

and social history, and activated an intense scrutiny over the possibility and desirability of planning in science.[12]

While the *history of science* became suffused with political overtones, new epistemological lines of fracture now came to inform much larger theoretical and ideological commitments concerning the *function of science* in society. Whereas the rival political ideologies of liberalism, fascism, and communism competed to claim the authority of science, the production and results of science themselves were subjected to historical and sociological inquiries which questioned the ideals of neutrality and detachment—the "purity"—of scientific work. Historians and sociologists of science initiated a vast enterprise of excavation of the history of science, contextualizing the implicit norms and practices which had guided the direction of science and the efforts of individual scientists: the inventions of the Newtons, Faradays or Planks, they proclaimed, were not traits of their own genius but ultimately products of their time. They uncovered the intellectual, social and material conditions of the progress of knowledge, embedding within their historical studies a normative viewpoint upon the position or "function" (Bernal 1939) of science within society. For the first time, these radical scientists brought modern ideological suspicion directly within the making of science and the production of scientific truth.

The disciplinary commitment of Hessen and Soviet scientists to actualize a vision of science rooted in the available means of production doubled up as a political pledge to a socialist form of organization (Mayer 2004: 65). On the one side, socialist-leaning historians and scientists became increasingly vocal in their dissent over the organization of science in the U.K. and looked towards the U.S.S.R. for a model where the scientist's work complemented social movements.[13] Once this dependency of scientific work upon social relations and material needs was acknowledged, pure science as a detached sphere remained only as an ideological residue of a bourgeois society, a leisurely activity for disengaged grey eminences. On the other side, Polanyi, and following him many early neoliberals, found these ideas to be dangerous and dogmatic, and their hostile reaction transmogrified into a defense of the independence of science as the only viable organisation. They refuted the link, postulated by Marxist scientists, between the planned progression of science and the movement of dialectical materialism. The validity of scientific results did not derive from their agreement with the dialectical laws of history, but rested upon epistemological conditions regarding the dispersion, coordination, and tacit nature of knowledge. Crucially, "freedom" in science represented more than an ethical stance: it pointed towards a method of coordination

[12] Robert K. Merton himself has acknowledged the triggering factor of the 1931 Congress, even though he did not adopt a Marxist point of view.

[13] The enthusiasm of so many scientists (not all of them Marxists) for the Russian example at this time must also be understood in the context of a tradition whereby scientists had long looked to the state as an ally in their struggle against the schools, universities, and other institutions they thought responsible for the neglect of science in Britain (Paul 1983: 6).

between individual agents, a heuristics of discovery *analogous*[14] to the way prices were reached through the "free" movement of economic agents. From 1931 onwards, early neoliberalism developed essentially as a project *critical* of determinist theories of knowledge, a stance which would remain constitutive of its future iterations.

Planning the economy

Michael Polanyi's visit to the Soviet Union in 1935 prompted his involvement in the political and economic debates of his times. Polanyi met there with Bukharin, the leader of the 1931 Russian delegation, who explained to him that "the distinction between pure and applied science made in capitalist countries was due only to the inner conflict of a type of society which deprived scientists of the consciousness of their social functions, thus creating in them *the illusion of pure science.*"[15] Bukharin persisted in seeing no contradiction between a comprehensive planning of science and the limited freedom of research of the scientists; it was to be regarded as "a conscious confirmation of the pre-existing harmony of scientific and social aims" (Polanyi 1939, 177). This antagonistic experience with the Soviet system and its supporters in England crystallized his intuitions about the nature of science gained in Berlin.

In Manchester, Polanyi became a regular visitor at the Economics Department, where he befriended John Jewkes, who became an ardent anti-planner and later a founding member of the Mont-Pèlerin Society (Scott and Moleski 2005, 158-60). Drawing from his many visits to the Soviet Union as a chemist, Polanyi contrasted the "vivid forms of social consciousness" he observed there, which were "invariably destructive," with the opaque mechanism of liberalism, which citizens "fail to comprehend" (Polanyi 1936a, 24). Polanyi was critical of the rise in public "fallacies" regarding economics, fallacies which were congenial to a quick rise in the "perplexity" of the laymen in industrialized countries. The lack of comprehension of the economic system by the mass of workers lured them into imagining manipulative forces in the dark, and to seek the deceptive transparency particular to state-controlled economies.

Calling it "a gravely deficient philosophy," Polanyi explained the rise of Communism and Fascism as a reaction to the failures of *laissez-faire*: utilitarian free-market thinking had neglected to answer the moral contradictions of a society bound by a public spirit of debate and, at the same time, a private motive of acquisitiveness. For Polanyi, however, the concealed workings of the market economy hid an advantageous disharmony between its elements that demanded to be explained pedagogically if it was to gain public support. The therapy Polanyi prescribed to democracies was to foster "a popular understanding of economic matters" (Polanyi 1937c):

[14] The idea of establishing the correct "analogy" between different social orders or between natural and social sciences is a constant preoccupation of Polanyi and early neoliberals.

[15] The significance of this conversation for Polanyi's intellectual development was such that this anecdote opened *The Tacit Dimension*, published 31 years later in 1966.

> "For no real devotion is possible to daily work which is involved in *a conundrum of perplexities.* No man can be satisfied by thinking of himself only; robbed of *clear consciousness* of his relations to those with whom he actually co-operates, he feels that the *complex structure which thus isolates him is bad, inhuman, revolting*." (Polanyi 1936d; my emphasis)

Taking it upon himself to correct the situation, Polanyi proposed to create a film which would explain the workings of the economy to the lay audience. Since his years in Berlin, Polanyi had sought to draw up a model of the economic system that could be easily circulated and taught. In 1936, he devoted some time and laboratory space to the construction of a physical analogue of the economic system, using a conveyor belt to express his ideas concerning the circulation of money. He eventually opted for the production of a motion picture, praising the enlightening medium of film which allows for "a complex structure that cannot be seen" to be understood. Otto Neurath's pictorial statistics paved the way forward for the reshaping of the common economic consciousness, and towards a better assimilation of complex phenomena (cf. Burke 2013).[16]

Polanyi's economic ideas were inspired both by Keynes and the Austrians, in an attempt to synthesize market mechanisms with regulative state intervention. In his motion picture, he intended to depict money as the voting cards of producers and consumers, through which they regulated goods to be produced or dismissed. The dialectic of marketing and consumption was "the most democratic representative system of self-government" whereas "so-called planning […] makes arbitrary decisions about what we ought to do for ourselves" (Polanyi 1937b). Polanyi's economic liberalism thus relied on publicity: the same way researchers co-ordinated their activity through the publication of their works, such was the role of prices—to act as a public co-ordinator of innumerable individuals. Polanyi's goal to "embed reliable knowledge of the economic mechanism into the general consciousness" (Scott and Moleski 2005, 162) entailed public intelligibility as the only way to appease the search for more direct and noxious remedies by the masses, including central planning.[17] To this end, Polanyi envisaged a society so transformed by this new wave of education, that the "promise of liberalism" would finally be fulfilled. The transparency of economics which had been achieved in the Soviet Union through public emotion and propaganda could be accomplished in liberal societies through reason and public education.

The indefinite foundations of a liberal order

[16] Through the semiotic properties of the motion picture, "we should see our social life symbolically projected, happening before us on the screen on an artistic plane of its own, directly significant" (Polanyi 1937b).

