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**THE COLLAPSE OF INTERWAR VIENNA:
OSKAR MORGENSTERN'S COMMUNITY, 1925 - 1950**

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From the perspective of science, art and intellectual life in general, Interwar Vienna was one of the most vibrant communities in modern European history. Within the field of economics, it was home to, amongst others, Ludwig von Mises, Friedrich von Hayek, Hans Mayer, Gottfried Haberler, Fritz Machlup, Oskar Morgenstern, Karl Menger and Abraham Wald. The community flourished after the end of World War I, and then began to suffer in the early 1930's as a result of growing political instability and rising anti-semitism. With the *Anschluss* of Austria by the Third Reich in March 1938, it collapsed completely, never to recover. Drawing on the personal papers of two key participants, Oskar Morgenstern and Karl Menger, and also on the archives of the Rockefeller Foundation, this paper provides a portrait of that community, chronicling its evolution and dramatic collapse. Particular attention is paid to the milieu surrounding Morgenstern, both as director of the Rockefeller-funded Austrian Institute for Business Cycle Research and as philosophical "dissident". In collaborating with mathematicians Menger, Wald and, later, John von Neumann, he gradually forsook his Austrian theoretical legacy. The account detailed here shows conflict and tension to have been central to both the life and death of this fabled community.

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Introduction

As every reader of this paper knows, if the city of Vienna has acquired a prominent place in the history of the 20th century, it is because of its extraordinary legacy in a range of fields, including medicine, mathematics, psychology and psychoanalysis, philosophy, architecture, design and the visual arts. Many of today's academic specialisms and creative arts can trace some part of their heritage back to the "City of Dreams" in the late 19th- and early 20th century, be it during the *Fin-de-siècle* era before the Great War or the harsher period between the dissolution of the Empire and the outbreak of World War II.¹

The Viennese contribution to the field of economics, too, was significant during this period. In choosing an opening landmark, few will contest the importance of the publication of Carl Menger's 1871 *Grundsätze*. With this, and later the *Untersuchungen*, Menger became the founding father of Viennese economics, and his influence lasted well beyond his death in 1923, with members of the younger generations looking to him, and sometimes competing for his intellectual mantle. Less obvious is the choice of an event with which to mark the close of the Viennese "conversation". Some will choose 1934, when spiritual pillar Ludwig von Mises left the city to take a position in Geneva. Others will prefer 1938, when the *Anschluss* occurred, and German troops arrived in the city. Yet others will say that what began in Vienna never really ended: the Austrian conversation simply moved abroad, with the torch being taken up by Mises, Hayek and their post-war disciples on both sides of the Atlantic.

Regardless of where one stands in this respect, it is widely accepted that between the 1870's and the Second World War, Vienna was home to a vibrant fecund community, in which many facets of economics as a field of inquiry – theory, policy, philosophical aspects, the relationship to other sciences and to mathematics – were vigorously discussed. These debates left their traces upon subsequent developments as diverse as Austrianism and the oeuvre of Friedrich Hayek; the field of

¹ For a beautiful account of Viennese politics and culture at the turn-of-the-century, see Schorske (1981). See also Johnston (1972) and Janik and Toulmin (1973).

law and economics; the theory of general equilibrium; the field of economic development; and the theory of games.

Intellectual life in Vienna in the early 20th century was intensely “social”. This is not to say that there prevailed an atmosphere of harmonious cooperation – far from it – but, rather, that intellectuals and academics, and artists too, depended upon one other for stimulus and affirmation. A pervasive feeling of anxiety; the close geographical confinement; the lack of anonymity; the presence of a cultivated elite; and existence of a lively public sphere in which politics, science and culture were objects of serious attention; all of these features made for a setting in which intellectual and artistic circles flourished. Because of the cultivation and curiosity of those involved, these groups often overlapped, with individuals participating in several at a time. While some of the gatherings were devoted to one particular discipline, discussion in many others ranged across several fields. In many such circles, even the scientific ones, discussion was not the purview of academics alone: whether at the café, the formal seminar or the public lecture, educated laymen mixed freely with university teachers. Thus, for example, when, in the mid-1930’s, mathematician Karl Menger twice raised money for his impecunious students by organising short series of public lectures, on subjects including physics, biology and the social sciences, he did so in the knowledge that the Viennese would pay to come hear Werner Heisenberg and others speak.

“Many members of the legal, financial, and business world: publishers and journalists, physicians and engineers took intense interest in the work of scholars of various kinds. They created an intellectual atmosphere which, I have always felt, few cities enjoyed” (Menger 1994, p. 9)²

² However, the same Menger took a rather jaundiced view of café life: “The productive coffee house discussions in Vienna were directed more towards belles lettres than in other cities and less towards logic and mathematics. For my part I, untypically, disliked the atmosphere of those places”. From an early draft of Menger (1994), no page number, Menger Papers, Duke University. For the two lecture series in question, see the volumes containing Menger (1933) and (1936a).

The economic circles that made up the interwar community in particular have been described in Earlene Craver's landmark article on the subject in this journal in 1986.³ Drawing on the recollections of several émigrés, Craver provides a rich portrait of the Viennese economists in the years leading up to their emigration. Thus, a key venue was the famed *Privatseminar* organised by Ludwig von Mises, which provided a forum for discussion throughout the 1920's and early 1930's, with considerable emphasis on questions of method and the scientific status of economics as a discipline. The fact that this seminar met, not at the University of Vienna, but at the offices of the Vienna Chamber of Commerce, where Mises worked, reflects an important feature of intellectual life in economics at the time, namely the dilution of the relative importance of the university and the rise in significance of non-academic venues, be they administrative offices or cafés.

During the same period, a circle also formed around Professor Hans Mayer at the University of Vienna, its membership overlapping with the Mises group. There was also, in the 1920's, the *Geist Kreis*, the members of which came from a variety of backgrounds, with discussion ranging across literature, history and the social sciences. Yet another, as of 1927-28, was the Vienna Economics Society, more a formal organisation than a discussion circle, which drew on the same pool of Mises and Mayer followers. Finally, in the 1930's, two other entities were the Austrian Institute for Business Cycle Research, funded by the Rockefeller Foundation and managed by Oskar Morgenstern, and the Mathematical Colloquium, organised by Karl Menger. The Institute conducted applied and theoretical economic research, while Menger's Colloquium, although devoted primarily to mathematics, gave special attention, especially towards the mid-1930's, to economic theory. To all of these might be added the philosophers, mathematicians and physicists surrounding Moritz Schlick at the Vienna Circle, not least because of Otto Neurath's interest in economic organization and planning.

* * *

³ See Craver (1986a).

In what follows, I shall use the life and career of Morgenstern as a point of departure from which to explore the Viennese economics community. He came of age in the mid-1920's, took over the management of the Austrian *Institut für Konjunkturforschung* in the early 1930's, and was one of the last of the Viennese to go into exile, just before the events of 1938. Beyond his extensive ties with fellow economists both in Vienna and abroad, he cultivated important relationships with others, including Menger's mathematicians, in particular, and the philosophers of the *Schlick Kreis*. That he did so was indicative of a certain dissatisfaction he felt with economics, Austrianism included, so that, amongst the city's economists, he may properly be viewed as both member and critic. Because of this, he casts, if anything, even greater light upon his milieu.

By considering the Viennese community in this manner, we are led to emphasize what I believe to be novel features of the history. Firstly, while Morgenstern certainly became a figure of power in Vienna, he was, in other respects, an outlier. Even as a young economist, he was keen to emphasize his differences with the central figures of the Austrian community, including Mises, Mayer and Hayek, as a result of which he sought alliances with others. This querulousness shaped his Viennese milieu, and contributed to its conflicted history. Secondly, our account demonstrates the impossibility of understanding the social history of that community without considering what its members wrote. Whether directly or indirectly, scientific papers both stimulated and mirrored social reconfiguration amongst the economists. Thus, for example, Morgenstern's 1934 book on the relationship between economics and politics, to the extent that it was critical of Mises, one of his mentors, served to confirm the author's shifting position within his circle. Other papers by him can be similarly interpreted. Finally, there are complex human dimensions to this story, occurring, as it did, during a period marked by anti-semitism. Morgenstern went from privately harbouring anti-semitic feelings throughout the 1920's and 1930's to feeling betrayed when some of his Institute colleagues embraced Nazism. At Princeton, he made closest friends of the von Neumanns, Hungarian Jews. With profound social upheaval came personal adjustment and change.

Dissent

When it was reconstituted in the late 1920's, through the efforts of Friedrich Hayek, the Vienna Economics Society included most of those in the city with an interest in the subject. Its senior figure,

Ludwig von Mises, was the leader of the Austro-liberals, a staunch opponent of government interventionism, influenced by his teacher Böhm-Bawerk. Around him stood a group of younger people, known for their liberal views, including Hayek, Richard Strigl, Fritz Machlup and Gottfried Haberler. Standing somewhat apart from this liberal nucleus were Paul Rosenstein-Rodan, Alexander Gerschenkron and Oskar Morgenstern.⁴ The other senior figure in the society was Hans Mayer, holder of a chair at the University of Vienna. Like Mises, he was a critic of mathematical theories of economic equilibrium, but he appears not to have shared his liberal politics, being closer to his mentor, von Wieser, in his approval of a strong state.⁵ Mayer and Mises were rivals and enemies, and the rehabilitation of the Society was part of an effort to reconcile them and pull the community together. Amongst the remaining members were Steffie Braun, one of the few women; Richard Schüller, the senior civil servant; Ewald Schams, an economist well-versed in mathematics; and members of the business community, such as banker Karl Schlesinger, and Felix Kaufmann, a philosopher of law and social science who worked for a petroleum company.⁶

One of the first talks to the reconstituted society was given in the autumn of 1927 by Karl Menger, then a 25-year old mathematician. He had recently returned to Vienna to a lecturing position at the university, after an acrimonious postdoctoral stay in Amsterdam with mathematician L.E.J. Brouwer. As the precocious son of Carl Menger, he was well-connected to Viennese society, and known in several intellectual circles. Only four years previously, in 1923, just after his father's death and before even beginning his own studies, he had written an introduction to the posthumous revised

⁴ On the Austro-liberals, see Klausinger (2008).

⁵ On Mayer, see, inter alia, Weber (1961).

⁶ Schlesinger and Schams were probably the most mathematically-minded of those present. Schlesinger had arrived in Vienna in 1919, when he fled the Communist Revolution of Bela Kun. In his 1914 development of Walras' monetary theory, *Theorie der Geld- und Kreditwirtschaft*, he used simple mathematics extensively, something which distinguished him in the German-speaking literature. See Morgenstern (1968), Weintraub (1985). Ewald Schams would later be remembered by Morgenstern as the one who had introduced him to the work of Pareto and Walras. On Schams, see Chapter 6 of Hayek (1992).

edition of the *Grundsätze*.⁷ Then, as student and protégé of Vienna Circle mathematician, Hans Hahn, he came into contact with Moritz Schlick, Rudolf Carnap and Otto Neurath. Small city that Vienna was, these figures were, in turn, known to the economists. Hahn, for example, was perhaps the University's most academically eminent socialist, and Neurath had long been an opponent of Mises.⁸

Amongst those attending Menger's talk that evening was Oskar Morgenstern, then temporarily back in Vienna, between Rockefeller-funded postdoctoral stays in Harvard and Rome. At that point, he was completing *Wirtschaftsprognose*, the *Habilitation* thesis that would allow him to teach at the University of Vienna. A methodological treatise, faithful to the tenets of the Austrian School, and critical of Historicism and Institutionalism, it was devoted to refuting the possibility of economic prediction.⁹

With the benefit of hindsight, Menger's talk that evening, in the differing reactions it provoked, may be viewed as opening up a fault line amongst the Viennese. Its subject was the Petersburg Paradox, on which Menger had been working since 1923, when he read his father's work on the topic of uncertainty.¹⁰ The situation is one in which Player A offers player B the following bet. A coin is tossed and B takes 2^{n-1} when heads first occur at n (i.e., if all the first $n-1$ throws show tails, and the n^{th} , heads). Although B's mathematical expectation for such a game is infinite, it is usually observed

⁷ There is also evidence in the Duke Menger archives that he wrote newspaper articles on economic topics in the early 1920's.

⁸ See, for example, Mises 1920 and 1922.

⁹ On *Wirtschaftsprognose*, see Leonard (2004) and (2010).

¹⁰ As pointed out by Borch (1973), in the first edition of the *Grundsätze* we find a paragraph in the first chapter dealing with "Time and Error" (4. Zeitirrtum), and in the revised edition of 1923 - the one introduced in detail by K. Menger - there appear in the second chapter two new parts, one dealing with the time element, (5a. Das Zeitmoment), the other with uncertainty (5b. Das Moment der Unsicherheit). Menger the son was thus quite aware, at this point, of the issue of uncertainty in economics. The time element, in turn, was the subject of Morgenstern (1934b), which was published alongside Menger's Petersburg Paradox article in the *Zeitschrift für Nationalökonomie*.

that B will not accept such a bet, something which, Menger notes, is not so much a logical "paradox" as a discrepancy. Menger then considers three of the existing theoretical resolutions of the problem - based on the perception of a discrepancy between changes in utility and changes in wealth; boundedness of the utility function; and ignoring small probabilities in the calculation of expected utility – and shows why they are insufficient to resolve it.¹¹

The "solution" Menger himself reaches is not really a solution at all, but rather a general, qualitative description of the behaviour of a person faced with the question: "how much am I willing to pay for the probability p of winning an amount D , i.e., for the chance (p, D) ?" Several features, Menger says, can be regularly observed in such kinds of evaluations. First, when the possible loss associated with a bet is large, even a large gain will be undervalued relative to its expected value. Secondly, an individual will generally be willing to risk only a part of his total wealth in games of chance of any kind. This proportion, w , will vary from person to person, but will generally be closer to 0 than to 1. Finally, the behavior of individuals in buying a chance (p, D) will depend on the probability p . When p is very small, it tends to be undervalued, so that a divergence appears between observed behaviour and that conforming to expected values.

In general, Menger concludes, chances are undervalued both where probabilities are very small and very large. Only in the middle range is behavior according to expected values likely to be observed. Even here, however, the existence of roulette and other games shows that chances are often overvalued. The probabilities at which the maximum overvaluation occurs for an individual, says Menger, will depend on his wealth, the potential gain, and other personal circumstances. These are empirical questions, and they highlight the difficulty, if not indeed futility, of trying to succinctly represent such choice behaviour in mathematical terms.

