

PHD THESIS SUMMARY:

**Otto Neurath and Ludwig von Mises: Philosophy, Politics,
and Economics in Viennese Late Enlightenment**

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PhD in Philosophy, October 2020

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Logical empiricism and the Austrian School of economics are two of the internationally most influential intellectual movements with Viennese roots. By and large independently of each other, both have been subject to detailed historical and philosophical investigations for the last two decades. However, in spite of numerous connections and interactions between the two groups, their relationship has captured surprisingly sparse attention. My dissertation focuses on the many-faceted juxtaposition of two supposedly antagonistic champions of Viennese Late Enlightenment: logical empiricist Otto Neurath and Austrian economist Ludwig Mises. I rationally reconstruct and critically compare their epistemological, methodological, and economic positions and demonstrate that a closer look reveals more compatibilities and similarities than acknowledged by the received view and by the protagonists themselves.¹ Over and above the historiographic task of challenging and amending this received view, the analytic components of my thesis inform contemporary debates in philosophy, politics, economics, and other sciences.

¹ Milonakis and Fine, for instance, characterize Mises's praxeology as "the most anti-positivist and anti-empiricist approach to social science ever stated" (2004, 259), which *prima facie* does not square well with Neurath's 'empirical sociology' (1931; see also [1931] 1973 for the standard English translation of excerpts of the 1931 book) or his 'radical physicalism' ([1934] 1983). While the antithetical opposition in philosophy, methodology, science, and politics is usually treated as an implicit certainty, Boettke, echoing Sigmund (2017), eloquently voices the received view on the relation between logical empiricism and the Austrian School: "How actually would one engage in 'exact thinking during demented times'? One answer was provided by the Vienna Circle, the other was provided by Hayek" (Boettke 2018, 33; see also 293).

AUTHOR'S NOTE: I want to thank my thesis supervisors Elisabeth Nemeth and Friedrich Stadler, my thesis examiners Rainer Hegselmann and Scott Scheall, as well as Hasok Chang, Ivan Ferreira da Cunha, Erwin Dekker, Malachi Hacohen, Karl Milford, Thomas Uebel, and all others who supported me by critically challenging my ideas and/or otherwise. I gratefully acknowledge funding from the Austrian Science Fund (FWF): W 1228-G18 and the Austrian Academy of Sciences.

Following an introduction and overview, chapter 2 reviews the existing literature on Neurath, Mises, and their encounter in the socialist calculation debates and questions the received view according to which Neurath and Mises are diametrically opposed in all respects. Admittedly, the socialist empiricist Neurath advanced calculation in kind for a ‘system of socialisation’ ([1921] 2004) whereas the classically liberal apriorist Mises devised the famous calculation argument against central planning. Yet, both scholars drew inspiration from the scientific and educational enterprise of Viennese Late Enlightenment, endorsed democracy, denied the possibility of meaningful monetary calculation under socialism, and sought to establish a viable notion of what is to be regarded as relevant and justified knowledge in the social sciences. The fact that Neurath and Mises also shared many philosophical, economic, and political opponents—including life-threatening totalitarian regimes—further motivates the more thorough analysis of their positions I prompt in chapter 2 (Linsbichler 2015).

Chapters 3 and 4 portray Felix Kaufmann as yet another idiosyncratic representative of the cultural milieu of interwar Vienna and as a mediator between the Vienna Circle and the Mises-Kreis. Kaufmann’s methodological writings, developed at the periphery of both logical empiricism and Austrian economics, facilitate understanding of their disagreements—some of them genuine and some of them merely apparent. His correspondence with Neurath indicates that what Kaufmann relayed to the Geistkreis and the Mises-Kreis as the doctrine of the Vienna Circle only captured overly reductionist, verificationist, and positivistic snippets of logical empiricism. Thereby, notwithstanding his other merits, Kaufmann contributed to the self-perception of many Austrian economists as antithetically opposed to logical empiricism (Linsbichler 2019; Linsbichler and Taghizadegan 2019a, 2019b).