[17] As he wrote to one of his close Manchester colleagues in June 1935: "my faith in the moral of Humanity leads me to assume that if they could be led out of blindness, I mean literal blindness: inability to see their vital surroundings, this moral power would rise to the situation it now must fail to grasp. […] To find, present, and develop truth in social matters is the first revelation we require, a revelation which can be gained by a technique of seeing society and cannot be found without it. This is my obsession." Polanyi to Hugh O'Neill, 15 June 1935 (quoted in Scott and Moleski 2005, 162; my emphasis).

In this perspective, a liberal order necessarily entailed a share of opaque complexity and indefiniteness, and it was the task of the public intellectual to explain why these arcane principles needed to be preserved. In a brief letter sent to the journal *Philosophy of Science* (Polanyi 1936c), Polanyi suggested that the unpredictable behaviour of physical atoms was analogous to that of human interactions and the functioning of institutions: "the description of chemical substances and the art of dealing with them lies quite near, by comparison, to the types of human behavior and the art of commanding human behavior" (Polanyi 1936c, 234).[18] Repudiating the positivist creed in exact values and laws found in classical physics, Polanyi emphasized the "value of the inexact" which makes those laws "only valuable in combination with the element of uncertainty in them, which is compensated by the supreme sanction of validity, which is faith" (Polanyi 1936c, 233).

As such, scientific work exemplified and systematized this relationship between imprecision and belief, objective measurement and subjective acquiescence. The positivist and scientistic creed disseminated by the socialist scientists presumed that history and society were determined by laws as exact as those found in the natural sciences. On the contrary, however, since our knowledge of complex phenomena always entailed a share of imprecision, it appeared "supremely unreasonable […] to claim that, by precise measurements and mathematical treatment, i.e. physical exactitude, a vital knowledge and command of such objects as living organisms and social bodies should be found" (Polanyi 1936c, 234). Beneath the transparency of exact laws and predictions lay the unpredictable world of behaviours, trends, and symbols. In response to the deterministic views of Marxism and positivist physics, Polanyi turned his mind towards this unaccountable element in scientific knowledge and human behavior**,** *an indeterminacy* which he would spend the next decades fleshing out into a fully-formed philosophy of science. Already in 1936, Polanyi had begun examining topics which would come to define early neoliberal thought: he provided critiques of planning and objectivism, emphasizing the limitations of exact predictions and the paucity of reductionist explanations, and remarked on the inherent complexity of phenomena, both in the natural and social sciences.

From this time onwards, Polanyi's preoccupations would primarily revolve around the reciprocity of scientific freedom and liberal institutions. If science had a moral standing of its own, then it could not abide by temporal powers, making it incompatible with totalitarianism conceived as the submission of all intellectual activity to one purpose (Polanyi 1941).[19] As a result, there existed "a common fate between independent science and political liberty" wherein "the link between science and liberty is completely reciprocal" (Polanyi 1937a). On the one hand, the regulative ideal of scientific truth prevented the spread of propaganda and the corrosion of liberal institutions. On the other hand, the superiority of liberalism was grounded in its

[18] A similar chemical analogy is found in Rougier's 1938 book *Les Mystiques Économiques*.
[19] A similar intuition about the nature of totalitarianism is found in Arendt's *Origins of Totalitarianism*, in the chapter called "Ideology and Terror" (Arendt 1979[1951], 460ff).

continuous commitment to free discussion and controversy in public life, something which was compromised in totalitarian countries (Polanyi 1937a). As a result, our trust in science mirrored our trust in liberal institutions as a means to foster reason and liberty. On the contrary, science without freedom was at risk of becoming an instrument of propaganda.[20]

As a result, Polanyi's general model of liberalism was built on the duplication of the rules he had discovered to work at its best for science. The role of the liberal state was not to contain the freedom of science, but to protect and uphold it as part of its tasks. A free society cultivated science as the boundless quest for new knowledge, which will be then available for practical applications: "*To the Liberal this position of science in society is a significant example of the principles of liberty.* Science, munificently showering gifts on all men, *when allowed freely to pursue its own spiritual aims*, but collapsing into barren torpor if required to serve the needs of society, makes a powerful argument for liberty" (Polanyi 1939, 181-82; my emphasis). Epistemological battles around scientific method reverberated as a political and ideological argument over the best form of government: "philosophy of science and political economy became fused together into a single set of propositions"(Mirowski 1998, 31). Between pure and applied science lied the liberal gap: a refusal to harness the quest for knowledge to social expediency.[21]

PART 2: PARALLEL CRITIQUES

Oskar Jászi, a fellow Hungarian emigre, had sent a copy of *USSR Economics* to the American publicist Walter Lippmann, who complimented Polanyi as an "exceptionally gifted observer" in his 1937 book *The Good Society* (2005, 78). At that time, Lippmann was corresponding with a network of dispersed liberals across the Atlantic, notably Friedrich Hayek, Lionel Robbins, and Wilhelm Röpke, advocating for a closer cooperation between "genuine" liberals (Burgin 2012, 65-7). They all shared the idea that the decline of liberalism resulted from an intellectual error which had to be redressed, not from any historical necessity. When Louis Rougier took the initiative to organize a conference to discuss the recent French translation of Lippmann's book,

[20] This is a view that would greatly influenced US lawmakers more than European ones. Nye writes that Polanyi's conception of the reciprocity of free science and liberalism "had considerably more impact in the United States where the structure of scientific organization in the late 1940s resembled that of Weimar Germany. Scientists and science policy-makers in the United States, for example, Bush, Conant, and Weaver, admired Polanyi's views, as did the engineer Harvey Brooks, who served on the President's Science Advisory Committee in the Eisenhower, Kennedy, and Johnson administrations. As Brooks wrote, a social contract emerged in the postwar United States between politics and science, in which science was to be supported largely through grants and contracts to institutions-universities, industries, and government agencies-leaving internal control of policy, personnel, and the method and scope of research largely to the scientists themselves. This was Polanyi's vision of how the modem state should support science" (Nye 2007, 433). See also Hollinger (1996).

[21] A thesis similar to Popper's *Poverty of Historicism* (2002a[1952]) of which the firt part was written around the same time.

Polanyi was invited as part of the English contingent of liberals along with Friedrich Hayek.

Whereas orthodox Marxism sought to explain any scientific discoveries as congruent with the laws of dialectical materialism, early neoliberals hoped to gain vital insights from the emergent philosophy of science to update the deficient epistemology of liberalism. Decisive in that regard was their mutual adoption of a *conventional framework* for liberalism, one which did not provide natural nor rational ground rules but a *method* to continuously adjust the legal framework to the social conditions, and our social theories to real-world "experiences."

Friedrich Hayek

Like Polanyi, Hayek had been exiled from Central Europe, and he set foot in London at a chaotic time, the day after the gold standard was abandoned on September 21st, 1931 (Hayek 1994, 78).[22] Hayek's admiration for his adopted country was equally shared by Polanyi and continental liberals, who viewed English steadiness as a beacon of hope amidst the general fall of Europe. Confronted with the promise of the left of rational state planning, Hayek trusted that a technical demonstration of its economic impossibility was all that was needed to undermine the progressive appeal of socialism. He refuted the claim that planning entailed a scientific or logical point of view, and that a liberal economy embodied the rule of irrationality and obscurantism. In its place, he rested his case for the market upon its superior ability to coordinate and utilize individual knowledge, while limiting coercion. Like Polanyi, he found that the hidden nature of the economic problem made liberalism suspicious to the layman: "the fact that in the present order of things such economic problems are not solved by the conscious decision of anybody has the effect that most people are not conscious of their existence" (Hayek 1997[1935], 56). The Austrian argument against planning, which takes its roots in Mises' contribution to the *Planwirtschaft* debate of the early 1920s (1935[1920], 1951[1922]), posited that the level of complexity reached by industrial society made the search for a centralized system of economic control not only impractical, but irrational.[23] Throughout the planning debate, Hayek and others argued that no preconceived solution could bypass the market in the coordination of economic agents. Thus, their economic science led to scepticism and restraint in the face of crisis, undeniably a less than popular attitude at the time.