The mixed reaction to Menger was telling. As one of the few economists present familiar with Bernoulli, Mises was quite taken by the proof of the insufficiency, as a solution, of Bernoulli's 200-year old distinction between marginal utility and marginal wealth. As for Hans Mayer, he did not like

¹¹ For more detail on Menger's treatment, see Bassett (1987) and Leonard (2010).

the paper, supposedly because it was too mathematical, and, as editor of the *Zeitschrift für Nationalökonomie*, explicitly advised Menger against publishing it.¹² The young Morgenstern, by contrast, showed a lively interest. Not only that, but he would be instrumental in finally having it published in the *ZfN*, almost seven years later, by which time he was on the editorial board of that journal.¹³

To the extent that it caused Morgenstern to stand out, Menger's talk that evening may be viewed as the beginning of a critical phase in both the former's development and the history of the Viennese community. In the 1920's, Morgenstern had broken with Universalist demagogue, Othmar Spann, and moved into the circles around Mises and Mayer. He would soon move again, gradually distancing himself from them, and embracing Menger and other mathematicians. In so doing, he helped shape his milieu.

There were already signs, in the late 1920's, of the curiosity and impatience that would carry Morgenstern beyond the confines of Austrianism. By 1927, he had read Edgeworth, Bowley, and Whitehead's Science and the Modern World. Then, during his stay in Rome in 1928, he wrote with enthusiasm in his diary about attending a mathematical conference that featured David Hilbert, Hermann Weyl, Emile Borel and Oswald Veblen.¹⁴ In 1929, he could write to his good friend Gottfried Haberler that Schlick's *Allgemeine Erkenntnislehre* has impressed him more than any reading since Kant, and that he was now reading Carnap's "*Der logische Aufbau der Welt*", which he found to be a "first-class effort". Nothing could be done, he now felt, without a thorough

¹² That the paper was primarily about the *limitations* of the use of mathematics in describing choice behaviour does not appear to have mattered to Mayer. This prejudice against mathematics amongst the Viennese economists greatly exercised Menger, and he wrote about it in several places. See Menger 1934c (1979), p. 272, and (1973).

¹³ See Menger (1979) p. 259. The paper first appeared in published form as a note by Menger (1934a), "Bernoullische Wertlehre und Petersburger Spiel" ("Bernoullian economics and the Petersburg game") in the fifth volume of the proceedings of the Menger's Mathematical Colloquium. The full version was published as "*Das Unsicherheitsmoment in der Wertlehre*", (1934c) in the *Zeitschrift*. The English translation, "The Role of Uncertainty in Economics", was published in 1979.

knowledge of mathematical logic and epistemology.¹⁵ At the same time, he privately became increasingly critical of his mentors:

“Yesterday I met Schams in the Café (illegible), but it was nothing special. We should complain about Mayer. Why doesn't Mayer work? He doesn't write, doesn't read, doesn't finish the second volume, he doesn't act on behalf of the journal, but he sits for hours in the café and talks about Spann. We are all of the same opinion of him. We could do much more if we could fill the journal. . . . I become green and yellow with anger about the useless journal. Rosenstein is equally unreliable”¹⁶

By early 1929, with an acerbity not uncommon in his diary, he was criticising Mises: “Friday was the Economics Association. Mises spoke about worn-out methodology, and his concluding talk especially was just impossible. Lots of Jews. Alvin Hansen is here, quite nice, but didn't impress me too much”.¹⁷

In a 1931 overview of mathematical economics for the Encyclopaedia of the Social Sciences, Morgenstern sought to build a bridge between Austrianism and mathematics. There was no reason, he said, why mathematics might not be applied to the social sciences, and to economics in particular. The objections, he wrote, in allusion to his teachers, tended to identify mathematics with the use of the infinitesimal calculus, and to involve the claim that, in economics, one dealt with discretely varying quantities, and with relationships which were not "mechanical". Not only did this overlook the existence of other branches of discrete mathematics, said Morgenstern, but there was nothing inherently mechanical about mathematics of any kind: it was, he said, in logical empiricist fashion,

¹⁴ See Diary, May 27, August 28 and September 4, 1928, OMDU.

¹⁵ OM to Haberler, March 28, 1929, OMDU, Box 4, Folder Correspondence, 1930-1932, S – Z, translated by Cornelia Brandt-Gaudry.

¹⁶ Diary, December 22, 1928.

¹⁷ Diary, March 25, 1929.

simply a machinery for drawing inferences. It facilitated the prosecution of the argument and was most useful where the problems selected were "too complicated to be tackled by ordinary means" (p.368). "Another mark of progress", he concluded, "would be the achievement of a closer integration between the psychological and mathematical orientations, a development which would not be hindered by any fundamental disagreements between the exponents of the two types of economic theory" (*ibid*).

With this, there appeared a tension that was to characterize Morgenstern's work in the 1930's: on the one hand, upholding the Austrian conceptual orientation - the "psychological" approach to time, expectations, and equilibrium - on the other hand, promoting the use of mathematics as the appropriate means of doing so. The task of reconciling these two spheres shaped not only his own research in the years that followed, but also his style as research entrepreneur and steward of Rockefeller funds. In turn, his power in the latter role ensured that what might have remained merely an individual pursuit, in fact became a force in the broader community.

Politics and Power: the Research Institute

In September 1930, Hayek sent a memo to the Rockefeller Foundation describing the activities of the *Osterreichisches Institut für Konjunkturforschung* of which he was director. He described how the affair had been set up in 1927 by Mises, with the financial help of the Austrian Chambers of Commerce, of Labor, and of Agriculture, the Austrian National Bank, various industry and banking groups, and the Federal Railroads. In the intervening period, the Institute had produced a monthly bulletin of economic conditions, carried out some special investigations, and begun producing monographs, the first of which was Hayek's own 1929 Geldtheorie und Konjunkturtheorie. In the near future, they wanted to pursue special studies, including on the history of business cycles in Austria; on the relationship between credit and the business cycle; and the elimination of seasonal fluctuations in time series data. With a staff of five, and two research workers, they were stretched

and needed more funds, he said, especially to hire short-term researchers: \$3,000 per year for five years would do.¹⁸

Hayek's memo was the continuation of a campaign begun earlier that year by Mises to attract Rockefeller support. At the Foundation, the psychologist, Beardsley Rummler, had been replaced in 1929 as head of the social science division by Edmund E. Day, the Harvard-trained business-cycle economist.¹⁹ His staff included the newly appointed John Van Sickle, a Michigan colleague, who became assistant director of the Foundation's social sciences office in Paris, before moving back to New York in 1934 and being replaced by Tracy B. Kittredge. Whilst Rummler had been interested in promoting interdisciplinary work, Day preferred to support projects in specific fields. With the collapse of Wall St. in late 1929 and the ensuing Depression, he emphasised the urgent need for research on economic stabilization:

"The costs imposed by serious business depression - of demoralization, broken health, disorganized families, neglected children, lowered living standards, permanent insecurity, impaired morale, as well as financial distress - are so appalling when viewed socially as well as individually that no problem of this generation calls more clearly for solution than this of economic stabilization. It is no exaggeration to say that unless the problem can be solved or at least measurably reduced the present social order is in serious jeopardy . . . No more important contribution could be made by the Foundation to the wise development of that social planning and control which seems ultimately so necessary and inevitable if contemporary civilization is to survive"²⁰

¹⁸ Memo, Hayek to Rockefeller Institute, Sept. 23, 1930, Austrian Institute for Business Cycle Research Records, Rockefeller Foundation Archives, Rockefeller Archive Center, Pocantico Hills, New York, (hereafter AIRAC), Record Group 1.1, Series 705, Sub-series S, Folder 36: "Austrian Institute for Trade Cycle Research, Vienna, 1930-1934".

¹⁹ On the Rockefeller Foundation, see Fosdick (1952), Bulmer and Bulmer (1981) and Craver (1986b).

²⁰ Day, Edmund E. "Proposed Foundation Program in Economic Stabilization", September 1931, quoted in Craver (1986b), p. 212.

Thus, in the early years under Day, inspired by Charles Bullock's Harvard Economic Service, the Foundation made new grants to economic research institutes, at the University of Oslo, in Rotterdam, Kiel, Bucharest and Heidelberg.

In Vienna, one of the first to seize the Rockefeller opportunity was von Mises, who, in 1930, although he likely viewed social planning and control as antithetical to contemporary civilization, approached Van Sickle for support. The latter sought second opinions from others. In his professional diary, he hesitated, concerned that it would apparently be only a matter of time before Hayek received a call from elsewhere, and that Mises, who, because of his Jewishness, could never hope to be more than a Privatdozent in Vienna, was supposedly in negotiation with a German university. He also wondered about the wisdom of funding in light of "present dissension in the SS [social science] field, and the anti-Jewish feeling [which] would complicate future relations of the RF [Rockefeller Foundation] in Vienna".²¹ However, he was by and large well disposed towards the "very good men in Vienna".²² A September dinner with Mises seems to have sealed the affair, and in November 1930 the Foundation guaranteed the Institute a generous \$20,000 for the period till 1935.²³

When Hayek left for the LSE in 1931, it was Morgenstern who took over. After the collapse of the Creditanstalt Bank that year, he became increasingly involved in public economic debate. As Klausinger (2008) reports, for the next three years, along with Fritz Machlup, Morgenstern wrote in the *Neues Wiener Tagblatt*, advancing Austro-liberal arguments: criticizing the inflationary effects of

²¹ John Van Sickle, Diary, May 21, 1930, AIRAC, *ibid.* Kiel was the university with which Mises was in discussion. Note the irony of Austrian anti-semitism in 1930 sending him in the direction of Germany.

²² *Ibid.*

²³ Although Mises was pessimistic as to the immediate future, and believed that union with Germany would ultimately take place in one form or another, he was optimistic, according to Van Sickle, as to the long run future of Vienna as a cultural and economic centre. He regarded as Vienna's first-rate minds, philosophers Schlick, Carnap, and Wittgenstein; economists Hayek, Morgenstern, Haberler,

any credit injections to save banks, opposing exchange controls as a way of defending parity, and favouring the austerity of domestic price adjustment, rather than protectionism, as a way of dealing with the trade deficit. Instead of resorting to public works as a means of countering depression, the Austroliberals promoted *Auflockerung*, namely price flexibility and the removal of market restrictions in the spheres of both production and employment. Elsewhere in the capital, public speeches by Mises and Hayek promoted the same economic philosophy.

Until 1934, when the new corporate state became hostile to liberalism, Morgenstern was involved in these liberal circles at the intersection of academia and business. For example, his participation in the *Neues Wiener Tagblatt* grew out of discussions with Machlup and businessmen Victor Graetz (director of the *Steyermühl* company which owned the newspaper) and Julius Meinl, head of the famous coffee emporium. Others to whom Morgenstern was close included Victor Kienböck, President of the Austrian National Bank, and banker Karl Schlesinger. From mid-1932 to mid-1933, he was instrumental in organizing economic policy conferences, aimed at the promotion of liberal policy amongst industry leaders. He also became involved, to his intellectual discomfort, in a pump-priming project, advanced by certain industrialists, which aimed at subsidizing the employment of new workers. Throughout the early 1930's, Morgenstern became quite prominent and was rumoured to be favoured for positions of influence, including General Secretary of the *Hauptverband der Industrie*, something that brought him into conflict with Mises, a friend of whom already occupied the post.²⁴

When the time came to knock again on the Rockefeller door, in 1935, Morgenstern was able to write a glistening report of the Institute's activities in the interim, mentioning the continued monthly Bulletin, and the consulting activities to government, where, especially in the light of recent political turmoil, their impartiality was greatly respected. The upheaval in question was, of course, the rise of

Machlup, Schütz and Rosenstein-Rodan; and philosophers of law Kaufmann and Schreier. John Van Sickle, Diary, Sept. 18, 1930.

²⁴ On Morgenstern's activities as policy advisor, see Klausinger, op cit.

Austrian corporate state, as of March 1933, a development that put the Austroliberals – i.e., those of them that remained in the country – on the philosophical defensive. By the end of 1934, however, after a one-year gap in his personal diary, Morgenstern emerged a key advisor to the Austrian state, being a member of the team that negotiated the treaty with foreign creditors of the Creditanstalt, and an advisor to that bank and to the Ministry of Commerce on matters of railroad regulation. He was also member of a governmental price control commission associated with the Institute.

In his 1935 report, Morgenstern also put special emphasis on the "purely scientific work", mentioning the publication of several monographs including Hayek's 1931 Preise und Produktion and his own 1934 Die Grenzen der Wirtschaftspolitik (trans. 1937 Limits of Economics), the Institute's establishment of a reading-room, and its links to the University by means of lectures and seminars, including those by Karl Menger and Franz Alt:

"This program provides for purely theoretical work as well as for empirical studies. These assume even relatively more importance than before; they are necessitated in order to examine theories of the Trade Cycle and procure a basis for new abstract thinking. It is my particular desire to harmonize more than has been done before both ways of research. I am absolutely convinced that abstract theoretical work, even making use of mathematical analysis or of the modern methods of Logic that have not yet been applied to Economics, are just as necessary as the systematic collection of facts".²⁵

"Economists have so far entirely neglected", he said, "the progress of mathematics and notably of logic during the last 30 years, so that it seems indispensable to subject economic theories of various kinds to the more rigorous test of these new ways of thinking and research".²⁶ He noted the availability of several excellent people from Menger's Colloquium, including one Abraham Wald,

²⁵ Morgenstern "Report on the Activities of the Austrian Institute for Trade Cycle Research 1931-1935", Feb. 13, 1935, AIRAC, Folder 37, Austrian Institute for Trade Cycle Research, Vienna 1935-1936, p. 11.

²⁶ Ibid, p. 14.

who could work on questions in pure theory. It was with Wald that Morgenstern developed his habit of working with mathematicians, and his support of him had lasting consequences for both his own thinking and the Viennese legacy.

Abraham Wald and the Colloquium

A 25-year old German-speaker from a large orthodox Jewish family in Cluj, or Kolozsvár, Rumania, Wald had first appeared at Karl Menger's door at the University's Mathematical Institute, in the autumn of 1927. Because of the conflict between Saturday classes and the Sabbath, and the refusal by the school to accept during the week a student absent on Saturday, Wald had been educated mainly at home by his brother, Martin, an engineer.²⁷ He was particularly interested in geometry, he told Menger, and had been reading Hilbert's *Grundlagen der Geometrie* (Foundations of Geometry), where he thought that improvements could be made by dropping some postulates and relaxing others. Menger recalls that Wald registered at the university, but was not seen for over two years, as he did not attend classes and had to serve in the Rumanian army. Early in 1930, he reappeared and Menger put him to work on the problem of "betweenness". Within a month, Wald had characterized "betweenness" in the ternary relations in a metric space, yielding four publishable papers.²⁸ Menger invited him to join his Colloquium.

This group had been organised by Menger in 1928, and over the course of the next few years, brought together a number of mathematicians, including Kurt Gödel, Franz Alt, Georg Nöbeling, Olga Taussky, G. Bergmann and Otto Schreier. Among the foreign visitors were the Polish

²⁷ See Menger (1952). Until World War I, after which the area fell to Rumania, Cluj had been Klausenburg, belonging to Hungary and part of the Austro-Hungarian empire. On Wald, see also Hotelling (1951), Morgenstern (1951), Weintraub (1985), Senechal and Wilger-Hunter (2004), and the review-type articles Freeman (1968) and Tintner (1952).