The centrepieces of the thesis, chapters 5 to 8, employ conceptual tools of contemporary philosophy of science to identify and analyse three areas of hitherto neglected compatibilities and similarities between Neurath and Mises. First, I present an analytic version of Mises’s theory of human action which renders the apriorism of Austrian economics compatible with a logical empiricist stance (chapters 5 and 6); second, I consider their shared methodology of counter-factual reasoning (chapter 7); and third, I discuss common presuppositions and some consensual conclusions in the socialist calculation debates (chapter 8). The historical insights gained in these case studies in turn contribute to contemporary

philosophical debates on first principles in economics, logic, and mathematics, on thought-experiments and the use of unrealistic models, as well as on rationality, nudging, the role of knowledge in society, and presuppositions of assessments of social well-being.

Chapter 5 explicates and construes the aprioristic elements of Austrian economics, specifically the fundamental axiom of Mises' praxeology, as analytic instead of synthetic. The fundamental axiom, "man acts" (see, e.g., Mises 1962, 4), states that at least some human behaviour is purposeful, i.e., human individuals and only human individuals subjectively choose goals and apply means they subjectively consider expedient to attain these goals. Whereas the most prevalent view interprets Mises's fundamental axiom as a synthetic a priori judgment and has instigated many philosophers and economists to outright reject praxeology, I propose a shift from a synthetic fundamental axiom to an analytic one. Contrary to claims by many praxeologists, it is perfectly conceivable to explain human behavior employing alternatives to the fundamental axiom.² Neither direct observation nor intuition nor pure reason can rule out these alternatives conclusively, hence in the final analysis, the justification of the fundamental axiom is pragmatic. The ensuing conventionalist version of praxeology alleviates the charges of extreme apriorism against Austrian economics and makes praxeology more acceptable from a contemporary as well as from a logical empiricist perspective. One examiner pointedly described chapter 5 as 'saving praxeology from its originator' (Linsbichler 2017, 2021a).³

Logical empiricists' approval of analyticity and conventionalism in logic and mathematics is exemplified in chapter 6. Specifically, Neurath's brother-in-law, Hans Hahn, is portrayed as a pioneer of logical pluralism and of logical tolerance who adopted and adapted Russell's logicism and Wittgenstein's nominalism, and who anticipated a philosophy of

² I draw analogies to the case of the parallel postulate of Euclidian geometry, which used to be deemed without alternative and synthetic a priori.

³ Although I identify several oft-neglected passages in Mises's writings which hint in the direction of analyticity and thus much less extreme apriorism, I certainly do not claim that Mises was a self-aware, full-fledged conventionalist. Rather, my constructive proposal aims at dispelling charges according to which praxeology is untenable because it relies on extreme apriorism. Regardless of details of the exegesis of Mises's epistemological deliberations, contemporary Austrian economists in Mises's tradition can continue their scientific endeavours without significantly altering the content of praxeology, but merely its epistemological status and the stance towards alternative research programmes. By contrast albeit in an equally constructive-minded spirit, Lipski (2021) suggests to reform praxeology by adding empirical content to the fundamental axiom to obtain a directly testable hypothesis, thereby dropping the aprioricity essential to Mises and most of his followers.

mathematics made famous by Carnap (Linsbichler 2018). Moreover, Hahn's remarks on the nature of definitions render his conventionalism applicable to other purely analytic disciplines besides logic and mathematics, thus arguably also to praxeology.

Chapter 7 reconstructs the use of Neurath's 'scientific utopias' and Mises' 'imaginary constructions' as linchpins of thought experiments, thereby illustrating similarities in their methodology of counterfactual reasoning and their common groundwork to the then emerging subdiscipline comparative economic systems. The chapter also informs recent discussions on the epistemological status of thought experiments and unrealistic models. Specifically, I argue that Norton's (1996, 2004) argument view of thought experiments can account for new discoveries in ways Neurath anticipated, and further, I reformulate Häggqvist's (2009) model for thought experiments to highlight the role of alternatives and decisions in science and in public debate (Linsbichler and Cunha 2021).