As with Polanyi, Hayek perceived the obscure workings of economics as requiring both explanation and passivity. The English infatuation with planning had led him to

[22] A gold historian added: "Britain's devaluation in 1931 had a psychological and political impact on Europe, and beyond, that can hardly be overestimated. In final analysis, the break-up of the international financial and commercial system was a decisive factor in "balkanizing" Europe and preparing the ground for World War II" (Palyi 1972, 250).

[23] "In a society which is to preserve freedom of choice of the consumer and free choice of consumption," wrote Hayek, "central direction of all economic activity presents a task which cannot be rationally solved *under the complex conditions of modern life*" (Hayek 1997, 89-90).

consider epistemological and methodological questions in a new light. It dawned on Hayek that a market-based society was not only superior because it allowed everyone to produce and consume at will, but more importantly because it conceded the greatest opportunity for people to acquire, share, and use information. Hayek hit upon the "problem of the *division of knowledge*" as "the really central problem of economics as a social science" (Hayek 1948[1937], 50), what is now known as the 'knowledge problem'.[24] In a sense, no scientist, statesman, nor planner, may ever reconstruct, by himself, the myriad epistemic mysteries encapsulated by each individual agent, due to the enormous amount of local knowledge used by individuals to make their choices.

Widely shared among neoliberals, Hayek's critique pivoted around one single axis: the (seemingly infinite) cognitive function of markets worked hand in hand with the epistemic limitations of other institutions aiming to correct its workings because knowledge was irrevocably local and dispersed, and impossible to centralize. It entailed paradoxically a continuous production of new knowledge on the market within the confines of a radical scepticism towards intervention. The planning debate was but an initial step in the construction of a more ambitious program, one which would shape decisively the novelty of neoliberalism: epistemology became both a critical tool pointed at competing political views and, subsequently, a positive foundation for social theory.[25] As manifested in the intellectual journeys of Hayek and Polanyi, the debate over the epistemic limitations of political control were of paramount importance for justifying their preference for a liberal order. Crucially, the virtues of markets were now extolled not solely as a privileged space for individual initiatives, but also as epistemological devices which limited the scope of scientific rationalism in economics and the potential value of state interventions.

Walter Lippmann

Analogous to Polanyi and Hayek, Lippmann and Rougier understood the descent of liberalism as a result of its faulty epistemology. Both lamented the poor state of a "liberal science" which could no longer orient the decisions of policy-makers nor command the assent of the public. Finally, both felt that liberalism, not only was scientifically superior when rightly understood, but represented a moral achievement of

[24] Don Lavoie placed his very informative study of the economic calculation debate under the sign of Hayek and Polanyi's theory of knowledge: "It is one of the main themes of this study that economic rivalry among competitors in the market generates knowledge that no rival on his own could have possessed in the absence of that rivalry. This, as I think Michael Polanyi has shown, is a special case of the way that knowledge in general grows, the way that progress is attained within the "Republic of Science" (Polanyi 1969, 49-71). Scientific discovery is a process that fundamentally depends on contention among separate rivals […] The outcomes of such processes are necessarily unpredictable in advance of their actual working out or living through. They are what Hayek calls *discovery processes*, processes that can reveal new knowledge that the rivals who created it could not have had" (Lavoie 1985, 26).

[25] Hayek himself admitted just that much himself when he remembered that: "It was still more or less an accident when in 1935, in editing various essays on socialist planning, […] I got increasingly interested in the philosophical and methodological questions which, I came to be more and more convinced, were ultimately responsible for some of the current political differences" (Hayek 1994, 68).

Western civilization. Responding to the European crisis and the radicalization of its political solutions, Lippmann and Rougier each built upon analogous intuitions about the division of labor, the coordination of individual agents and the role of institutions to update the liberal theory of social order.

That economic planning did not stand up to proper scientific inquiry was an argument Lippmann lifted directly from Mises and Hayek. Furthermore, he surmised that "to realize the promise of science," planners "must destroy free inquiry. To promote the truth they must not let it be examined" (2005, xliv). Polanyi as well had started to glimpse at this radical step in his articles. Both Lippmann and Polanyi proposed a stark distinction between science and technology—or pure science and applied science. The organization and results of scientific inquiry or technological application modelled two very different modes of political interventions: the former was liberal in nature, as exhibited in the methodical self-organization of science, and the latter authoritarian, fashioned as the application of social technologies to a passive material.

The distinction they drew was as much ideological as it was epistemological. Collectivists, they both reflected, understanding their mission as the realization of the scientific project of a technology-driven society had actually forgotten how science had developed: "Had they [the collectivists] taken a longer view they would have questioned their basic premises, remembering that the scientific achievements which they now regard as compelling the establishment of authority became possible only as scientific inquiry was emancipated from authority" (Lippmann 2005, 17). Science then embodied the "method of freedom" whereas interventionism was "arresting the very advance in science which is the reason given for the magnified officialdom" (Lippmann 2005, 19-20). Liberalism embodied the method of science the same way science had built itself upon a methodological liberalism. The *history of science*, read through neoliberal glasses, revealed their common genealogy and circular interaction.

At the core of Lippmann refutation of technological predictions to serve as the strong arm of government, we find two familiar themes: the intrinsic limitations of our knowledge and its reach, and the complexity of the social which lends it a measure of opacity. The historical phenomenon of the division of labor produces a cognitive economy which remained invisible to individual agents. On that peculiar insight—that social knowledge is tacitly embedded in traditions and customs, and that our consciousness is helplessly limited—Lippmann is situated at a convergent point with Hayek, Polanyi, and Rougier. They all pinned the complexity of the social upon the inexplicit canvas onto which our daily interactions, habits and practices were woven. The obscurity of both the individual and social psyche veiled a wealth of knowledge, one which the market artfully and efficiently coordinated. Complete planning, on the other hand, by bringing all the economic processes to the fore, failed to acknowledge the cognitive economy brought naturally by the division of labor. The social world, perpetually in flux, "transcended" our power and understanding, and men deceived themselves "when they imagine that they take charge of the social order" (Lippmann 2005, 32). For early neoliberals, the new-found belief in scientific politics through an

extension of government power betrayed an ignorance of the complexity of the social order and of interventions.

Louis Rougier

Although one of its most unsung representatives, the French philosopher Louis Rougier charted the clearest path among early neoliberals for an epistemological critique of rival political ideologies. His depiction of socialism as a scientific fallacy originated in his early epistemological work and his rejection, building on the work of Henri Poincaré, of all *a priori* truths. From 1920 onwards, Rougier aimed to dismantle the 'Rationalist dialectic': the belief in the existence of eternal and necessary truths was caused by a "mental illusion" which reified empirical phenomena into abstract and self-evident propositions (Rougier 1920, 441). Like Hayek and Popper, Rougier followed the same epistemological path: his criticism of *a priori* truths combined with the inspiration of conventionalist mathematicians convinced him that the determinants of knowledge rested with the scientists themselves and the discrete but rigorous methodological rules they adopted.[26] The revolutionary conventionalism of the mathematicians and physicists of the 20th century called for epistemology and science to free themselves from the shackles of formal logic and to operate without the safety net of either empirical induction or metaphysical anchoring: a creative rupture with Reason and Nature which neoliberal philosophers set to replicate with the doctrine of liberalism.