²⁸ A point q is "between" the points p and r if, and only if, $p \neq q \neq r$ and the three points satisfy the equality $d(p, q) + d(q, r) = d(p, r)$, where $d(\bullet)$ is "the distance between". See Wald 1931a, b, c, and 1933.

mathematicians, Knaster and Tarski, Čech, from Czechoslovakia; and, on his annual trips between between Princeton and Budapest, John von Neumann. Papers were formally presented and discussed, and later published in the seminar's proceedings, *Ergebnisse eines Mathematischen Kolloquiums*.²⁹ A glance at that journal reveals a wide range of mathematical topics, with emphasis on logic, topology and the theories of dimension, curve and measure. Indeed, for the first five years, the *Ergebnisse* is without reference to economics or social science.

This was a time of rising anti-Semitism. This traditional Viennese prejudice had been particularly strong just after the War, had declined somewhat in the latter part of the 1920's and rose dramatically with the onset of economic depression after 1929. This time, it took the form of protests by Austrian Catholic and German nationalist student fraternities against the disproportionate number of non-Aryan professors and students at the University of Vienna. There were frequent public demonstrations, class disruptions, violent outbursts and beatings, and matters were not helped by the fact that Vienna's police had no authority in the self-policing University. In anti-Semitic student diatribes, Menger himself was incorrectly labelled as Jewish on at least one occasion, and Hahn, the only member of the Academy of Sciences who was both Jewish and socialist, was also targeted.

As one of the *Ostjuden*, or Eastern Jews, Wald stood at the lower end of the established hierarchy amongst the Jews of Vienna. It was families like his that had flooded into the Leopoldstadt, Vienna's quintessential poor Jewish ghetto. He would thus likely have been conspicuously different in accent and appearance from his assimilated counterparts, such as Mises or Schlesinger, both of whom were of Jewish origin but culturally integrated. Menger, as an outsider in the Brouwer circle in Amsterdam, a gentile amongst Jews, a mathematician amongst economists, and in a minority at the University in his resolute opposition to German nationalism, was sensitive to difference, to marginality. Thus, when he said that Wald "had exactly the spirit which prevailed among the young mathematicians who gathered together about every other week" at the Mathematical Colloquium, he

²⁹ See Weintraub (1985) and Punzo (1989), (1991) and (1994).

was not simply referring to his mathematical ability (*ibid*, p. 15).³⁰ In the political climate of Vienna in the early 1930's, the Colloquium not only was a site for collective work in mathematics, but represented stability and shared values.

Wald's brilliance was matched only by his powerlessness. Because of straitened financial circumstances, he was often absent from Vienna, and it appears that, at some point, he became responsible for his ageing parents, something that added to his burdens. In late 1931, he wrote to Menger saying that he could not return to Vienna for financial reasons, but that he had been taking a university course in insurance methods, and was continuing to work on the topology of the k -dimensional interval, on which he was enclosing results. Further letters follow in 1932 with results on axiomatics and the theory of convex spaces. Then, in 1933, Wald was back in Vienna, desperately seeking some position that would allow him to remain in the city, close to Menger and the Colloquium. Given his background, however, and in the middle of the Depression, which perhaps hit Austria harder than any other European country, Wald stood no chance whatsoever for any kind of university appointment. Thus Menger turned on his behalf to Schlesinger and Morgenstern.

Schlesinger was one of those Viennese businessmen with the leisure and inclination necessary for such intellectual pursuits. He had published a book on the Walrasian system in 1914, and was an active participant in the Viennese Economic Society. According to Menger, he was interested in improving his mathematical skills and therefore receptive to the offer of Wald's tuition. Out of this conjunction came Schlesinger's 1933 paper on the modified Cassel system, which introduced inequalities into the general equilibrium problem and thus dispensed with Walras' simple counting of equations and unknowns.³¹ Wald, in turn, produced several papers dealing with systems of

³⁰ Elsewhere, Menger notes that amongst his University colleagues, his "friend Hahn was the only mathematician who knew Wald personally. No one else showed the slightest interest in his work" (*ibid*, p. 18).

³¹ The Colloquium's developing interest in economics and social science appears in the fifth volume, which concerns the meetings of 1933-34, with reference to two notes by Menger, on "Bernoullian economics and the Petersburg game" and on the relationship between finite sets and the formalization of ethics, and to the papers of March 1934 on general equilibrium by Schlesinger and Wald. The notes by Menger (1934a; b) were essentially short communications concerning what was published subsequently as (1934c) and (1934d) respectively. On the general equilibrium papers of Schlesinger

equations in mathematical economics, including the production and exchange variants of the Walrasian general equilibrium equation system, and the Cournot duopoly model.³²

Morgenstern's relationship with Wald began in earnest in 1933, as indicated by a small grant from the Rockefeller Foundation to the Institute for the employment of Wald "to undertake a methodological study of the decomposition of statistical series".³³ For the next few years, Wald worked as researcher at the Institute. In early 1935, Morgenstern wrote to the Foundation, praising Wald's statistical and mathematical work, which, he said, was very reassuring and indicated that there was "still very much purifying to be done".³⁴ Here, Wald had constructed a procedure for seasonal decomposition, different from that of Persons' method of "link relatives", which Morgenstern presented at Louvain and Paris that year.³⁵ Wald's work here culminated in a 1936 book, *Berechnung und Ausschaltung von Saisonschwankungen*.³⁶

(1935) and Wald (1935), see Weintraub (1985), pp. 59-107, and Ingrao and Israel (1990), pp. 175 - 210.

³² See Wald 1935, 1936a, b. A third general equilibrium paper by Wald would be lost in the flurry in 1938.

³³ July 24, 1933, Research Aid Grants, Paris, Rockefeller Foundation, Box 4, Folder 36, AIRAC, Vienna, 1930-1934.

³⁴ February 13, 1935, "Report on the Activities of the Austrian Institute for Trade Cycle Research 1931-1935", Box 4, Folder 37, AIRAC, Vienna, 1935-1936.

³⁵ When applied to Austrian unemployment data for the period 1923 - 1934, Wald's method produced a better fit than Persons', and Morgenstern's talk included a graphic display of the results. See "La nature et le calcul des variations saisonnières", Memorandum per Dr. A. Wald, distribué à l'occasion de la conférence de Dr. Oskar Morgenstern, Wien, 6 mai, 1935, à l'Institut Scientifique des Recherches Économiques et Sociales, Paris, a copy of which was located in the Karl Menger papers at Illinois Institute of Technology.

³⁶ On Wald (1936) see Morgan (1990) p. 84, n. 10.

Wald also provided Morgenstern with instruction in basic mathematics - algebra and differential calculus – thereby succeeding Franz Alt in that role.³⁷ He had a considerable impact on Morgenstern, and the latter wrote frequently of him in his diary. By the end of 1935, Wald was assuring him that he would soon understand nearly everything in mathematical economics, which Morgenstern noted with delight.³⁸

In Menger's Orbit

³⁷ Franz Alt (b. 1910) entered the University of Vienna as a student of mathematics in 1928, and was a participant in the Menger Colloquium and Hahn's seminar. In a 1997 interview Alt recalled that, upon his graduation from university, Menger felt guilty that he could not provide him with some employment and recommended him to Morgenstern, who appointed him as private tutor in mathematics at 20 Schillings an afternoon. "Morgenstern . . . very interesting, very intelligent. . . . He was convinced that mathematics was important . . . He told me once that he had wanted to study physics, but right after World War I all the interest was in the social sciences, and so he felt he should go into that . . . He had me help him read books on mathematical economics. It helped that I knew languages. We read English mostly. There was a man named Bowley who wrote a book here on mathematical economics. It was just as interesting for me as for him. I had to prepare each meeting, read a chapter in the book, and then we discussed it. He knew as much about it as I did, but perhaps once in a while I could explain something". (From a May 1997 interview with Alt, at his New York home, conducted by Seymour Kass, Bert Schweitzer, Abe Sklar, and Mrs. Annice Alt). Through Morgenstern, Alt met various figures, including Oskar Lange, and Paul and Alan Sweezy, and was led to publish an article on utility theory in the *Zeitschrift für Nationalökonomie* (see Alt 1936). In 1938, Alt moved to the U.S., where he was introduced by Morgenstern to Harold Hotelling. The latter, in turn, introduced him to Charles Roos, formerly of the Cowles Commission, whose 1934 book, *Dynamic Economics*, Alt had reviewed for the *Zeitschrift*, and who had by then left Cowles to set up a private economic forecasting consultancy, the Econometric Institute, in New York. Alt later left economics and made his career in computing. I am grateful to Professor Seymour Kass for permission to quote from this interview, the manuscript of which has been deposited in the Vienna Circle collections both at the University of Pittsburgh and in Vienna.

³⁸ "Another mathematics lesson, very interesting. I feel as though I am making real progress. Wald told me of his new works. An amazing thing. It isn't enough, as Walras assumed, to consider only monotonically decreasing utility functions, because he [Wald] proved that with with many of them, simple exchanges never lead to an equilibrium! Similar paradoxes for the addition of demand curves, which were considered before to be totally harmless! That should have far-reaching consequences . . . Wald is really intelligent. I consider these works to be very important; they throw new light on the application of mathematics to economics. One will not be able to do without these at all" (Diary, Nov. 2, 1935, OMDU). Note that, in his references to Wald, Morgenstern shows none of the prejudice previously displayed elsewhere towards the Jewish members of the Mises circle and *Geist Kreis*.

The deepening of the relationship between Morgenstern and Menger, nurtured by the former's support of the latter's students, coincided with a period of marked political tension in Vienna. After Hitler's rise to power in early 1933, the Austrian government under Dollfuss suspended the constitution. This marked the beginning of autocratic government and, a year later, the corporate regime was established. In February 1934, they cracked down on the Socialists, bringing cannon fire and upheaval to the city. In this setting, Menger turned earnestly to the mathematics and logic of social science, and he became obsessively concerned with the demarcation between science and politics. Though fired by the general circumstances, his list of sinners here included Neurath, on the Left, and Mises, on the Right. This was the case even if Menger himself was, on balance, politically closer to Mises than Neurath: it was one thing to be of liberal inclination, it was quite another to say that it could be legitimized by science.

As for Morgenstern, having spent several years promoting liberalism in the policy sphere, and now become perhaps the city's most prominent economist, he found himself adviser to a regime that had sympathies for neither liberalism or socialism. He was in a difficult position, and his response was to follow Menger in his insistence on the integrity of (economic) science. Their joint emphasis on value-neutrality, and precision more generally, must be seen in the context of heightened politicization.

In March 1933, Morgenstern wrote: "Saturday I was to dinner at Menger's. He gave, in a manner of speaking, a lesson on curve and dimension theory. We talked about a math. course that he wants to give, which will probably be excellent. We plan to meet again in August; until then, he is going to read the greater part of the book, and of articles, which I have lent him, and we are going to construct an axiomatics of economic theory. It could be of importance" (OMDU, July 11, 1933). Throughout 1934, the bond between the two strengthened, with Morgenstern spending part of his holidays with Menger and his fiancée, Hilda Axamit, in Ramsau and Strobl, and then with the mathematician alone in the Burgenland. He read his book on ethics and, in a seminar taught with Richard Strigl, used the paper on the Petersburg Paradox.³⁹ With Menger and Schlick, he attended

³⁹ On von Strigl, see Chapt. 6 of Hayek (1995) and the "Introduction" to von Strigl (2000) by Jörg Guido Hülsmann, pp. i-xxviii.

the International Congress of Philosophy in Prague, and in Vienna there were were teas and social gatherings with Menger, Wald, Strigl, and Institute economists Reinhard Kamitz and Ernst John.⁴⁰

The influence of this expanded analytical community was reflected in Morgenstern's writings of the mid-Thirties. Catalysed by his contact with the mathematicians, he became trenchant in his emphasis on logical precision, and continued to seek to reconcile psychological themes with rigorous, formal treatment. One example is his 1935 paper, "Perfect Foresight and Economic Equilibrium", which he presented also to a meeting of the Vienna Circle.⁴¹ Here, Walras and Pareto are criticised for failing to make explicit their assumptions about what subjects can foresee, and Hicks (1933) for assuming that perfect foresight is a precondition for equilibrium.⁴² We must ask, says Morgenstern, "the foresight of whom? of what kind of matters or events? for what local relationships? for what period of time?" (p. 171-2). Without this, the concept of general equilibrium is jeopardised. As it stands, the assumption of complete foresight implies that individuals have perfect insight into all economic processes concerning prices, production, and income. Given the interdependence and complexity of the economic system, this implies "incredible powers on the part of the economic agent", who must not only know exactly the influence of his own transactions on prices but also the influence of every

⁴⁰ See Letter, OM to Eve Burns, Mar. 6, 1934, OMDU, Box 4, Corresp. 1928-1939, Burns, Eve M. On Prague, see Diary, Nov. 4, 1934, OMDU. On the seminar on risk, see *Ibid*, Nov. 29, 1934.

⁴¹ Other theoretical papers reflecting Menger's influence include Morgenstern (1934b) and (1936). For a more detailed exploration of the relevant writings by Menger, including his book on ethics, see Leonard (1998) and (2010).

⁴² In the opening paragraph, Morgenstern refers to the discussion of Wald's work on general equilibrium in Vol. 6 of Menger's *Ergebnisse*, 1935, which revealed that: "The mathematical economists present an especially noteworthy example [of logical carelessness]. They, indifferent to whether it is a question of a general or of some particular equilibrium, have been content to assert that there are present as many equations as there are unknowns, rather than from the start proving in an exact mathematical fashion that there is a solution at all - and a unique solution - for these equations" (p. 169). Strident tones from one who, only four years previously, had made this very claim of the Walrasian system (see 1931, p. 367).

other individual, and of his own future behavior on that of the others".⁴³ Such agents are not mortals, he says, but "demi-gods" (p. 173): "Unlimited foresight and economic equilibrium are thus irreconcilable with one another".

These theoretical matters, he continues, "are so extremely complicated that only far-reaching employment of mathematics could help to suggest the reciprocal dependencies. The relationship between human behaviors dependent on one another, even without the assumption of foresight, is almost inconceivably complicated, and it requires cogent examination" (p. 174). To date, "the only examination of a *strictly* formal nature about social groups, even though it is carried out in another field and is limited to the co-existent individuals independent of one another, is a work by K. Menger, [Morality, Decision and Social Organization, 1934] which it is hoped, will become known to economists and to sociologists because of its importance in laying the foundation for further work" [p. 174-5].⁴⁴

⁴³ Innocenti and Zappia (2004) point out that, in the discussion of perfect foresight, Morgenstern's target here is also Hayek, following his 1933 lecture in Copenhagen, "Price expectations, monetary disturbances and malinvestment" (reprinted in Hayek 1939, Profit, Interest and Investment and Other Essays on the Theory of Industrial Fluctuations, London: Routledge & Kegan Paul, pp. 135-56). Hayek noted that equilibrium theory was now taking account of the time factor by making assumptions about the attitude of persons towards the future, i.e., "essentially that everybody foresees the future correctly and that this foresight includes not only the changes in objective data but also the behaviour of all other people with whom he expects to perform economic transactions" (1933, pp. 139-140, quoted in Innocenti and Zappia, p. 74).