Chapter 8 rationally reconstructs and critically compares the different and idiosyncratic conceptions of rationality defended by Neurath and Mises and suggests some consequent insights with respect to contemporary rationality wars, the socialist calculation debates, the foundations of welfare economics, and Viennese Late Enlightenment. The cautionary character of the latter is pinpointed by Neurath, foreshadowing a Hayekian theme: "Rationalism sees its chief insight in the clear recognition of the limits of actual insight" (Neurath [1913] 1983, 8). Considering Mises' deliberations on the rationality of individual action together with his denial of the possibility of rational action under socialism, I identify a tension: How can, as Mises maintains, all human actions be rational (in his sense of the term) and yet socialism preclude rational action in complex situations? Discussing problems of other solutions to this interpretational problem,⁴ I dissolve the tension by explicating Mises' sense of the terms 'rational' and 'action': as a result (and according to Mises), socialism precludes rational action because socialism precludes action. Chapter 8 subsequently highlights Neurath's and Mises' shared concern for the limits of rationality and for the potential of knowledge to improve decisions, and finally draws on Sugden's (2013) distinction between welfarist and contractarian perspectives to reveal hitherto

⁴ Aside from Neurath, more recently O'Neill (1998), Salerno (1993), and Uebel (2018) at least implicitly dissolve the tension differently, namely by reading Mises as equating rationality with monetary maximization in the context of the calculation debates.

overlooked compatibilities in the socialist calculation debates. Both Neurath and Mises reject monetary calculation, including most forms of cost-benefit-analysis as an evaluative standard on the social level, i.e., for the comparison of economic orders. Whereas Neurath enhances and champions calculation in kind as an alternative, Mises does not provide any workable evaluative standard. He regards calculation in kind as overly ponderous but does not offer principled objections against its use. In any case, Mises maintains that any (reasonable) evaluative standard on the social level strongly suggests the adoption of an economic order which provides meaningful money prices for monetary calculations on the part of acting individuals. As long as a by and large capitalistic economy prevails, both Mises and Neurath accept that individuals or individual firms voluntarily use monetary calculation accompanied by limited versions of calculation in kind, for instance so-called common good balance sheets (Linsbichler 2021c, 2021e).

My dissertation thesis is a starting point for further systematic reconstructions and critical comparisons of positions maintained in the logical empiricist tradition, on the one hand, and positions in the vicinity of Austrian economics, on the other.⁵ Chapter 9 indicates a number of suggestions for subsequent research, such as: (i) a re-evaluation of Austrian economists' stance opposing formal methods in the social sciences (Linsbichler 2021d); (ii) unearthing Carl Menger's, Karl Menger's, and Hahn's role in the early history of the principle of logical tolerance made famous by Carnap; (iii) an exploration of how, given the challenge of logical tolerance and logical pluralism, Mises's logical monism can be modified in order to safeguard the anti-racist conclusions he infers from it; (iv) further development and partial formalization of analytic praxeology as devised in chapter 5; (v) a history of proposals for universal basic income by scientific utopians; (vi) a reconstruction of Neurath's, Mises's, and Kelsen's thoughts on democracy and on the role of experts and education in a democratic social order. The lattermost topic notably indicates that many problems of philosophy and political economy debated in Viennese Late Enlightenment have not lost their significance in the 21st century.

⁵ The heterogeneity and complexity of logical empiricism beyond left-wing, positivistic reductionism has been re-discovered in recent decades. For an appreciation of the heterogeneity and complexity of the Austrian School of economics beyond aprioristic market fundamentalism, see e.g., Linsbichler (2020, 2021b, forthcoming).

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