In the 1930s, Rougier undertook two missions abroad, one to the Soviet Union in 1932, and the other to Eastern Europe in 1934. He claimed, some decades later, that it was this trip which sparked his interest in economic and institutional problems (cf. Audier 2012, 98-99), and nurtured his new perspective of a "constructive liberalism" (*libéralisme constructeur*) in which institutions ought to guarantee the proper operation of the price mechanism. He later admitted that the spectacle of totalitarian regimes had proved to him "by the absurd, the necessity and the soundness of liberalism" (quoted in Denord 2006, 101). Very much like Polanyi, Rougier considered the dangerous success of the Soviet Union a wake-up call for liberalism to change its message.[27] Both were struck by the contradiction between the actual results brought about by the regime and

[26] "Human science," wrote Rougier "can only be interpreted, in definitive, by the men who make it, just as the measurements of an instrument can only be interpreted by the theory of this instrument" (Rougier 1936, 194).

[27] Rougier's confession of the influence of his trip to Russia can be found in a text he wrote in support for his candidacy to the ALEPS' Arnoulx Prize in 1970 : "I owe to a mission to the USSR (Sept.-Oct. 1932) […] the interest I have showed since then to institutional and economic problems. In order to react against the totally unjustified infatuation from a part of French intelligentsia towards the Soviet experience, it had appeared to me that the representation of the market economy had to be revamped. The Manchester School had neglected the study of the institutional framework that, alone, allows the market economy to function efficiently. They had further neglected the social question which made necessary to assign part of the national income from individual consumption towards collective ends. It was suitable then to admit the legitimacy of state interventions on the triple condition that the price mechanism was respected, the real cost of these interventions stated, and that they were financed thanks to actual revenues within a balanced budget" (Archives Rougier, quoted in Audier 2012b, 98-99 footnote)

its promises.[28] Rougier reminded the reader that in Soviet Russia: "science for science's sake, just like art for art's sake, are considered bourgeois heresies. *Soviet science is a political science, a class science*, which must serve the proletariat and allow him to build socialism. In the current state of affairs, with this prevailing *mystique*, *moral and political sciences are impossible*" (1934, 622; my emphasis). Among the early whistleblowers, Rougier noted the difficult situation of Russian geneticists, sent to Siberia because "the laws of Mendelian heredity are incompatible with Marxism-Leninism" (quoted in Dard 2007, 56).[29] At around the same time, and against the tide of their respective settings, both Rougier and Polanyi had reached very similar conclusions as to the use of science for propaganda in totalitarian countries. The politicization of science in Soviet Russia, and its repercussions in the French and British scientific communities, polarized scientists and made them sensitive to the social conditions of their work. Scientific philosophy, instead of unifying mankind, had led to more divisions in the name of rival conceptions of science and scientific method and objectives.

Following these two eastern trips, Rougier will be twice invited to an important place for the elaboration of early neoliberalism: the *Institut Universitaire des Hautes Études Internationales* in Geneva, where Ludwig von Mises and Wilhelm Röpke were both residents in exile at the time. Both of his books *Les mystiques politiques contemporaines* and more famously *Les mystiques économiques* (1938) were drawn from the lessons he gave at the Institute, respectively in June 1935 and June 1937. In the *Mystiques économiques,* Rougier aimed to show that economic planning was not only a flight of fancy but a scientific fallacy because "such an endeavor presumes that circumstances, by nature continuously variable, remain constant; that innumerable variables upon which the creation and circulation of wealth depend are known; that tastes, needs, preferences, which are purely qualitative and subjective things, can be quantified" (1938, 27). Like the spontaneous equilibrium of gas molecules within a sphere, the statistical distribution of society was impossible to predict and calculate: the subjectivity of economic agents made their behavior opaque to individual scrutiny, yet allowed for statistical regularities to develop. Gas kinetics allowed us to see how the freedom of each atom (invisible to the naked eye), far from provoking anarchy, led to a pressure and temperature equilibrium, which we could observe. These different orders of magnitude ensured the catallaxie of the economy: from the freedom of the "human molecules" resulted the "collective order" at a higher level (1938, 51). The cognitive limitations of the agents and the resultant dispersion of information made a directed

[28] Both Polanyi and Rougier considered Communism a religion. However, Polanyi perceived Communism as a substitute for a loss of religiosity and an ideology born of nihilism and materialism, whereas Rougier accepted it as the last mutation of the Judeo-Christian doctrine.

[29] To illustrate the scientific hubris which stirred Soviet scientists and their followers, Rougier claimed that during his trip to Moscow, in October 1932, Abram Joffé, then president of the Russian Academy of Sciences, made a striking confession. He admitted that the Bolshevik regime was "purely transitory," it was there to "make a clean sweep:" "the day will come," Joffé told Rougier, "when the Bolsheviks will step down in favor of us. On this day, Russia will no longer be administered by the Politburo, but by the Academy of Sciences" (Rougier 1948, 33).

economy impossible because it broke this "marvelous calculating machine that is the price mechanism"[30] (1938, 28). For Rougier, a gas mass provided the analogue of the "perfect liberal regime," a statistical equilibrium which thinking human molecules perpetually disrupted: "On the kinetics of economic actions is superimposed, as to belie them, the dynamics of the psychological interactions between human groups" (1938, 191)[31]. Similarly, the State represented a structure which restricted the individual's "degrees of freedom" (1938, 191).

Rougier's chemical analogy which comes at the end of the *Mystiques économiques* illustrates vividly the attraction of the natural sciences towards economic thinking. However, contrary to classical liberalism, these analogies between economic activity and physical or chemical laws did not consist of a reductionist gesture anchoring economic science within the natural sciences. On the contrary, these updated analogies incorporated the precautions which stemmed from the new scientific spirit of these disciplines: the imprecision of micro-observation, the antireductionist properties of ensembles, the danger of hypostatizing regularities.

Early neoliberalism as an epistemological critique of planning

This early neoliberal argument against the possibility of planning directly led to the parallel elaboration of two key ideas: first, social knowledge is irremediably divided and dispersed; second, it remains largely implicit and tacit. Epistemic limitations deriving from the division of knowledge had both scientific and political consequences for just how much one (e.g. the state; the planning board; the welfare economist) was able to know and thus to predict adequately. Neoliberals rested their case for the market on its epistemological superiority to "keep commercial ideas and information in universal circulation" (Polanyi 1940, 39). They shared the same critique of planning based on the impossibility to centralize information efficiently, and the necessity to let lateral adjustments substitute for vertical decisions (cf. Polanyi 1998[1951], 189ff).

But there existed an additional epistemological limit to planning: not only social knowledge could not be centralized in one place, it remained largely implicit, that is tacitly embedded in traditions and customs. For Polanyi, each dynamic order (e.g. arts, law, language, religious and social thought) had developed through "direct individual adjustment" whereby a "public mental heritage" was being transmitted between generations (Polanyi 1941b, 438). In order to articulate a model for a liberal society, neoliberals agreed, one had to start from the complexity of existing orders wherein "we make constant use of formulas, symbols, and rules whose meaning we do not understand and through the use of which we avail ourselves of the assistance of

[30] The argument, both in Rougier and Lippmann, is more positivist than in Hayek and Polanyi, as for Rougier and Lippmann, we could theoretically (even though it was completely impractical) have a calculating machine powerful enough to resolve this set of equations. With the presence of tacit knowledge revealed through the markets, this is just impossible for Hayek and Polanyi.