⁴⁴ Morgenstern was considering submitting "Perfect Foresight" to the Journal of Political Economy, an English language review, because he knew that "Mr. Keynes is preparing a book on the theory of money largely based on the element of expectation and anticipation" (OM to Knight, Dec. 18, 1935, OMDU). Morgenstern's resistance to Keynes' economics is a recurring theme in this period. In a letter to Eve Burns in 1934, he claimed to have proved that, in Keynes' theory of money, "his equations completely don't hold up" (OM to Burns, Mar. 6, 1934). Then in his diary in 1935, he wrote: "Wald finds my article on Keynes mathematically alright. Now I am going to prepare it for publication and I am going to send it to Chicago" (OMDU, Oct. 26, 1935). I have been unable to find any trace of this paper on Keynes.

As Morgenstern's diary makes clear, the paper captured the interest of Menger and Wald, in turn, reinforcing his bond with them.⁴⁵ Hayek, too, liked the paper. From London, he wrote to say that they had discussed it in his seminar, and that he might actually publish the results in Morgenstern's review.⁴⁶ No such report appeared in the *Zeitschrift*, but when one re-reads Hayek's well-known exploration of equilibrium theory of two years later, his "Economics and Knowledge" in *Economica*, many of the themes broached by Morgenstern surface again, and even Menger's work on ethics is cited for its promise. The emphases in the two papers were quite different though. Whereas Hayek took as evident the stylised fact of economic coordination, and sought to understand the knowledge mechanisms that must somehow underlie it, Morgenstern downplayed the existence of any such

⁴⁵ "Yesterday I had lunch with Karl Menger. . . . we quickly discussed 2 1/2 hours. He had carefully read the article on Foresight, agrees, and wants me to deal more with these interesting questions. He is now busy with completing a large work . . . but then he wants to immediately return to social-scientific questions. It was, like always with him, a very stimulating meeting" (OMDU, Sept. 11, 1935). In a letter worth quoting at length, Wald wrote: "I believe that everything is correct. One can also understand by 'foresight' that the economic subject has a subjective conviction to foresee any kind of economic things, which however do not have to be congruent with reality. Foresight in this sense I want to call 'subjective foresight'. The complete subjective foresight of an individual then means the subjective conviction that the person has the capacity to form an overview of all future economic phenomena. The full subjective foresight of two individuals need not necessarily be in agreement. The assumption that every economic subject has full subjective foresight could be free of contradiction. There are functional connections between subjective foresight and different economic phenomena. The assumption that every economic subject has full foresight in the usual sense means that every economic subject has the same full subjective foresight, and that this is congruent with the future true turn of events. Such an assumption then leads to a contradiction when situations come to pass where the economic subject wants to adjust his actions so that they are in opposition to his evaluation of the foresight of other economic subjects. This is probably the case in economics. But there are also conceivable areas where human actions foresight play an essential role, and nevertheless full foresight in the objective sense would be free of contradiction" (ibid). Letter, Wald to Morgenstern, Aug. 2, 1935, KMIT. In the same letter, Wald mentions having begun reading "the book by Weber", suggested by Morgenstern, which, he found, gave a good orientation of many problems in economics, but treated them "rather superficially and not strictly". This was probably Weber's essays on Economy and Society.

⁴⁶ Letter, Hayek to OM, Feb. 9, 1936, OMDU. Knight, too, was enthusiastic: "It seems to me that in your article on perfect anticipation you have done a major piece of work". He went on to add that "the market for high grade economists in this country seems to be quite 'bullish' at the moment. Are you interested?" (Knight to OM, Mar. 12, 1936, OMDU, Box 6, Corresp.: Knight). Haberler too wrote

order in the absence of a logically coherent understanding of knowledge and beliefs. This difference of emphasis is consonant with the gulf then emerging between the two Austrians, for, under the influence of the mathematicians and the scientific philosophers, Morgenstern was drifting away from both Hayek and Mises. His scientific commitments and intellectual community were evolving hand-in-hand.

The Limits of Liberalism

"Yesterday in the Economics Society, Menger gave an excellent presentation about the law of diminishing returns. It was an exemplary piece of work for the proof of the necessity of exact thinking in economics. It was interesting that Haberler failed totally in the discussion . . . Of all these exact things he, by far, doesn't understand the most essential. Mises talks pure nonsense"

Morgenstern, Diary, Dec. 31, 1935

In Morgenstern's early years, Mises was a silent presence, never featuring explicitly in his work, but exerting an influence nonetheless on his writings and career. In his 1928 essay, *Wirtschaftsprognose*, Morgenstern's critique of Institutionalism and prediction was very much in the spirit of Mises, and his assuming the helm at the Institute could hardly have been done without the active encouragement of its founder. Also, throughout the early 1930's, Morgenstern's economic commentary and policy advice was very much in the spirit of the Austrian liberals.

As time went on, however, Morgenstern became increasingly critical of Mises, explicitly in his diary, more allusively in his writings. This was partly as a result of the influence of Menger, who took umbrage at the way in which the elder scholar opposed the use of mathematics in economics and yet appealed to the "logic" of his argument when reinforcing his "scientific" liberalism. Following his experience with Brouwer, and even Hahn and Neurath, Menger was exceedingly sensitive to any

expressing his admiration (See Haberler to OM, July 30, 1935, OMDU, Box 5, Corresp. 1928-1939,

intrusion of normative or political preference into scientific work. This rubbed off on Morgenstern, who became critical of Mises' philosophy of economics, including his a priorism, his views on mathematics, and the way he used the discipline to justify laissez-faire.

A sense of Mises' priorities at the time may be gained from his 1933 *Grundprobleme der Nationalökonomie*, later translated as Epistemological Problems of Economics. Here, he continued his onslaught against German historicism, arguing that the study of the unique and unrepeatable events of history could never lead to theoretical insight. Theoretical understanding was *a priori*, being rooted in the nature of human action. It constituted the prior analytical scheme by which one selected amongst the confusing mass of data presented by historical reality. The insistence by Sombart and the *Kathedersocialisten* on empirical methods, and their arguments against the possibility of a universally applicable theory, were, Mises argued, rooted in their political bias towards interventionism. Were they to concede that humans, throughout known time and space, were purposeful in their behaviour, directing it towards improvement of their situation, entering into economic exchange, and generating the economic phenomena of markets and prices, they would, said Mises, be forced to admit the universality of economic theory. They would also concede that the liberal order was the system of political organisation that best facilitated the unhindered pursuit of economic ends by individuals: "[T]he science of economics proves with cold, irrefutable logic that the ideals of those who condemn making a living on the market are quite vain, that the socialist organization of society is unrealizable, that the interventionist social order is nonsensical and contrary to the ends at which it aims, and that therefore the market economy is the only feasible system of social cooperation" (p. 196). This was Mises' message, repeated throughout the various essays of Epistemological Problems and later expanded in his 1949 *magnum opus* Human Action.

A subtheme in Mises was his opposition to the use of mathematical formalism in economics, his main argument being that it was not only unnecessary, being merely an embellishment of insights gained independently of mathematical reasoning, but harmful, in that it induced a simplistic, mechanical, perception of the social domain. The problems faced in the social sciences are so complex, says

Haberler, Gottfried).

Mises, that "even the most perplexing mathematical problems" appear simpler. Those who wish to resort to mathematical methods are welcome to it, he says, but "[t]hose theorists who are usually designated as the great masters of mathematical economics accomplished what they did without mathematics. Only afterwards did they seek to present their ideas in mathematical form. Thus far, the use of mathematical formulations in economics has done more harm than good" (p. 116-7). He goes on to condemn the Trojan horse of "mechanism" smuggled in with mathematics. He points also to the natural sciences, where the role of mathematics is different from that in the social sciences, insofar as the discovery of empirically constant relationships is possible, but similar insofar as "even the mathematical sciences of nature owe their theories not to mathematical, but to nonmathematical reasoning" (p. 117).

To Menger, statements of this kind were naive. They suggested that Mises was unaware of the distinction between quantification and the use of mathematical symbolism, was unfamiliar with the generative role of mathematics in the development and refinement of concepts in physics, and viewed mathematics as some sort of uncontested, homogeneous tool, to be "applied" in the natural sciences when the occasion demanded. Little wonder that Menger, with characteristic restraint, described Mises' opposition as "idiosyncratic".⁴⁷

Mises also appealed to logic and intuition, when describing economic theory:

"Like logic and mathematics, it is not derived from experience; it is prior to experience. It is, as it were, the logic of action and deed . . . logic and the universally valid science of human action are one and the same . . . What we know about the fundamental categories of action - action, economizing, preferring, the relationship of means and ends, and everything else that, together with these, constitutes the system of human action - is not derived from experience.

⁴⁷ "Ludwig von Mises gave stimulating lectures without, however, clearly separating the ideas of economic theory (which he presented with an idiosyncratic opposition to the use of even simple mathematics) from his idea of complete *laissez-faire*". Menger (1994), p. 11.

We conceive all this from within just as we conceive logical and mathematical truths, a priori, without any reference to experience" (pp. 13-14).

After his experience with Brouwer's Intuitionism, Menger was all too familiar with justifications of mathematical and logical truths "from within". Looking "within", Brouwer had found grounds to reject the axiom of choice, the law of the excluded middle, and non-constructive existence proofs. Menger was highly suspicious of appeals to intuition, the authority "within", as the basis for any kind of mathematics, as they usually translated into attitudes of intolerance.⁴⁸ In his counter-attack against Brouwer, Menger emphasised the existence of multiple logics, and so he was especially sensitive to the cavalier manner in which Mises appealed to "the" logic in order to undergird his conception of human action. Also, Menger's work on the Petersburg Paradox had emphasised the *empirical* nature of the question: some people accepted very favourable bets, others did not. Recourse to *a priori* reasoning here did not carry one very far in determining how individuals behaved: one would have to know much more about their particular circumstances. All in all, Menger learned to regard Mises with suspicion, viewing his a priorism as scientifically inadequate and rejecting the way in which he incessantly sought to put economic theory to political use.

Certainly, there was much in Mises' writing with which Menger could agree: his rejection of Spann's Universalism, his Austrian emphasis on individualism as the appropriate methodological approach in social science, his distinction between "cold, hard" science and the consolations of metaphysics. Menger would also have endorsed Mises' nominal separation of the irrefutable "facts" of economic science from the domain of political or ethical choice. Again and again, however, Mises himself blurred the very distinctions he proclaimed to maintain. Notwithstanding his claim that ethical choice and economic science occupied different realms – that even if economic theory pointed to the efficiency of classical liberalism, one was always free to reject it on political grounds – Mises' entire rhetoric in Epistemological Problems is intended to promote the politics of laissez-faire. This is reinforced with frequent reference to the natural sciences, logic and mathematics – areas about which Menger probably knew more than most of Mises' readers.

Thus, during the week after Christmas, 1935, Menger presented another paper to the Vienna Economics Society, explicitly challenging Mises on a question of logic and proof. He was responding to a claim by Mises, in his *Grundprobleme*, that certain propositions of economics could be proved, an example being the law of diminishing returns.⁴⁹ In the paper, later described by Schumpeter as a reading of "the logician's riot act" to economists (1954, p. 587), and by the author himself as the first instance in economics of a clear separation between the question of logical interrelations among propositions and that of empirical validity, Menger examined the existing proofs of the law of diminishing returns. Focusing on Wicksell, Böhm-Bawerk and von Mises, he took their analyses apart with a fine-tooth comb, showing how they failed "to meet the requirements which logic places on a sequence of inferences intended to constitute a proof". The talk created something of a stir, and, as indicated by the diary entry with which we opened this section, it had the effect of galvanizing Morgenstern further.⁵⁰

In this connection, Morgenstern had written to Hayek in mid-1933, indicating that he was completing a book - "mainly a summary of discussions . . . with practitioners", "for a wider audience", that would not "go too much into methodological details". Sending a copy of the book to Knight in early 1934, he confirmed that his "methodological line [was] rather different from the one followed by Robbins, Mises and Hayek".⁵¹ The book in question was his 1934 *Die Grenzen der Wirtschaftspolitik*, translated in 1937 as The Limits of Economics. A rambling book, it is critical, rarely constructive,

⁴⁸ Menger's rejection of Neurath's campaign for Unified Science was informed by the same attitude.

⁴⁹ This was published as (1936). For Menger's recollection of the time, see (1979, p. 279).

⁵⁰ From London, Hayek wrote that he heard from Schütz about the Menger-Mises debate, and was wondering if he could get more details. See Hayek to OM, Feb. 15, 1936, OMDU, Box 6, Corresp.: Hayek.

⁵¹ Letter OM to Hayek, July 11, 1933, OMDU. Letter, OM to Knight, February 9, 1934, OMDU.

and targets a range of established economists, including Robbins, Mitchell and Keynes. However, it is for von Mises that Morgenstern reserves his sharpest barbs.⁵²

"[T]here are but few sciences", writes Morgenstern, "which are in such an objectively unsatisfactory condition as economics" (p. 19). The discipline is riddled with "value judgments". In the *Foreword*, he reiterates Robbins' emphasis on the requirement of rationality of economic policy, and the need for "absolute precision of thought . . . when we are forced to be the unhappy witnesses of an almost unprecedented decay of intellectual life in so many countries" (p. vi). Thus Morgenstern rails against the redundant doctrines of the historical school and their disguised successors, the Institutionals, with all of which Mises would have been in agreement.

Elsewhere, however, Morgenstern challenges Mises directly: "[T]he thoroughly empirical character of economic theory cannot be stressed too strongly. *A priori* theory would be very easy if it were possible to dispense with necessity of dealing with reality and with the flux of economic events and if it were sufficient to lock oneself in a room and invent the world of facts, adopting the attitude that if theory and reality did not agree, so much the worse for reality. 'Theory' of that kind can neither be confirmed nor refuted: nothing easier could be wished for. But, unfortunately, it has nothing to do with the real world" (*ibid*, p. 10).⁵³

⁵² Of the original German version, a reviewer, Henry Laufenburger, wrote in the French Revue d'Economie Politique: "[Morgenstern] believes in the autocratic State which, according to him, can resist the demagogic demands of the parliamentarians, form long-term economic (five-year) plans and assure a better distribution of wealth. Without doubt, Mr. Morgenstern would like to have dictatorial power subject to certain control, but this would be organized by the controlled themselves. Why, given this, did Mr. Morgenstern not choose a title which would allow the reader to guess the content of his book? By this means, he would have avoided wasting the time of those actually interested in "economics"" (1935, p. 1085, my translation). Another brief review by E. Phelps Brown in the Economic Journal alluded to similar frustrations (1934). The 1937 English version, The Limits of Economics, on which our account is based, is claimed by Morgenstern to be considerably revised and, therefore, "not . . . simply a translation" (1937, p. vi). The attack on a priorism and liberalism was present throughout.