[31] Compare with a similar formulation found in Popper's *Poverty of Historicism*: "The human factor is ultimately the irrational element in social life and social institutions" (2002[1957], 146).

knowledge which individually we do not possess" (Hayek 1948[1945], 88).[32] The superiority of competitive markets did not only lie with the effortless coordination of the various individual plans, but stemmed from their capacity to draw out, compute, and value the tacit knowledge carried by the participants.

For early neoliberals, the problem with planning did not flow from the intrinsic limitations of calculating power or economic science, but from the *opacity of psychology*. This presupposition resulted in much of the shared neoliberal anti-positivist and antireductionist bias as well as their insistence upon the observation of actions rather than the sociological scanning of intentions. Equally in Lippmann, Hayek, Rougier and Polanyi, the superiority of a market economy was predicated upon an epistemology which distinguished between spheres of lawful exact knowledge, and spheres where precise knowledge was impossible because it remained dispersed, tacit, opaque. As Europe hastened towards war, neoliberals started to elaborate a wider social theory from these narrow epistemic intuitions. By the end of the 1930s, the terms of the calculation debate had been reframed in terms of the defence of liberalism against totalitarianism, giving political leverage to epistemological arguments which had been originally devised to discredit the idea of economic planning. This recoding, far from evident from the outset, became a distinctive hallmark of neoliberal thinking.

PART 3 –EARLY NEOLIBERALISM AT WAR

The Walter-Lippmann Colloquium (WLC) was convened by Louis Rougier in August 1938 at the International Institute for Intellectual Cooperation (IIIC), located in one of the wings of the Palais-Royal in Paris. As the intellectual and scientific arm of the League of Nations, and a precursor of UNESCO, the IIIC represented a part of the much larger interwar effort to organize intellectual organization among League members in order to rethink the parameters of international order (Laqua 2011). The publication of Lippmann's book had been merely the pretext for an idea which had been circulating for some time among the early neoliberals. The objectives of the meeting were clearly posed by Rougier in his opening statement. Out of the three merits he found in Lippmann's book, the first two worked hand in hand: the struggle against collectivism and the criticism of liberalism *qua laissez-faire*. During the Colloquium, these two themes will become fused into one: the limits of state intervention within the framework of the price mechanism. The state needed to guarantee its own independence from coalesced interests who threatened to leverage their influence for further interventions. The third merit Rougier found in Lippmann's book, on the other

[32] Compare with Hayek (2010[1942-1944], 146n10): "There is a great deal of knowledge which we never consciously know implicit in the knowledge which we are aware, knowledge which yet constantly serves us in our actions, though we can hardly be said to 'possess' it."

hand, did not concern the real economy but his description of the poor state of the science of liberalism and the need to restore a true liberal science.

Polanyi's economic film entitled "An Outline of the Working of Money" was shown to the Colloquium's participants.[33] His sole recorded intervention during the proceedings tapped into the same educational themes he had vigorously exposed in defense of his movie project. Civilization was threatened by this "mental derangement" caused by a "permanent state of perplexity" over the unintended consequences of economic interventions. The problem with the invisible hand was precisely its *invisibility* which frustrated the agent's economic activity from its larger social and moral sense, a void which central plannism fulfilled. This widespread ignorance about how the economic system operated threatened to make the next century "a modern Dark Age in which the use of rational thought was lost."[34]

By the beginning of the Second World War, the emerging consensus for a scientific reform of liberalism was jeopardized by the collapse of Europe. The planning debate reached a provisional resolution with the declaration of war. For neoliberals, many of their worst fears came to be realized: the horizon of a supra-national European federation dissipated, war economies meant widespread state interventions and controls, and the rule of law was all but suspended. Worse, liberalism and its failures kept on carrying the blame for the democratic shipwreck in Europe. Influential social thinkers like Karl Mannheim had linked together the fate of Western society and its planned rationalization as the only way to save the crumbling democratic state, coining the motto "planning for freedom" (Mannheim 1940). Socialist scientists like C. H. Waddington thought totalitarianism was "inevitable" and "a step which we shall all have to take to-morrow" because "the whole trend of recent history is towards it" (Waddington 1948, 22). The fight against collectivism had become first and foremost a fight of ideas and, crucially, a fight over scientific ideas.

Fighting socialist scientists

Despite some important differences, both Hayek and Polanyi were looking for ways to defeat the current "scientific socialism" which was a dominant voice in the media and the public intelligentsia, and fed the public with the kind of fallacies neoliberals had identified. To a large extent, their wartime publications amounted to a war effort against the left scientists in England who occupied vital positions within the war government, continued to influence the general public (thanks to the sympathetic editorship of *Nature* and the B.B.C.) and met regularly to discuss their views in the Tots

[33] Despite some criticism, Polanyi received encouragement to work on a more ambitious version. With the help of John Jewkes, he obtained a grant from the Rockefeller Foundation to redo and enlarge the first version, which he intended to distribute in America. He completed "Unemployment and Money" in the Spring 1940 and it premiered in London and New York. Unfortunately, the movie failed to attract any substantial attention (Scott and Moleski 2005, 178-9).

[34] "Chapters," "1929-1939," box 42, folder 2, Polanyi Papers (quoted in Scott and Moleski 2005, 177).

& Quots discussion group.[35] In a letter from July 1st, 1941, Hayek explained that he attached "very great importance to these pseudo-scientific arguments on social organization being effectively met and I am getting more and more alarmed by the effects of the propaganda" of the left scientists which "discredit the reputation of science by such escapades."[36] Hayek was now effectively joining Polanyi's fight against planned science, writing in *Nature* that the movement for economic planning strongly supported by left scientists and engineers, had now "succeeded in capturing public opinion that what little opposition there is comes almost solely from a small group of economists" (Hayek 1941, 213). Being in the midst of writing his own critique of the scientist psychology (Hayek 2010), he derided the natural scientists' meddling habit with economics, "pronouncing in the name of science in favour of schemes or proposals which do not deserve serious consideration." (Hayek 1941, 217). Hayek's formative political activities during the writing of the *Road to Serfdom*[37] "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." (Mirowski 2007, 363).

Writing to Hayek after the *Nature* article's publication, Polanyi reiterated his current commitment to their joint enterprise, stating that "the only real aim in my view is the starting of a literary and philosophical movement of our own for the renaissance of Liberalism."[38] Polanyi's own refutation of planning had evolved from a defence of pure science towards an epistemological defence of liberalism based on the position of thought in society. The struggle for pure science, he had determined, had been a small, but revelatory part of a much larger civilizational struggle: "the attack on science," he proclaimed, "is a secondary battlefield in a war against all human ideals, and the attack on the freedom of science is only an incident in the totalitarian assault on all freedom in society" (Polanyi 1941, 454). Science was only one of the many "dynamic orders" to be found in the "intellectual and moral heritage of man" and characterized by "an arrangement of great complexity and usefulness, achieved by a series of *direct lateral adjustments* between individual producers making independent decisions" (Polanyi 1941, 435-6). Two in particular were paradigmatic examples: Science as Polanyi

[35] The Tots and Quots was an important and largely forgotten group which greatly contributed to the publishing ire of early neoliberals. The club had been formed in the early 1930s by Cambridge zoologist Solly Zuckermann and this original group of Young Turks comprised Lancelot Hogben and J. B. S. Haldane, as well as Julian Huxley, G. P. Wells, and the economists M. M. Postan, Roy Harrod, and Hugh Gaitskell. Running from 1931 to 1933 and reconvened in 1939, the meetings had elicited amongst its members, most of them had been greatly influenced by the 1931 Russian roadshow, "a strong theme of the social responsibility of scientists" (Zuckerman 1978, 109) as the debates dealt with the "general significance of science to society" and "the conscious role science might play in social development" (*ibid.*, 391). Hayek wrote to Fritz Machlup that: "The most dangerous people here are a group of socialist scientists and I am just publishing a special attack on them in NATURE – the scientific weekly which in recent years has been one of the main advocates of 'planning'." (Hayek to Machlup, 19 October, 1941; reproduced in Hayek 2010, 319). In an unpublished interview with W. W. Bartley III dated "Summer 1984, at St. Blasien", Hayek said that J. D. Bernal "became to me representative of a new view, which I tried to analyse in 'The Counter-Revolution of Science', and that was so dominating in Cambridge." (quoted in Caldwell 2010, 33n91).

[36] Hayek to Polanyi, 1 July 1941, Box 4, Folder 7, Polanyi Papers, University of Chicago Library.

[37] Of which the first draft had been completed as early as 1942. The same topic of science and plannism reappears in *Road to Serfdom*. cf. Hayek 2007, pp. 200-204.

[38] Polanyi to Hayek, 18 November 1941, Box 78, Folder 35, Hayek Papers, Hoover Archives.

tirelessly demonstrated, and the Common Law towards which Lippmann had pointed. The Common Law had arisen "by a process of direct adjustments between succeeding judges" in a process "precisely *analogous* to the relationship between the consecutive decisions of individual producers acting in the same market" (Polanyi 1941, 436). For Polanyi, dynamic orders extended beyond the economy, they encapsulated a variety of activities or institutions which resembled each order according to their method of organization.

Here we can see at work the construction of neoliberal theory: the epistemological foundations unravelled in the analysis of the economic order (Hayek) or in the workings of science (Polanyi) were the templates of a much larger foundation for social activity which had been inherited as "spontaneously arising orders." They were 'analogous', or illustrative of a much larger and unifying principle: undesigned orders.[39] Polanyi already possessed at that time an all-encompassing view of society as "a network of dynamic orders" (Mullins 2013) anchored in tradition and publicity. The complexity of existing orders made them epistemologically superior in embedding and discovering new knowledge and information while conferring to the individual a higher sense of responsibility and commitment.

The challenge of Karl Mannheim and of a sociology of knowledge

The sophistication of neoliberal thinking owed a lot to the intellectual challenge presented by fellow Hungarian exile Karl Mannheim. Between his arrival in London in 1933 and his death in 1947, Mannheim's output combined his sociology of knowledge developed in *Ideology and Utopia* (1936[1929]) into a dark assessment of the course of European history, where the safeguard of freedom could only be achieved through planning, lest the masses fell for totalitarian ideologies. In Germany in the 1920s, Mannheim's sociology of knowledge aimed at creating sociologically-informed politics which could overcome the irrational elements present in ideology. He proposed the "free-floating intelligentsia" as being in a privileged position to achieve the integration of the common denominator present within the various thought-models in order to actualize the emancipatory dimension of sociology. In the England of the 1930s however, Mannheim turned towards the idea of "planning for freedom" as a way to pre-emptively safeguard Western civilization, which meant that traditional elites ought to embrace the sociological diagnosis of their failures and their remedies (Mannheim 1940). He shifted from a conception of knowledge with a catalytic function at the service of better-informed politics towards a knowledge instrumental for control by the planning elite as a way to counter social disintegration (Kettler and Meja 1995, 148). Liberalism could only be rescued through a positive understanding of its automatic mechanism of integration, then to be strategically reoriented towards a therapeutic

[39] In the preface to his *Logic of Liberty*, Polanyi presented the "freedom in science" as the "Natural Law of a community committed to certain beliefs and the same is seen to apply *by analogy* to other kinds of intellectual liberty" (Polanyi 1998, xviii; my emphasis).

reconstruction of society. Mannheim and the Social Relations of Science movement were veering towards the same conclusions: that thought, being a product of society, had thus to serve society.

Karl Popper, Friedrich Hayek and Michael Polanyi all came in contact with Karl Mannheim during his London exile, as Hayek and Mannheim were colleagues at the LSE and Mannheim invited Polanyi to participate in *the Moot*, a Christian discussion circle initiated by J. H. Oldham and attended by T.S. Eliot.[40] They all perceived his sociology of knowledge at the service of scientific politics as deeply antagonistic to the neoliberal project which sought to sever the link between knowledge and social reform. For Popper, uncovering the "social determination of scientific knowledge" annihilated the basis of free discussion and controversy and the quest for scientific objectivity (Popper 2013[1945], 420). The goal of a higher synthesis of dormant elements by an intelligentsia contradicted the process of scientific discovery, which remained always incomplete and subject to modification.[41] Popper identified Mannheim's utopian vision with that of a closed society which was fundamentally hostile to his own open society based on conjectures and refutations. Equally mistaken in his view was Mannheim's conception of knowledge: like Polanyi, he emphasized the personal elements of scientific knowledge and discovery. "What the 'sociology of knowledge' overlooks," wrote Popper in his *Poverty of Historicism*, "is [...] the fact that it is the public character of science and of its institutions which imposes a mental discipline upon the individual scientist, and which preserves the objectivity of science and its tradition of critically discussing new ideas" (Popper 2002[1957], 144).

Similarly for Hayek, Mannheim's sociology of knowledge was the latest avatar of "scientism" where the comprehension of the mechanisms of thought would allow the theoretician to predict its development. The "constitutional limitations of the individual mind" as unveiled by Hayek as the foundation of spontaneous orders solved the problem of coordination and integration Mannheim was hinting at with his scientific planning. " Polanyi considered Mannheim's sociological reductionism antithetical to the restoration of dynamic orders founded in the personal knowledge of individuals. For Mannheim, planning entailed a revaluation of the old traditional beliefs to achieve a controlled direction of the masses. Polanyi, on the other hand, valued the continuity of the Western mental heritage, where dedicated communities of practitioners were guided by tradition and faith. Whereas truth in Mannheim can be achieved by the social scientist through a decentering from its initial position, Polanyi remained committed that it could solely be found at the level of personal beliefs, in the "dark heart" which no

[40] Mullins and Jacobs (2006: 147) explain that the discussions of the Moot "revolved around the topic of *order* and, more particularly, around the problem of how order might be restored in British society and culture in the context of a 'world turned upside down'." For the relationship between Mannheim and Polanyi, see Mullins and Jacobs (2005).

[41] Popper's "Poverty of Historicism" published in *Economica* in 1944-1945 constituted in many ways "a brief against Mannheim" (Pooley 2007: 376) as he writes that Mannheim's *Man and Society in an Age of Reconstruction* (1940) provides an adequate stand-in for the whole of "historicism." Mannheim's book, Popper writes, "is the most elaborate exposition of a holistic and historicist program known to me and therefore singled out here for criticism." (Popper 2002[1957], 62n16).

sociological light could reveal.[42] Polanyi, Hayek and Popper all effectively argued that scientific knowledge was a socially determined process, yet an intersubjective and rational one, and not the result of social conditioning. Their philosophy of science, valuing the social process of science within dedicated institutions as independent from the scientist's social position, was in effect an answer to Mannheim's materialist sociology of knowledge.