⁵³ Mises is named only in the Appendix, where his *Grundprobleme* is described as "an attempt to find an *a priori* basis for economics. . . one of the points where he diverges fundamentally from the view point put forward [here]" (1937, p. 154). In the same passage, Morgenstern castigates Robbins' Nature and Significance for presenting the Austrian economists as being more uniform in

Morgenstern then lumps Mises in with the socialists in that both allow political values to enter their theorising, and both seek support for their politics in economic analysis. Liberalism is paradoxical, he writes, in that it argues against government intervention without acknowledging that it may be necessary to intervene in order to maintain free competition in an age of rising monopoly power. Rigid systems, in general, says Morgenstern, be it Liberalism or Socialism, also ignore changes in the 'economic mentality', such as the appearance of a general desire in people to have the State systematically attend to their welfare.

The exclusive task of economics, he says, is to determine the effects of policy. Alluding to the Austrian situation, he proceeds with lengthy dissections of exogenous shifts or policy changes, of primary and secondary effects, of economic and psychological consequences. The book's two guiding metaphors are those of physical and spiritual health, with abundant references to medicine, psychological stability and pathology. Menger, Gödel and Wald are all harnessed in attacks on the imprecision of Keynes and the political biases of Mises, and, as we shall see below, blows are struck in the context of local power struggles. With this volume, Morgenstern distanced himself definitively from Mises, rejecting not so much a liberal style of economic policy as the idea that this was the only policy conclusion to which economic analysis could lead.

On reading the book, Hayek became testy: "If one is supposed to be grateful for being sent a book, and one does not agree with it at all, and one knows the author too well to handle the matter in one phrase, the only way is to make the letter a counter conclusion. But for that I haven't had enough time. And you make the discussion very hard for me. To be honest, your book is a collection of, often brilliant, aphorisms, but it lacks the consistent argumentation with which one can start a discussion. Furthermore, that you were rude to some of my friends makes it even more difficult. . . .

their views than was actually the case. In another oblique reference to Mises, he continues: "It is, moreover, worth noting that in practice the difference is one of method only for the few surviving apriorists are obliged in practice to make so many concessions that in the actual theorems themselves they abandon their original position, so that in the end both they and the empiricists are speaking the same language. What is really the most unfortunate result of their methodological position is their tendency to identify economic theory with a particular system of economic policy" (ibid, p. 10).

. . . [We] can only hope that, through the years, with many applications of the principles to specific problems, we can convince each other".⁵⁴

Hayek and Morgenstern, however, never did convince each other. Although they had emerged from the same community, with shared Austrian theoretical concerns, by the mid-1930's they were on different paths. The former was in London, campaigning against socialism and planning, and soon to be condemning "scientism" and "positivism" (see Hayek 1940a, b). Morgenstern was in Vienna, rejecting a priorism, attacking the idea of any necessary connection between economic analysis and politics, allying himself with the mathematicians in his task of "purification".⁵⁵ In time, the distance separating them would widen to that which separated the Road to Serfdom from the Theory of Games and Economic Behaviour. Morgenstern would become very critical of Hayek, regarding him as someone who "hated science" and was a "propaganda economist".⁵⁶

⁵⁴ Hayek to OM, April 2, 1934, OMDU. Neither did Knight like the book. On reading the 1937 translation, he wrote: "Frankly, I hardly know how to comment on your book. I have not read the English version in its entirety. It seems better than the German edition, but I have not made any detailed comparison. I hope it will not give offense if I say frankly that it did not seem to me, or to some colleagues whom I have heard comment, that the book represented a terribly serious effort on your part to penetrate to the more fundamental issues. We have been inclined to infer that it was written rather for a semi-popular audience than with a view to making some real contributions to the discussion, which you are certainly capable of making" (Knight to OM, July 31, 1939, OMDU).

⁵⁵ In his correspondence with Eve Burns, he rose to the defence of his book *Grenzen* (Limits, 1937): "I am very sorry to have disappointed you with my book with its negativism, but I have the feeling that what is really necessary today is pitiless criticism, and I can tell you in confidence that I have just started with it now. My second book will also be overwhelmingly critical because only through that can the rubble of tradition be removed", OM to E. Burns, March 6, 1934, OMDU, Box 4, Folder Corresp. 1930-1932, S – Z

⁵⁶ "Yesterday a curious letter from Hayek. He hates science as he always has. He claims to have heard "many curious rumours" about the book. Funny. He is going to find it even more "curious" when he sees it. . . He is in a dead end. The Pure Theory of Capital is not worth reading" (OM Diary, September 1, 1943). In August 1947, in Copenhagen, Morgenstern recorded an earlier meeting in Basel with a mathematician named Furlan who was "against the propaganda-economists, Röpke, Hayek, etc." (Diary, August 23, 1947). Throughout the 1930's, Morgenstern's diary contains many criticisms of Hayek, most of them impressionistic. For example: "Hayek ... has written to Knight that he should give up economics and rather plant potatoes. He is totally crazy. Now my view is confirmed that Hayek is never going to become anything" (Jan. 9, 1935). See also

By the mid-1930's, therefore, Morgenstern's community – in the sense of those he saw regularly in Vienna – could be understood in terms of two concentric circles. Closest to him in the middle were Menger, Wald, Alt, the researchers at the Institute, and a few other independent figures, including Schlesinger and, perhaps, Schams. The mathematicians amongst them, in particular, were a great source of stimulus, shaping his scientific personality. Menger became a critical presence, suggesting various paths by means of which the relationship between economic theory and mathematics could be explored, be it in the analysis of risk-taking (Petersburg Paradox); in the assessment of so-called proofs in economic theory (Diminishing Returns); or in the formal treatment of human interaction (Menger's sociology/ethics). As for Wald, beyond his landmark contributions to the theory of general equilibrium, he enhanced the work of the Institute, and provided stimulus and instruction to Morgenstern. Within this inner circle, the latter, in turn, wielded considerable influence, through his patronage and his ability to engage others more analytically gifted than himself.

Outside this group lay the broader community of Viennese economists, with the key members of whom Morgenstern enjoyed a relationship of what might be termed conflicted dependence. Mises provoked disagreement and heightened Morgenstern's desire to assert himself independently of him. As for Mayer, while his theoretical critique would remain important, his professional underachievement and idiosyncrasy soon provoked filial revolt. With intellectual development came the readjustment of communal ties.

It is worth mentioning that, amongst those whom Oskar Morgenstern saw regularly were some whose role in his development was negligible in comparison with others whom he never met at all. For example, take Hilbert or Russell, whose influence upon him came in the form of reading and, perhaps even more importantly, when filiated and filtered through the intermediate work of Menger. These foreign mathematicians became, to use critic George Steiner's term, "real presences", in Morgenstern's life, unwittingly transforming his Viennese relationships. Unlike his Viennese milieu, his "community of the mind" was not bound by the Ringstrasse.

Sept. 15, 1933; Sept. 14, Oct. 26, and Nov. 2 1935, OMDU. For Hayek's tantalisingly short

Given the natural interplay between social affinities and intellectual commitments, the choreography described above was perfectly normal. In any community, such making and unmaking of relationships is in the nature of things. In Vienna, however, there were stronger forces at work: forces, both centrifugal and external, that would eventually bring about communal collapse. The process was observed closely by the Rockefeller Foundation, as is revealed in their surviving records.

The Beginning of the End

As we have earlier seen, in 1930, the Foundation made a 5-year grant to the Institute. In July of the following year, no doubt encouraged by the Institute's success, a group comprising President of the Austrian National Bank, Richard Reisch, Hayek, faculty economist Karl Pribram and – testament to the power of lucre – enemies Mayer and Mises, sent to the Foundation a jointly signed "Memorandum on the Situation of Research in Social Sciences in Austria".⁵⁷ They were requesting money for the support of politically-independent research. "After the war", they wrote,

"these difficulties have become immense because of the general impoverishment and because the influence of party-politics, which is so particularly dangerous to social sciences, has become overwhelming. The small means which are available are mostly under the administration of more or less political organizations which, quite naturally, use it for purposes which seem most important from their respective partisan point of view and which are not in the first place guided by scientific considerations . . . There is, therefore, at present no body or organization whatever in Austria which could assist independent and unbiased research in social sciences".⁵⁸

dismissal of game theory, see Hayek (1994).

⁵⁷ Memorandum on the Situation of Research in Social Sciences in Austria, July 27, 1931, AIRAC.

⁵⁸ *Ibid.*

They distinguished their project from the newly-funded Business Cycle Institute, which covered only a small section of economics, leaving many young men and women without support and compelled to earn a living by uncongenial means. They had in mind work in social history (the transition from monarchy); sociology (the problems arising from the "racial and national mixture of population in Central Europe"); economics (problems of changes in economic structure and others needing quantitative measurement, which did not fall into the Institute's ambit); and political science (the transition from autocracy to democracy). Without saying for how long, they requested \$15,000 per year. There is no evidence of a reply from the Foundation.

In March 1933, Rockefeller's Van Sickle met Mises in Paris, where they spoke of the effect of Hitler's accession to power on the development of economics in Germany and Austria.

"[Mises] was inclined to take a very pessimistic view, and in his opinion we had probably seen the end, for at least a generation of any intelligent economic research in the German-speaking countries. He felt that the dictatorial regime in Germany and the extension of nationalistic tendencies in Austria will destroy any intellectual freedom in the field of economic studies, or will make it impossible for any properly qualified economists to obtain academic positions. He felt that the National Socialists would attempt to develop their own economic theories based on false premises with disastrous results for Germany and the almost complete suspension of the development of economic science"⁵⁹

The 1931 social science proposal was brought up again by Pribram in October 1933, when he called to see Van Sickle in Paris. The allusion to racial issues in the original memo now came to the surface directly. Pribram suggested that the Directorship of such a social science institute might consist of:

"Aryan Prof. Richard Reisch, representing Economics

⁵⁹ TBK, Internal Rockefeller Foundation Memo, re Conversation with Prof. Mises, Paris, March 3, 1933. Mises also forecast Jewish professors having to leave Germany and the use of income tax

Jew-Aryan	Prof. Mises or Prof. Hans Mayer, representing Economics
Aryan	Prof. Karl Bühler, representing Psychology
Aryan	Prof. Verdross, representing Law and Political Science
Jew	Prof. Pribram, representing Modern Social and Political History" ⁶⁰

Pribram emphasized the importance of the proposed institute being independent of the University, where the majority of the professors were frankly Nazi: "The directors of the proposed Institute would all be members of the university, but they are all Liberals and independent. There would be only one or at most two Jews in the Direction" (*ibid*).

Van Sickle indicated to his superior, Day, that he supported the proposal, saying that the situation in Vienna was now so serious that the Foundation might be justified in "backing frankly the minority liberal element" (*ibid*). The group should be financed for the next two years, till 1935, he said, at which point the grants to Morgenstern's and the psychological institutes would have expired and the matter could be reviewed. He added, significantly: "We must reckon, of course, with the fact that institutes now receiving direct aid from the Foundation will no longer be so keen for a general institution whose Board of Directors might not treat them so generously as we have" (*ibid*). And indeed, although there is no "smoking gun", Morgenstern's actions and writings with regard to Mises, including Limits and the other attacks discussed above, are entirely coherent with his having felt stung by this bid to usurp the role of his own Institute. His extension of the Institute's activities beyond business cycle work, to mathematical economics, to the study of the Danube Basin, may also be seen as an attempt to thwart the funding manoeuvres of the larger group.⁶¹

laws to seize Jewish property in both countries. There were already cases in Austria, he said, where the entire personal capital had been confiscated through bloated tax claims.

⁶⁰ Letter, JVS to Edmund E. "Rufus" Day, October 10, 1933, AIRAC.

⁶¹ For example, in May, Van Sickle had written to Day, of Morgenstern's intention to expand the field of Institute activities beyond business cycle work. Letter, JVS to EED, May 1, 1933, AIRAC. Funds for Wald followed in July, and for another price study in August. In December, 1934, Morgenstern wrote in his diary of his plans for the Institute for the next few years, ". . . and I am going to have reading rooms. Mises, Mayer, etc. are not going to be asked anymore" (Diary, Dec. 9, 1934, OMDU).

Van Sickle, in the meantime, pursued the matter. He visited the economic institute in Heidelberg, where political interference suggested that Foundation support should be reduced, and then Vienna, where more was justified: "The general opinion is that Austria will survive as an independent state with an authoritarian government, and that social science will be reasonably free. I was impressed on this visit, as on every former one, with the genuine interest in research and the surprising vitality of scholarship. There are warring factions, but there are good scholars who stand between them and who can be trusted to administer any funds we might place at their disposition".⁶² He had lunched with Pribram, Verdross and Degenfeld, who agreed that, to administer a grant, a Committee for Promotion of Social Science Research should be formed, independent of the university, and minus "any of the prima-donnas - notably Mayer, Mises and Spann" (*ibid*). He had later explained to the latter why they were being excluded. He continued:

"I have suggested to Pribram that in the letter of request the Social Sciences should be so defined as to exclude support of the pure Romanticism and the vituperative propaganda of Spann, yet permit support of precisely defined problems by younger scholars of the Spann School.

. . . There are distinct hazards in this proposal, which arise out of deep personal animosities. It is my hope, however, that these animosities can be reduced by a tactful and impartial committee. I am particularly desirous of drawing Spann into the circle of beneficiaries because I believe that he will then find it more difficult to continue his present destructive opposition to all objective liberal research.

Thus, if one of his men receives Committee support, it would be harder for him to characterize as 'stuff and nonsense' another piece of work accomplished under committee auspices by a man of the rival marginal utility school, and to oppose his 'habilitation' at the university. To do so would be an affront to the whole committee" (*ibid*).

⁶² Letter, JVS to EED, Oct. 28, 1933, re "Social Sciences in Vienna", Box 4, Folder 35.