The positive revaluation of tradition

The significance of tacit knowledge became an important component of early neoliberalism. Its existence confined the claims of "positivist" or "collectivist" social science, and helped to reaffirm the primacy of abstract and inarticulate principles and ideals in the formation of social thinking. Despite his rationalism, Popper admitted that a great deal of our social knowledge derived from experimentation and casual observation whereas "the holistic view of social experiments leaves unexplained the fact that we possess a very great deal of experimental knowledge of social life" (Popper 2002a, 79). As with Popper, Hayek found that casual social knowledge could not be accurately described by the social sciences because it stemmed from a tacit understanding of situations into which "local circumstances of time and place" have a decisive role. Furthermore, this social knowledge doesn't arise in one individual brain, but is embodied in symbols that "we use without understanding them, in habits and institutions, tools and concepts, that man in society is constantly able to profit from a body of knowledge neither he nor any other man completely possess" (Hayek 2010, 146-7). This intangible reservoir of knowledge both surrounds and limits us. Yet, this social knowledge is indispensable to create spontaneous collaboration between individuals as they share the same implicit codes and customs.

Accumulated in the long-term, tacit knowledge sediments as traditions, themselves representing the unplanned and spontaneous 'growth of reason'. Traditions, through the operation of tacit knowledge, possessed their own rationality and contributed to the development of spontaneous orders by equipping participants with a shared baggage of morals and rules of conduct. The same way social knowledge could not be fully encompassed and understood, traditions represented general rules of morals and conduct to which we submitted without fully understanding them (Hayek 2010, 154)[43].

[42] Polanyi wrote personally to Mannheim: "As regards the social analysis of the development of ideas, suffice it to say that I reject all social analysis of history which makes social conditions anything more than opportunities for a development of thought. You seem inclined to consider moral judgments on history as ludicrous, believing apparently that thought is not merely conditioned, but determined by a social or technical situation. I cannot tell you how strongly I reject such a view." Polanyi to Mannheim, 19 April 1944, Box 4, Folder 13, Polanyi Papers, University of Chicago Library. For more on the relationship between Mannheim and Polanyi, cf. (Mullins and Jacobs 2005).

[43] "It is essential for the growth of reason that as individuals we should bow to forces and obey principles which we cannot hope fully to understand, yet in which the advance and even the preservation of civilization depends" (Hayek 2010, 154).

Like the market economy, they commanded a measure of submission and deference, since their legitimacy rested with their 'superhuman' powers of social coordination.

This view of tacit knowledge had been developed at around the same time by Michael Polanyi when reflecting about the institutions of science, law, and religion and their shared properties. For instance. the tacit aspects of tradition revealed themselves in the shared obligation scientists feel towards the implicit ideals of science, and the ethical and professional commitment it puts before them. Polanyi saw no other explanation for the consensus existing between scientists than the fact that they all shared the same premises and submitted "unconditionally" to the general authority of science: "The tradition of science, it would seem, must be upheld as an unconditional demand if it is to be upheld at all. It can be made use of by scientists only if they place themselves at its service. It is a spiritual reality which stands over them and compels their allegiance." (Polanyi 1964[1946], 55) Finally, since the tacit elements could never be formally described, and since truth remained an ever-elusive goal, the transmission of the scientific tradition represented mainly the transmission of scientific beliefs supported by faith.

Tradition understood as the continuity of the tacit aspects of knowledge in a social order offered another angle for the neoliberal demarcation of the opaque and the transparent. The discussion around the topic of tradition in Britain largely exceeded the smaller circle of the *Moot*, although three of its members produced prominent pieces of work and influenced many others: T. S. Eliot, Michael Polanyi, and Karl Mannheim. Major contributors to this debate which took place in the 1940s also included Friedrich Hayek, Karl Popper, and, perhaps the most significant of all, Michael Oakeshott with his classic article of 1947 "Rationalism in Politics" (Jacobs 2012). Polanyi argued that science as an institution could not be reduced either to a set of explicit rules or protocols, nor to a functional part of a social organism. The practice of science, as well as of law or of religion, was akin to following "rules of the art" which could only be embodied and transmitted through institutions informed by a tradition.[44]

In these ways, the topic of tacit knowledge in tradition came to solve the question of the origin of the institutions and practices early neoliberals addressed. Not only were traditions reservoirs of tacit knowledge, they embodied shared principles and values which were instrumental in the formation and preservation of social orders. They provided sources of legitimacy and authority for practices without resorting to a discursive justification. Moreover, they were crucial factors of social stability and continuity. Against the search for an original intention or design, the development of traditions through tacit knowledge offered a critical angle against political opponents who wished to rationally reform society. Finally, it provided a general model for liberalism as a *method* to understand orders which possessed their own dynamism through the interplay of tradition and change.

[44] "Being incapable of precise formulation, rules of art can be transmitted only by teaching the practice which embodies them. For major realms of creative thought this involves the passage of a tradition by each generation to the next." (Polanyi 1964[10946], 58).

PART 4: POST-WAR DIVERGENCES

Despite the limited success of his *Society for the Freedom of Science*, Polanyi's ideas were gaining traction in England and in the U.S.A. as he was quickly recognized as the principal exponent of the principles of academic freedom. His production during the war and after built upon the intuitions he had expounded within his early work, and more and more Polanyi framed his writings within a conscious perspective of rescuing liberalism and Western civilization. By the spring of 1943, Polanyi had written fifty pieces in defense of the liberal traditions, some as outlines and manuscripts, others as lectures and essays (Scott and Moleski 2005, 190). "Up until *The Road to Serfdom*," Mirowski reminds us, "it was Polanyi, and not Hayek, who was the more visible and publicly effective spokesman against the Left in Britain. [...] it was Polanyi and not Hayek who was situated at the axle of a vast wheel of controversy over political economy and science in Britain in the 1940s" (Mirowski 1998, 33).

Polanyi's repeated insistence upon the spiritual dimensions of both science and society lent his liberalism a particular flavor. Yet, his proclamations that the commitment to the Western civilization was a matter of faith were echoed by the participants to the Mont-Pèlerin meeting of April 1947. In his opening address, Hayek denounced the same "false rationalism" which Polanyi had repeatedly criticized since the end of the 1930s, as leading to a form of "intellectual hubris." The proper attitude towards the spontaneous orders within society were those of reverence and intellectual humility, akin to the spiritual awe found in religious convictions. Like Polanyi, Hayek did not believe that positivism or radical skepticism provided solid grounds for a renewed liberalism: "Unless this breach between true liberal and religious convictions can be healed," he announced, there was "no hope for a revival of liberal forces" (Hayek 1992, 244). Moreover, the private militant organization which Hayek wished to establish relied on two fundamental Polanyian assumptions: on the one hand, participants ought to share an "agreement on fundamentals" where "certain basic conceptions are not questioned at every step" (Hayek 1992, 238). On the other hand, Hayek acknowledged that adherence to liberalism simply out of habit was insufficient: participants were expected to commit to its ideal and to spread it within society. Against the Marxist message of materialism and universalism, the neoliberals reaffirmed the importance of a community bonded by shared ideals. Within this community, the dissemination of these ideals would be confided to "second-hand dealers of ideas" who could educate and influence the masses. Responding to Hayek's paper on "Intellectuals and Socialism" (1949), Polanyi admitted there was "hardly one paragraph who hasn't given me a thrill of pleasure."[45]

[45] Polanyi to Hayek, 14 December 1948, Box 78, Folder 35, MPS Papers, Hoover Archives.