In an immediate reply, Day quashed Van Sickle's proposal, citing Austrian political instability. Van Sickle fought back, with letters travelling back and forth between him and head office into early 1934.⁶³ In January, in a telegram to Day, he announced Dollfuss's suspension of the constitution, but insisted that the situation was not so bad as to endanger scientific work.⁶⁴ A few days later, having spoken to Professor Charles Rist in Paris, he elaborated further:

"Authoritarian government bids fair to spread in Europe. We shall doubtless have to learn to distinguish between good authoritarianism and bad authoritarianism. Even such an old Liberal as Professor Rist appears to be swinging around to a belief that some modified form of dictatorship may be the only way out of the present mess. The democracies seem paralyzed by the conflicting aims, aspirations and appetites of their constituents. Freedom appears to be a luxury that we cannot afford after our triumphant war to make the world safe for Democracy. Unless Nazism sweeps Austria, and I don't think it will, the type of authoritarianism will be one compatible with reasonable freedom of research and expression. I hope that my proposal of October last is only postponed, not discarded".⁶⁵

Following the bloody events of February, Van Sickle said that he understood the international public outrage, but that the whole affair was "very human". The public had seen only the visible and best aspects of Social Democratic domination of Vienna; the model tenements, progressive schools, improved hygiene, etc. What they did not see was the "slow, steady expropriation of the middle classes by a variety of class taxes. Only one who has lived in Vienna can realize the bitterness and despair provoked by this policy. . . Then too the anti-religious attitude of the party . . . deeply offended the provinces with their large catholic populations. Total result: the provinces and the entire

⁶³ See Letter, EED to JVS, November 6, 1933; and JVS to EED, Nov. 20, 1933, and JVS to Sydnor Walker, Dec. 1, 1933.

⁶⁴ Cable, JVS to EED, Jan. 19, 1934, Box 4, Folder 35.

⁶⁵ Letter JVS to EED, Jan. 24, 1934, Box 4, Folder 35.

middle class against the Socialists and only waiting their chance to destroy them".⁶⁶ He admired the Socialists, but was not surprised that it ended the way it did.⁶⁷

Van Sickle felt that the new regime could swing towards either the German Nazis or Italian fascism, but that a compromise between dictatorship and liberalism was likely. If this occurred, then social science research in Vienna could continue; he hoped to encourage the Viennese Committee to submit one or two modest proposals. He then added a postscript:

"A word is perhaps in order regarding the Jewish situation in Vienna. If Nazism triumphs there will be a Jewish exodus even greater relatively than from Germany. If one or the other solution prevails, the Jews will officially enjoy protection, but there will be little or no chance in academic life for younger men not yet in secure positions. These men will try to get out as fast as they can find openings abroad" (*ibid*).

A month later, he reported that all those he had talked to were of the opinion that the Dollfuss regime was growing stronger and could hold out indefinitely against any domestic Nazi pressures. On the other hand, "Pribram was the most pessimistic", he wrote, "but his attitude is probably a function of his age, his poor health and his race. Naturally the Jews are the most uneasy".⁶⁸ That year, Pribram left for the U.S., and Mises for Geneva.

⁶⁶ Letter JVS to EED, March 10, 1934, Box 4, Folder 35. On Red Vienna, see Rabinbach 1983 and (ed.) 1985.

⁶⁷ Concerning the events of March 1934, Morgenstern wrote somewhat cryptically to Eve Burns in the U.S. : "The time of the shootings was really bad, since it is really no pleasure to shoot canons in the middle of the city, and what's more to be shot at by them. One will have to wait to see what else will happen since the great task in such events is not to surmount them but rather how to liquidate them, and this process has only just started and no-one can say where it is going." OM to E. Burns, March 6, 1934, OMDU, Box 4, Folder Corresp. 1930-1932, S – Z.

⁶⁸ Rockefeller Foundation Internal Memo, JVS, re The Status of SS [Social Science] in Vienna, JVS Visit to Vienna, April 12, 1934, Box 4, Folder 35.

Another such uneasy Jew was Abraham Wald. At this point, he had been scraping along for three years, thanks to Schlesinger and to Morgenstern's Institute, and, like many others, began to consider leaving Austria. Morgenstern, like Pribram before him, became a key person in the attribution of Rockefeller student grants and fellowships in Vienna. Throughout the 1930's, some of his underlings at the Institute were awarded travel grants to study abroad, with several of them going to Harvard, as he had done. In mid-1935, the Foundation's Tracy Kittredge interviewed Wald in Vienna, on Morgenstern's suggestion that he would benefit from some time in the U.S.A or England to work on time-series problems.⁶⁹ Nothing came of it, and Wald continued his search.⁷⁰ With Menger's recommendation, Morgenstern secured more money to employ Wald, and continued to press the Rockefeller Foundation on the question of a fellowship. As of 1936, however, the question of Wald's background arose increasingly often in the Rockefeller correspondence. In February of that year, Kittredge interviewed Wald yet again, in Morgenstern's presence, and wrote supportively back to Van Sickle in New York.⁷¹ The latter replied:

"Although Wald's work is too mathematical for me to have any opinion based upon direct examination of his publications, I have no doubt that he is one of the very ablest of the men working upon problems of statistical technique as applied to business cycle analysis. It is a pity that his nationality and race combined make his future so precarious. . .

[However, we] have given so many fellowships to Morgenstern's group that I think we should lay our emphasis elsewhere for a while after we have made an award to Dr. John.

⁶⁹ See Note, undated, concerning Kittredge interview with Wald on July 9, 1935, AIRAC.

⁷⁰ Later that year, a possibility arose in Palestine, through Jacob Fraenkel at Jerusalem, but it too fell through. Wald wrote to Menger of his intention to go to Palestine anyway, if he could get the entry permit and the money. He had been working on geometry and metrical geometry, he wrote, but it was difficult as he had to work with his brother and did not have the necessary peace. As always, he looked forward to getting back to Vienna and the Colloquium. Letter, undated, Wald to Menger, KMIT.

⁷¹ Letter, Kittredge to Van Sickle, February 23, 1936, AIRAC.

Wald should be kept under observation, but I am not inclined to recommend any early award".⁷²

A few months later, in July, Kittredge interviewed Wald yet again. Morgenstern was still pushing to have Wald visit Princeton, at either the university's mathematics department, or the Institute for Advanced Study. In his notes, Kittredge wrote that, because of his Jewishness, Wald would be very unlikely to secure a university appointment in Vienna, or to "ever become a permanent member of the staff of the Institute". The Foundation had no provision for funding someone in Wald's position, he said, but, at least, Wald had recently invented some new device for improving radio apparatus and so was assured of at least a minimal income.⁷³

In September, Van Sickle was still holding off on Wald, who was "obviously a man of exceptional ability but, unfortunately, a man without a country": "It is impossible to foresee what the future holds in store for him. His development should be kept under observation as he may prove in time to be one of those rare individuals whom we are justified in aiding regardless of immediate prospects. It is hard on him, but I am satisfied that we should not recommend him for a fellowship in the near future".⁷⁴

Given the political situation, and with Pribram and Mises now gone from Vienna, the Social Science project had been shelved. The Foundation also began to worry about the Business Cycle Institute, which seemed to be drawing too close to the government, but expressed confidence that if anyone was capable of "maintaining standards", it was Morgenstern.⁷⁵

⁷² Memo, VanSickle to Kittredge, 27 March 1936, AIRAC. Ernst John was one of Morgenstern's researchers at the Institute. He was awarded a Rockefeller Fellowship for 1937, which he spent in the U.S.

⁷³ Note on Interview TBK with Wald, July 11, 1936, AIRAC.

⁷⁴ Letter, Van Sickle to Kittredge, 16 Sept. 1936, AIRAC.

⁷⁵ See Memos, JVS to TBK, Sept. 25, 1936 and TBK to JVS, Oct. 13, 1936, AIRAC. A month later, Gerhard Tintner, one of the young associates of the Institute, fled Vienna. Meeting with Van

In early 1937, Wald continued to worry; Morgenstern continued to press his case; Van Sickle continued to resist: "In spite of Morgenstern's guarantee of employment in the Institute on his return to Vienna, I doubt whether there is any real future for [Wald] there. Growing anti-semitism has closed the doors to such men throughout most of central Europe. It is a tragic situation but I don't see how we can use our fellowships to combat the trend. If an award were made to Wald to study in this country I am convinced that he would use the sojourn here to seek permanent employment".⁷⁶ He suggested that they contact other scholars, just to be sure that Wald was "really gifted". In the meantime, Morgenstern had Wald send a reprint of his *Zeitschrift* general equilibrium paper to Van Sickle. Finding it impenetrable, Van Sickle sent it onto Warren Weaver, at the Rockefeller offices in New York, explaining Wald's case: "He is one of those homeless Jews whom it is very difficult to place".⁷⁷ Weaver sent it onto Harold Davis at the Cowles Commission, saying the same thing.⁷⁸

In 1937, Wald found himself beleaguered further when Karl Menger left Vienna to take a position at the University of Notre Dame in the U.S. In his letters to Menger, Wald appeared increasingly anxious. He worried about the renewal of his contract at the Institute, sent reprints to Hotelling and Schultz, and waited. Then, thanks to Morgenstern, he was invited to Geneva for September and

Sickle, on his way to the Cowles Commission in Colorado, he said that the Italo -German agreement augured poorly for Vienna's Jews, whose lot would be serious. Freedom had already disappeared, he said, and the Institute's Monthly Bulletins, which he had been writing, "no longer reflect the views of the staff. Interpretations are consistently colored to suit the government, though the statistical data . . . have not been tampered with. Morgenstern meantime plays a larger role in Austrian public life, has secured reasonably adequate public support and . . . appears to have consoled himself for the loss of freedom by the thought that he can work freely within the government. Tintner thinks that Morgenstern's role there is thoroughly salutary. If Tintner's interpretation of the situation is correct it would seem that our relations with the Institute will have to be carefully reviewed at the time our present grant terminates" (Memo, JVS to TBK, Nov. 16, 1936, AIRAC). Morgenstern quickly intervened, dismissing Tintner's pessimism as excessively gloomy. See Letter, OM to JVS, Nov. 23, 1936, AIRAC.

⁷⁶ Memo, JVS to TBK, Feb. 9, 1937, AIRAC.

⁷⁷ Memo, JVS to Weaver, June 16, 1937, AIRAC.

⁷⁸ Letter, Weaver to H.T. Davis, June 18, 1937, AIRAC.

October, by Hans Staehle, director of economic research at the League of Nations, to work on price indices as part of cost-of-living analyses being conducted by the International Labour Office.⁷⁹ Observing his work, Staehle was moved to write to Kittredge at the Foundation, singing Wald's praises, explicitly recommending a Fellowship, and suggesting that Frisch, Menger, Tinbergen and Haberler be consulted.⁸⁰ Kittredge remained recalcitrant, reiterating Van Sickle's argument about the risk of having Wald enter the American labour force.⁸¹ Then, that same day, he wrote privately to Van Sickle, reporting a turn taken in the conversation with Morgenstern re Wald:

"OM of course shares Staehle's views as to AW's quite unusual abilities . . . [but] Morgenstern still feels however that if only one appointment from Vienna can be envisaged in 1938, he personally would give preference to the candidacy of Kamitz. K. has become Morgenstern's chief of staff and has been sharing increasing responsibility for the theoretical as well as for the practical investigations of the Institute. If an exceptional appointment could be made to Wald in addition to the ordinary fellowship appointment requested for Kamitz, Morgenstern would be delighted'⁸²

It is clear why the Rockefeller Foundation continued to create obstacles for Wald. Why, however, did Morgenstern, at this moment, choose to hold back in promoting him? Subsequent events

⁷⁹ Here, building on earlier work by Haberler, Leontief and Staehle, Wald showed how an improved approximation to the true cost of living index could be constructed, under the assumption that the utility function could be approximated by a second-degree polynomial, and given certain other restrictions on the indifference mapping. By the same means, he showed how statistical data could be used to numerically estimate the underlying utility function and hence the demand functions. The results were published in Wald (1937), (1939) and (1940). See Tintner (1952).

⁸⁰ Letter, Staehle to TBK, Nov. 26, 1937, AIRAC.

⁸¹ Letter, TBK to Staehle, Dec. 1, 1937, AIRAC.

⁸² Memo, TBK to JVS, Dec. 1, 1937, AIRAC.

suggest that it may have been because he had information about other possibilities for him, and knew that Kamitz would not face the same opposition.⁸³

Continuing to stall over Wald, the Foundation sought opinions on the relative merits of him and Kamitz. Both Haberler and Tintner rated Wald "head and shoulders" above Kamitz, whom they also rated below Ernst John, the previous Rockefeller Fellow.⁸⁴ On the other hand, Howard Ellis, at Berkeley, endorsed Kamitz, who, he said, was of "convincing and businesslike appearance and address [ensuring] no lost motion in awkwardness or vagueness concerning objectives".⁸⁵ Van Sickle spoke to Morgenstern, who, too, was by now in the U.S., on a Carnegie fellowship for the first few months of 1938, visiting Vanderbilt, Princeton and elsewhere. After the conversation, the Foundation officer stuck to his guns:

"I am quite ready to believe that Wald is quite unusually gifted. I still do not see how we can give him a fellowship, in view of the fact that he would be almost certain to use the fellowship to secure a permanent position in this country. . . Morgenstern yesterday . . . said that Wald had been offered a Cowles Commission fellowship. This offers \$1,000, but nothing for travel. As Wald is responsible for his parents in Rumania, he has not been able to save anything and cannot, therefore, finance the trip to Colorado. Morgenstern expressed the hope that we might be able to make a grant-in-aid to get him over here. I told him that I did not see how we could possibly do so, much as I should like to help Wald. I suggested that he attempt to interest some well-disposed American Jew in Wald with a view to getting the slight assistance that was needed".⁸⁶

⁸³ Morgenstern (1951) writes that Wald received an invitation from Alfred Cowles in 1937.

⁸⁴ See memo JVS to TBK, Jan. 6, 1938, AIRAC.

⁸⁵ Letter Ellis to JVS, Feb. 21, 1938, Series 705E Austria, Folder 1214.

⁸⁶ Memo JVS to TBK, Jan. 21, 1938, AIRAC.

Thus, head-and-shoulders notwithstanding, the Fellowship went to Kamitz, and Wald was refused travel money. It was late January 1938. During this time, Nazi activity in Vienna rose visibly, with groups of youths roaming the streets molesting people of Jewish appearance, graffiti appearing on the walls, and petrol bombs being thrown into synagogues. Early in February, Hitler dismissed his senior generals, making himself supreme commander of the German armed forces. On February 12th, he summoned Chancellor Schuschnigg to a now-famous meeting at Berchtesgaden, his mountain retreat, where the Austrian capitulated to Hitler's demand that the Nazi von Seyss-Inquart be admitted to the Austrian cabinet as Minister of the Interior, with control of the police. On Thursday, February 24th, Schuschnigg made a radio broadcast, pleading for a unified Austria, but without defiantly challenging Hitler. Then, in early March, he threw down the gauntlet, declaring that a plebiscite would be held in which Austrians could vote for, or against, a free, German, independent, social, Christian and united Austria. Two days later, on March 11th, to the dismay of Austria's Jews, he announced in another broadcast speech that the plebiscite had been cancelled, and that Hitler had demanded that the Federal President Miklas appoint a cabinet of his, Hitler's, choosing. Otherwise, German troops would be sent into Austria. With this, Schuschnigg stepped down as Chancellor, making way for Hitler's Seyss-Inquart.⁸⁷

The End

On March 15th, Ernst Wagemann, the Director of the Berlin Institute, arrived in Vienna with instructions to liquidate the Business Cycle Institute. He spent a week there, dismissing most of the staff, including Wald and the absent Morgenstern, and retaining only the politically acceptable Kamitz and John. The former was made acting Director, and instructed not to communicate with Morgenstern or any foreign institutions, including the Foundation. However, early in May, in a café on the outskirts of Vienna, Kamitz met secretly with Kittredge.⁸⁸ He told him that he had suggested to Wagemann that the Foundation might be willing to continue support if the independence of the Vienna Institute could be assured, reporting on Austrian conditions and doing basic theoretical research. Wagemann had insisted, however, that economic reports and analysis would have to

⁸⁷ See Carsten (1977) and Clare (1981).

conform to instructions from Berlin, and that he was personally opposed to the theoretical investigations so that the monograph series would be scrapped.⁸⁹

On March 19th, as President of the Vienna Economics Society, Hans Mayer wrote to all members: "In consideration of the changed situation in the German Austria I am informing you that under the respective laws now applicable also to this state, all non-Aryan members are leaving the Economic Society".⁹⁰ But, by then, many of the members, Christian, Jewish, and the "mixed group" alike, had already left or were, in one manner or another, leaving Vienna. Mises was in Geneva, and Hayek had long been in London. Menger was now at Notre Dame, Tintner in Iowa City, Haberler in Harvard, and Machlup in Buffalo. Having broken with the Austrian regime in late 1937 over its unwillingness to face up to agrarian special interests, Morgenstern was in the U.S., searching for a new university. When the Nazis took over the Institute in March 1938, he was deemed *persona non grata*.

In the streets of Vienna, Jews were forced into demeaning acts, religious Jews were forced to commit acts of sacrilege, shops were defaced and looted, property destroyed, and apartments plundered. By April 3rd, Morgenstern, in Wisconsin, could write to Van Sickle that both

⁸⁸ See Memo, TBK to Sydnor Walker, May 19, 1938, AIRAC.

⁸⁹ How the Institute could have even attempted to maintain its previous program, given its virtual dismantling by Wagemann, is not clear. (For more on Wagemann, see Klausinger (2008)). Like many Austrians, Kamitz seems to have played his cards pragmatically. At the same time as he went to the trouble, and ran the risk, of meeting Kittredge, telling him about the plight of the Institute, he was able to inform him that he had "no personal difficulties" having been asked to take over lectures at the *Hochschule für Welthandel* to replace professors who had recently been discharged. It even looked likely that he would be appointed to a dozentship so that his "prospects for an academic career . . . seemed good" (Memo, TBK to Sydnor Walker, May 19, 1938, AIRAC).

⁹⁰ Quoted in Mises (1978), p. 99. In these Recollections, written in 1940 when he had just arrived in the U.S. and was bitterly upset at the turn of events, Mises condemns Mayer as a Nazi collaborator, and dismisses him as an economist. I suspect that the lack of historical interest in Mayer's economics in the postwar period was shaped by his *Anschluss* actions, and by Mises' 1940 condemnation. Not until 1994 was some of Mayer's work translated into English, in a volume of Austrian readings, edited by Israel Kirzner (1994).

Schlesinger and another economist, Kunwald, had committed suicide.⁹¹ On April 11th, the Institute's Monthly Bulletin appeared, with a foreword by Wagemann:

"The vast historical development of these days, which has inspired and widened the life the German people in all its aspects, emphasizes also new ways for this publication. Out of the union of Austria with the Reich there has developed on the economic side two important issues. It will now be necessary, in general, to provide for the fusion of the economic and constitutional life of these two different State economies and, in particular, to overcome the economic distress of Austria. This has to be accomplished by the powerful and quickly-effective means and methods which National Socialism has developed and which were completely lacking in the former Austrian government with its remarkable lack of understanding . . . The close collaboration of both [the Berlin and Vienna] research organizations will make possible our fruitful collaboration in the great tasks which lie before us".⁹²

Excluded from this project, and fearful of National Socialism, Abraham Wald was still in Vienna. He wrote to Menger about the bureaucratic difficulties being created by the Rumanian government, which would only issue a 3-month passport, whereas the Cowles position was for one year. He hoped Cowles would not make any difficulties for him: "It would be a great misfortune for me were I to lose this position. I would then be facing the abyss and would not even have the financial means to travel anywhere".⁹³ He could not even leave Austria to go home to Cluj because the Rumanian government had forbidden reentry without the special permission of the Ministry of the Interior.

⁹¹ On the treatment of Jews following the Anschluss, see Oxaal et al (eds.) (1987), Wistrich (ed.) (1992), and Pauley (1992). Botz (1987) reports that despair among the Jewish upper middle classes dramatically increased the number of suicides in the months following the *Anschluss*, with 220 reported in March alone; "The Jews of Vienna from the Anschluss to the Holocaust" in Oxaal et al (eds.) (1987), pp. 185 - 204.

⁹² Austrian Institute for Trade Cycle Research, Monthly Bulletin, April 11, 1938, p. 12 (translated from German).

⁹³ Letter, Wald to Menger, April 18, 1938, KMIT.

Then, at the eleventh hour, he got out, re-entering Rumania with difficulty, and from there departing, via Cuba, to the U.S., Colorado, and Cowles.

By the end of April 1938, a silence had descended over Vienna. Mises, Menger, Morgenstern, Schlesinger, Hayek, Machlup, Tintner, Haberler, Wald – all were gone.⁹⁴ Mayer presided over a spectral Economics Society, and the Institute, now under Kamitz, was but a shell. Evening talks on the Petersburg Paradox had become a thing of the past.

Closure

The Rockefeller Foundation helped Morgenstern settle at Princeton, paying part of his salary for a while. Although Princeton was then still a somewhat provincial gentleman's college, worlds away from Vienna, Morgenstern knew some members of the faculty, and it was close to New York city. It also housed the Institute for Advanced Study, which Morgenstern had been eyeing for some time from Vienna as a possible North American destination.

In a sense, his mathematical lessons and discussions with Wald and Menger were a form of preparation for his collaboration with von Neumann. At the same time, he had now to become a true co-author, and to assimilate and contribute to the difficult new theory the Hungarian was producing. The leap required was considerable, and Morgenstern returned again and again in his diary to the changes he was undergoing, now that he was working with someone of von Neumann's calibre. "I have the impression that my former scientific life was just full of vague presentiments. I have probably always expected a lot from mathematics and logic, but I was mistrustful in some aspects, partially under the influence of K. Menger, and rightly so. Since I have known Johnny, everything has changed, and a completely new era has started for me" (Diary, December 5, 1943).

There was also a considerable change of milieu for Morgenstern. The Viennese were now dispersed in various countries. Others were dead. A handful had remained behind. Morgenstern went from being a respected figure of authority and power in Vienna to commanding no such recognition in Princeton. At the same time, thanks to the proximity of the Institute, he was surrounded by first-

order mathematicians, including Hermann Weyl, Oswald Veblen and Carl Ludwig Siegel, in addition to von Neumann and Gödel. Einstein was also there in the background, and visitors included Niels Bohr and Bertrand Russell. In this company, Morgenstern rebuilt around him a new community of scientists-in-exile.

With these new circumstances came other changes. In mid-October, 1938, only several months after his arrival at Princeton, he was visiting a laboratory in Wilmington, Delaware, where his then-girlfriend from Austria was coming to work. In his diary, he complained about finding too many Jews there, and not enough pure Americans.⁹⁵ Whether or not this is the last such remark in his diary, I have been unable to ascertain, but it is reasonable to believe that Morgenstern soon found it necessary to re-evaluate old attitudes.

I have shown elsewhere that von Neumann's return to game theory in 1939-1940 occurred amidst tremendous family upheaval in Hungary, with Jewish families such as his own and his in-laws' being forced to leave the country under great duress.⁹⁶ Indeed, when Morgenstern met the von Neumann couple for the first time – at an evening at Herman Weyl's in early January 1940 – it was their first social outing since the suicide, a week before Christmas, of Klari von Neumann's father, Charles Dán. A reluctant, troubled émigré, not long in the U.S., the Budapest doctor threw himself under a train at Princeton Junction. Thus, in drawing close to the von Neumann's, whose intimate friend he became, Morgenstern was brought closer to the continuing plight of the European Jews. It is reasonable to believe that this prompted some reflection, and contributed to the growing psychological distance between himself and Vienna. In 1941, he wrote about discarding his old self: "I have a clear feeling of freedom from prejudices and ties to theories and general views, as I were shedding my skin. Hopefully a few things will remain. On the emotional level I am more open to

⁹⁴ On Mises' flight from Geneva to the U.S., see his (1978).

⁹⁵ See Diary, October 15, 1938, OMDU.

⁹⁶ Indeed, I argue that this political upheaval provides a key to von Neumann's elaboration of a new theory of coalitions and social equilibria. His game theory was a product of its time. See Leonard (2010).

small joys, and I see how often I was a complete donkey. Took everything too tragically. That must come from my education in the First World War” (Diary, January 27, 1941).

When he did return to the “City of Dreams” after the war, in June-September 1947, for the first time in ten years, it was to bear witness to the rupture. In his diary – written in English for the duration of this visit – he repeatedly returns to the complicity of his former colleagues with Nazism. Thus, while he felt that he could forgive friend and mentor Ewald Schams his “Pg”, i.e., Nazi membership, he could not pardon his former Institute employee, Kamitz. Still less could he forgive his old teacher, Hans Mayer:

“Mayer – Sch[ams] told me – applied voluntarily to be sent to a Nazi Schulungslager!! He also asked Sch. for help to become a Pg! (When the Russians had arrived, Grassberger told me, Mayer, instead of going to the Univ., went to offer his ‘services’ to K. Gruber who was known as leader of the Tyrol[ean] Resistance Movement. Shortly afterwards G[ruber] became Priv. Doc[ent](!). There is nobody who has a good word to say for Mayer. Neider (Gerold & Co.) said that M[ayer] sent out statements about the dismissal of Jews from the Economics Society a few days after the Anschluss, even before any laws were made, orders given, etc. -- !” (Diary, July 6, 1947, OMDU).

Three days later, he met Mayer himself at the Café Bastei. “Evasive, depressed, reduced. He asked whether Edgeworth (!) had died (+1927!!). He wants me to be editor of the Zeitsch. with him. Nothing doing. Also he would propose me in 2 – 3 years for the Univ.! as if this were something. He was – naturally – persecuted by the Nazis, etc. etc. Most disgusting. Then some talk about the theory of games which is totally unknown to him. . . He has a very bad conscience. It shows again that a certain amount of character is inseparable from science. . . What a disappointment to see this man who has been a teacher for me & to whom I once looked up . . . “ (Diary, July 11, 1947). Looking at Vienna: “The city makes me sad. Standing there, I enjoyed what I saw, but it gave me no pang. For that, my interests & sympathies lie elsewhere & I cannot forget what has happened here e.g., to the Jews, how people plundered their neighbours etc.” (July 17, 1947).

He was shown the wartime files of several people, including Gottfried Haberler's brother, Gerhard, and Reinhard Kamitz, both of whom, he says, were heavily involved with the Nazi movement all along. Kamitz, at the Institute, had apparently already been reporting, before 1938, statistical and economic information "to all sorts of Nazi offices!!". Soon after the *Anschluss*, he had told Morgenstern's sister, Hannchen, that her brother had "quite few black points with the Gestapo". "It is clear where they came from", wrote Morgenstern. "I am glad I had them. But what these fellows did was ordinary plain treason & I don't want ever to have anything to do with them if I can possibly help it. How can they be good scholars?" (*Ibid*).

From there, he flew to Frankfurt, and was distressed by the bomb damage he saw in Munich and Nuremberg. "But after Munich one passed over Dachau, and over Nuremberg I recalled the Nazi-criminals. That served to extinguish, to compensate the feeling of pity. It is impossible to say what one should feel in view of tragedies of these dimensions" (Diary July 30, 1947).

Via Copenhagen and London, he flew back to Princeton, where he reflected on the general resignation towards conditions he had found in Europe, the "widespread intellectual weakness" (September 17, 1947). If the journey had convinced him of anything, it was that there was no going back to the world he had known, Vienna included. Then, it was time for drinks, with Klari von Neumann and other friends: "Thus began the Princeton life again, I nothing the worse for all my experiences. All had gone smoothly & had done me a lot of good. I have widened my views, confirmed many opinions & impressions, gained a great deal & – very glad to be back in the States. How interesting to see how much more I belong here, than to Europe" (*Ibid*).

Epilogue

After a few months at the Cowles Commission in 1938, Abraham Wald went to Columbia University where, under the guidance of Harold Hotelling, he taught courses and, in 1942, became assistant professor of economics. 1943 saw him brought into the wartime Statistical Research

Group at Columbia, where he developed sequential decision rules for the testing of samples of munitions – economical procedures that were then adopted by thousands of military supply factories.

On May 3, 1944, as part of their Hungarian campaign, German troops entered his native Cluj.⁹⁷ Over the course of one week, with the help of Hungarian *Gendarmes*, they rounded up the approximately 17,000 Jews of the city and hinterland, placing them in the Iris Brickyard on the north side of the town.⁹⁸ Here, in the “Kolozsvar Ghetto”, they were held in the open air for a further three weeks. Then, by means of six railway transports, beginning on May 25 and ending June 9, they were carried three days and three nights in cattle wagons to Auschwitz, where the majority of them were murdered. Of Wald’s family of nine, one brother, Hermann, survived, later joining him in New York. In 1950, by which time he had become chairman of Columbia’s new department of mathematical statistics, Wald and his wife died when their plane crashed in fog in the mountains in southern India, where he was on a lecture tour. A resolution by the American Statistical Association, penned most likely by Hotelling, paid tribute to Wald’s statistical contributions, and wartime service, and remembered his “ability to be friendly and kind under the severest strains”.⁹⁹

Of those in Morgenstern’s circle who had remained in Vienna after the *Anschluss*, Richard Strigl died in 1942, and Ewald Schams and Hans Mayer both passed away in 1955. As for Ernst John and Reinhard Kamitz, they initially remained at the now-renamed Austrian Institute for “Economic” Research. John’s career later took him to the Federal Chancellery, while Kamitz went on to achieve postwar eminence, becoming Minister of Finance, from 1952 to 1960, and President of the Austrian National Bank, from 1960 to 1968.¹⁰⁰

⁹⁷ Northern Transylvania, in which Cluj (Kolozsvar) was located, had been returned to Hungary by the Second Vienna Award of 1940.