Despite the proximity between Hayek's vision and his own, Polanyi was disappointed with the Mont-Pèlerin meeting. His participation in the initial meeting did not elicit flattering comments and his credentials were not as well assured with the Society as they were in England. He was trusted neither by the Germans nor the Americans, and Karl Popper in particular opposed from the beginning Polanyi's project of anchoring liberalism to a metaphysical framework.[46] On the other hand, John Jewkes kept vouching for Polanyi, and his participation in the Society allowed him to strike friendships with Raymond Aron, Bertrand de Jouvenel, and Veronica Wedgwood. Polanyi dedicated the summer of 1948 to the writing of *The Logic of Liberty*, his book devoted to economics and the planning controversies which collected essays and broadcasts from the past decade.

Polanyi's relationship with the Mont-Pèlerin Society illustrates the hopes and deceptions some of its early members shared. Compared to other participants, Polanyi was neither an economist, nor (yet) a philosopher. Polanyi's concern to reassert a liberalism committed to a moral and cultural ideal did not sit well with the budding Mont-Pèlerin Society, and Polanyi quickly felt ill at ease with the technical economic discussions of his fellow neoliberals. At the onset, MPS members had been united more by what they opposed than by a common agenda. Polanyi, for instance, who regarded capitalism and tradition as connected elements of an antirationalist critique of planning, opposed members who conceived the two as incompatible. Three elements account for the progressive distance Polanyi felt with the MPS. First, the progressive circumspection of the members to discuss liberalism as a general idea or framework for society as it seemed to have been agreed on at the original 1947 meeting. Somehow the Society relinquished its role as an intellectual center for the development of an alternate account of what liberalism entailed beyond economic freedom. Second, the idea of a multidisciplinary academy which Hayek had envisioned quickly faded as economists took the lion's share of new appointments whereas philosophers declined in numbers. Finally, the Society was perceived as rather closed onto itself, unwilling to commit to its positions publicly. At the conclusion of its first decade, the MPS had moved away substantially from the foundational questions which had motivated its constitution. Hayek's ambition to prevent the MPS from becoming a society of economists failed and polymaths members like Knight and Jouvenel retreated from debates increasingly economistic in style. By early 1956, Hayek was suggesting to colleagues that the society ought to celebrate its tenth anniversary and then wind down. The "Hunold affair" and the mass resignation of Continental members narrowed down the Society membership to technical economics and its Atlantic identity even further.

The original members' ambition to create an active dialogue between economists and philosophers dissipated and the shared attempt to construct a "new" liberalism had irremediably collapsed (Burgin 2012, 125). In a letter sent in 1955, Polanyi explained

[46] See the minutes from the first meeting of the Mont-Pèlerin Society, especially the session titled "Liberalism and Christianity" in "Mont-Pèlerin Conference, April 4th, 9.30," Box 5, Folder 13, MPS Papers, Hoover Archives.

his own misgivings to Hayek about the MPS whose "great achievements were due to a theoretical position which is not wholly right and which succeeded to some extent in spite of some rather far reaching errors." "One of the benefits of the Mont Pèlerin Society," Polanyi continued, "was to consolidate friendships, such as those between [Bertrand de] Jouvenel and myself which fostered a somewhat different view of liberty and the menaces to liberty than those expounded by [Ludwig von] Mises and [Jacques] Rueff – and sometimes by yourself. Of this I have made no secret, either in Beauvallon [France, MPS Meeting 1951] or in Venice [MPS Meeting 1954], at both of which places I intervened to say so at some length."[47] Reluctant to be a source of divisiveness among the members, Polanyi concluded the letter by asking whether he should withdraw from the MPS. In response, Hayek encouraged Polanyi not to withdraw as he represented "an extreme wing" in a Society he had never intended to become "homogenous." Hayek's answer is quite revealing in that he conceded that the original intention of the MPS had been somewhat betrayed as the "wider philosophical issues" were not topic of discussions anymore, denting his own interest in participating: "if you and perhaps the two others I have mentioned [Aron and Jouvenel] ceased to attend I should probably rapidly lose interest in the proceedings and get tired of the thing."[48] Despite personal assurances that they were both "concerned with the same kind of problems which are my concern," Polanyi retreated himself from any involvement from this point onward.

CONCLUSION

"Events have discredited a purely defensive liberalism. [...] The cultivation of detachment in the face of an advancing foe is a certain way to enslavement," confessed Polanyi in 1940 in a letter to J. R. Baker (Wigner and Hodgkin 1977, 427). This call to arms to scientists exposed the indissoluble bond between liberalism and free science: the pursuit of science depended upon its institutional and political framework. The materialist and historicist theories of the development of science had disclosed how much the scientists and their work were embedded within the progress of society. Planning its progress, some said, would finally liberate humanity from the shackles of error and misery. The nascent sociology of science and knowledge, often advanced by Marxists to support the case for planned science, paradoxically triggered the epistemological recasting of the relationship between the nature and use of knowledge, and the organization of society. For Polanyi, the constitution of the scientific community embodied both our highest civilizational achievement, and the template upon which the good society ought to be modelled.

[47] Polanyi to Hayek, 9 November 1955, Box 43, folder 35, Hayek Papers, Hoover Archives.
[48] Hayek to Polanyi, 20 November 1955, Box 43, folder 35, Hayek Papers, Hoover Archives.

Polanyi's commitment towards the "Republic of Science" brought him close to some epistemological questions which other liberals were also considering. The premise that knowledge was irrevocably tacit and personal (Polanyi), local and dispersed (Hayek) and always subject to its own falsification (Popper) unless it was to fall into a dogmatic mystique (Rougier) underpinned a recoding of liberalism as an institutionalized network of spontaneous orders with the market acting as a scientific device of coordination. The market served not only economic functions, but was endowed with the role of an epistemological guardian of a free society. Hayek's attempt to ally himself with Polanyi in order to argue for a different portrait of the operation of science, at a time when he was deep into his project of criticizing scientism, showed that the real adversary of early neoliberals were other scientists supporting socialism and planning as the logical extrapolation of their scientific world-view, and not interventionist liberals like Keynes. Paying attention to the shifting conceptions of the position of science in society during the 1930s provides us with an indispensable foundation for understanding the evolution of the neoliberal project.

Finally, one of the lessons early neoliberals learnt from their fight against socialism was that the politics of theorization were as important as scientifically defeating their opponents. Polanyi founded the *Society for Freedom in Science* in 1941 to organize scientists against the threat of planned science. Hayek, prompted by the unexpected success of the *Road to Serfdom* in America, revived his international activism which would lead to the foundation of the Mont-Pèlerin Society in 1947. Polanyi would be instrumental in the development of the *Congress for Cultural Freedom* founded in 1950. The tensions between the agendas of the various organizations, and the unfulfilled promises of the Mont-Pèlerin Society, brought many early neoliberals with polymath leaning into the fold of the CCF and away from the MPS. This showed the fundamentally open nature of neoliberalism at its beginnings and the fluid environment which existed post-WWII before these various institutions crystallized divergent programs and positions. Until 1955, it was felt that these competing liberal projects could work hand-in-hand, their personnel freely moving from one to another. After 1960, we find the picture of a dispersed set of groups whose orientations have moved then far from their post-war project. The original neoliberalism was dead, with the corpse never to be found.

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