⁹⁸ See Braham (2000), p.129. For a eyewitness account of the evacuation of Kolozsvar, see Herzberger (1980).

⁹⁹ See Hotelling (1951), p.19.

¹⁰⁰ For information on John, I am grateful to Hansjörg Klausinger. On Kamitz, see Dwiok and Koller (1977).

References

Alt, Franz (1936), "Über die Messbarkeit des Nutzens", Zeitschrift für Nationalökonomie, Vol. 7, pp.161-69, translated by Sigfried Schach as "On the Measurability of Utility" in the University of Minnesota, Economic Translation Series.

_____ (1997), Interview with Seymour Kass, Bert Schweitzer, Abe Sklar and Mrs Annice Alt, May 17, New York

Bassett, Gilbert W. Jr. (1987), "The St. Petersburg paradox and bounded utility", History of Political Economy, Vol. 19, No. 4, pp. 517 - 523

Borch, K (1973), "The Place of Uncertainty in the Theories of the Austrian School", in Hicks and Weber (eds.), pp. 61-74

Botz, Gerhard (1987), "The Jews of Vienna from the Anschluss to the Holocaust" in Oxaal et al. (eds) 1987, pp.185-204

Braham, Randolph L. (2000), The Politics of Genocide: the Holocaust in Hungary. Detroit, MI: Wayne State University Press.

Bulmer, Martin and Joan Bulmer (1981), "Philanthropy and Social science in the 1920's: Beardsley Ruml and the Laura Spelman Rockefeller Memorial, 1922-29", Minerva, XIX, Autumn, p. 385ff

Carsten Francis L. (1977), Fascist Movements in Austria: From Schönerer to Hitler, London & Beverley Hills: SAGE

Clare, G. (1981), Last Waltz in Vienna: The Destruction of a Family 1842-1942, London: Pan

Craver, Earlene (1986a), "The emigration of the Austrian economists", History of Political Economy 18, No. 1, pp. 1-32

_____ (1986b), "Patronage and the Directions of Research in Economics: The Rockefeller Foundation in Europe, 1924-1938", Minerva, XXIV, Nos. 2 - 3, pp. 205-222

Dwiok, Fritz and Hildegard Koller (1977), Reinhard Kamitz: Wegbereiter des Wohlstands. Wien, München, Zurich, Innsbruck: Molden.

Fosdick, Raymond B. (1952), The Story of the Rockefeller Foundation, New York: Harper

Freeman, Harold (1968), "Wald, Abraham", in International Encyclopaedia of the Social Sciences, New York: Macmillan, Vol. 16, pp. 435-438

Hayek, Friedrich (1931) Prices and Production, London: George Routledge & Sons Ltd. German translation: Preise und Produktion, Vienna: Julius Springer, 1931.

_____ (1933) [1929], Monetary Theory and the Trade Cycle, London: Jonathan Cape

_____ (1935) "Price expectations, monetary disturbances and malinvestment", in Hayek (1939) , Profit, Interest and Investment and Other Essays on the Theory of Industrial Fluctuations, London: Routledge & Kegan Paul, pp. 135-56; and reprinted as Chapter 7 of Hayek, Collected Works, Volume 5, Good Money: Part 1, The New World, edited by Stephen Kresge, University of Chicago Press, 1999.

_____ (1937), "Economics and Knowledge", Economica 4 (N.S.), pp. 33 - 54

_____ (1992), The Fortunes of Liberalism: Essays on Austrian Economics and the Ideal of Freedom. Edited by Peter G. Klein. The Collected Works of F.A. Hayek. Vol. IV. University of Chicago Press.

_____ (1994), Hayek on Hayek, An Autobiographical Dialogue, edited by Stephen Kresge and Leif Wenar, London: Routledge

Herzberger, Magda (1980), "Interview, Oral History Transcript" (216pp.), Wisconsin Historical Society, at www.wisconsinhistory.org/HolocaustSurvivors/Herzberger.asp

Hicks, John (1933), "Gleichgewicht und Konjunktur", Zeitschrift für Nationalökonomie 4, p. 445

Hicks, J.R. and W. Weber (eds.) (1973), Carl Menger and the Austrian School of Economics, Oxford: Clarendon

Hotelling, Harold (1951), "Abraham Wald", The American Statistician, Vol. 5, No. 1 (Feb.), pp. 18 – 19. (Including "Resolution in Honor of Abraham Wald", adopted by the The American Statistical Association and the Institute of Mathematical Statistics, at membership meetings in Chicago, Illinois, December 27 and 28, 1950).

Innocenti, Alessandro and Carlo Zappia (2005), "Thought and Performed Experiments in Hayek and Morgenstern", in Fontaine, Philippe and Robt. Leonard (eds.), The Experiment in the History of Economics, London: Routledge, pp. 71-97

Janik, A. and S. Toulmin (1973), Wittgenstein's Vienna, New York: Touchstone

Johnston, William A. (1972), *The Austrian Mind: An Intellectual and Social History, 1848-1938*, Berkeley and Los Angeles: University of California Press

Klausinger, Hansjörg (2008), "Policy Advice by Austrian Economists: The Case of Austria in the 1930s", Advances in Austrian Economics, Vol. 11, pp. 25-53

Laufenburger, Henry (1934), Review of Morgenstern (1934) *Die Grenzen der Wirtschaftspolitik*, Revue d'Economie Politique, Vol. 48, No. 3, pp. 1084-5

Leonard, Robert (1995), "From Parlor Games to Social Science: von Neumann, Morgenstern, and the Creation of Game Theory, 1928-1944", Journal of Economic Literature, Vol. XXXIII, June, pp. 730-761

_____ (1998), "Ethics and the Excluded Middle: Karl Menger and Social Science in Interwar Vienna", Isis, Vol. 89, No. 1, pp. 1 – 26

_____ (2004), "'Between Worlds", or an Imagined Reminiscence by Oskar Morgenstern about Equilibrium and Mathematics in the 1920's", Journal of the History of Economic Thought, Volume 26, No. 3, Sept., pp. 285 – 310

_____ (2010) (in press), From Chess to Social Science: von Neumann, Morgenstern and the Creation of Game Theory, 1900 – 1960, Cambridge and New York: Cambridge University Press

Mayer, Hans (1932), "Der Erkenntniswert der funktionellen Preistheorien", in Mayer (ed.) Die Wirtschaftstheorie der Gegenwart, Vienna, Vol. 2, pp. 14-239b, translated and reprinted as "The Cognitive Value of Functional Theories of Price, Critical and Positive Investigations Concerning the Price Problem", in Kirzner, Israel (ed.) 1994, Classics in Austrian Economics, A Sampling in the History of a Tradition, London: William Pickering, pp. 55 - 168.

Menger, Karl (ed.) (1928 – 1936), Ergebnisse eines Mathematischen Kolloquiums, 7 Volumes, Leipzig and Vienna: Deuticke

_____ (1930), "Der Intuitionismus", Blätter für Deutsche Philosophie 4, pp. 311- 325. Translated by R. Kowalski as "On Intuitionism" in Menger 1979, pp. 46- 58

_____ (1933), "Die neue Logik", in Krise und Neuaufbau in den Exakten Wissenschaften. Fünf Wiener Vorträge, Leipzig and Vienna: Deuticke, pp. 94-122. Translated by H. B. Gottlieb and J. K. Senior as "The New Logic" in Philosophy of Science 4, pp. 299 - 336. Reprinted in Menger (1979), pp. 17 - 45, with prefatory notes on "Logical Tolerance in the Vienna Circle" pp. 11 - 16

_____ (1934a), "Bernoullische Wertlehre und Petersburger Spiel", Ergebnisse eines mathematischen Kolloquiums 6, pp. 26-27

_____ (1934b), "Ein Satz über endliche Mengen mit Anwendungen auf die formale Ethik", Ergebnisse eines mathematischen Kolloquiums 6, pp. 23-26

_____ (1934c), "Das Unsicherheitsmoment in der Wertlehre. Betrachtungen in Anschluss an das sogenannte Petersburger Spiel", Zeitschrift für Nationalökonomie 5, pp. 459-485. Translated in Menger (1979) as "The Role of Uncertainty in Economics", pp. 259 -278.

_____ (1934d), Moral, Wille und Weltgestaltung. Grundlegung zur Logik der Sitten. Julius Springer: Vienna. Translated as Morality, Decision and Social Organization. Towards a Logic of Ethics. Dordrecht: Reidel, 1974.

_____ (1936a), "Einige neuere Fortschritte in der exakten Behandlung sozialwissenschaftlicher Probleme", in Neuere fortschritte in den exakten Wissenschaften. Fünf Wiener Vorträge, Dritter Zyklus, Leipzig & Wien, pp. 103-132

_____ (1936b), "Bemerkungen zu den Ertragsgesetzen", Zeitschrift für Nationalökonomie 7, pp. 25-26, and "Weitere Bemerkungen zu den Ertragsgesetzen", *ibid*, pp. 388 - 397. Translated as "The Logic of the Laws of Return. A Study in Meta-Economics" in Morgenstern (ed.) 1954, pp. 419 - 81. Revision of translation as "Remarks on the Law of Diminishing Returns. A Study in Meta-Economics" in Menger 1979, pp. 279 - 302

_____ (1937), "An Exact Theory of Social Relations and Groups" in Report of Third Annual Research Conference on Economics and Statistics, Cowles Commission for Research in Economics, Colorado Springs, pp. 71-73

_____ (1938), "An Exact Theory of Social Groups and Relations", American Journal of Sociology 43, pp. 790-798

_____ (1952), "The Formative Years of Abraham Wald and his Work in Geometry", Annals of Mathematical Statistics, 23, pp. 14-20

_____ (1973), "Austrian Marginalism and Mathematical Economics", in Hicks and Weber (eds.), pp. 38-60

_____ (1994), Reminiscences of the Vienna Circle and the Mathematical Colloquium, edited by Louise Golland, Brian McGuinness and Abe Sklar, Dordrecht: Kluwer.

_____ (1979), Selected Papers in Logic and Foundations, Didactics, Economics, Dordrecht: Reidel

_____ (1994), Reminiscences of the Vienna Circle and the Mathematical Colloquium, Dordrecht: Kluwer, edited by Louise Golland, Brian McGuinness, and Abe Sklar

von Mises, Ludwig, (1920), "Economic Calculation in the Socialist Commonwealth", in F.A.

Hayek, ed., *Collectivist Economic Planning*. London: George Routledge & Sons, 1935 (Reprint, Clifton, N.J.:Augustus M. Kelley, 1975), pp. 87-130.

_____ (1936) [1922], Socialism, Translated by J. Kahane. London: Cape

_____ (1960) [1933], Epistemological Problems of Economics, Princeton: Van Nostrand

_____ (1978), Ludwig von Mises: Notes and Recollections, South Holland, IL: Libertarian Press

Morgenstern, Oskar (1928), Wirtschaftsprognose: Eine Untersuchung ihrer Voraussetzungen und Möglichkeiten, Vienna, Julius Springer, iv + 129 pp.

_____ (1931), "Mathematical Economics", in Seligman (ed.) Encyclopaedia of the Social Sciences, Vol. 5, pp. 364-8

_____ (1934a), Die Grenzen der Wirtschaftspolitik, Vienna: Julius Springer, 136pp. Translated by Vera Smith and revised as The Limits of Economics, London: Hodge, 1937, v + 151pp.

_____ (1934b), "Das Zeitmoment in der Wertlehre", Zeitschrift für Nationalökonomie, Vol. 5, No. 4, pp. 433-458, Translated as "The Time Moment in Economic Theory" in Schotter (ed.) 1976, pp. 151-67

_____ (1935a), "Vollkommene Voraussicht und wirtschaftliches Gleichgewicht", Zeitschrift für Nationalökonomie 6, No. 3, pp. 337-57. Translated by Frank Knight, mimeo, Univ. of Chicago. Reprinted in Schotter (ed.) 1976, pp. 169-83

_____ (1935b), "Report on the Activities of the Austrian Institute for Trade Cycle Research 1931-1935", Feb. 13, 1935, AIRAC, Folder 37, Austrian Center for Trade Cycle Research, Vienna 1935-1936

_____ (1936), "Logistics and the Social Sciences", Zeitschrift für Nationalökonomie, Vol. 7, No. 1, pp. 1-24, trans. in Schotter (ed.) 1976

_____ (1951), "Abraham Wald, 1902-1950", Econometrica, Vol. 19, No. 4, October, pp. 361-367

_____ (1968), "Schlesinger, Karl", in International Encyclopedia of the Social Sciences, Vol. 14, pp. 51-52

Oxaal, Ivar, Michael Pollak and Gerhard Botz (eds.) (1987), Jews, Antisemitism and Culture in Vienna, London and New York: Routledge & Kegan Paul

Pauley, Bruce F. (1992), From Prejudice to Perdition: A History of Austrian Anti-Semitism, Chapel Hill & London: University of North Carolina Press

Punzo, Lionello F. (1989), "Von Neumann and K. Menger's Mathematical Colloquium", in Dore, M., S. Chakravarty and R. Goodwin (eds.), John von Neumann and Modern Economics, Oxford: Clarendon

_____ (1991), "The School of Mathematical Formalism and the Viennese Circle of Mathematical Economists", Journal of the History of Economic Thought, 13, Spring, pp. 1 - 18.

_____ (1994), "Karl Menger's Contribution to the Social Sciences", in Menger 1994, pp. xxi-xxiv

Rabinbach, Anson (1983), The Crisis of Austrian Socialism. From Red Vienna to Civil War 1927-1934, Chicago: University of Chicago Press

_____ (ed.) 1985, The Austrian Socialist Experiment, Boulder, Colorado: Westview Press

Rellstab, Urs 1992b, Ökonomie und Spiele, Zurich: Verlag Rüegger, x + 219pp.

Robbins, L. 1935 [1932], An Essay on the Nature and Significance of Economic Science, London: Macmillan

Schlesinger, Karl 1935, "Über die Produktionsgleichungen der ökonomischen Wertlehre", in Menger (ed.) 1935, Ergebnisse eines mathematischen Kolloquiums, 1933-34, Heft 6, pp. 10-11

Schlick, Moritz 1930, Fragen der Ethik, Vienna. Translated as Problems of Ethics, New York, 1939.

Schorske, Carl 1981 [1961], Fin-de-siècle Vienna, New York: Random House

Schotter, Andrew (ed.) 1976, Selected Economic Writings of Oskar Morgenstern, New York: NYU Press

Senechal, Marjorie and Patti Wilger-Hunter (2004), "Connections, Context and Community: Abraham Wald and the Sequential Probability Ratio Test", The Mathematical Intelligencer, Vol. 26, No. 1, pp. 25-33

von Strigl, Richard (2000), Capital and Production (a translation of (1934) Kapital und Produktion, Vienna: Springer Verlag), with an Introduction by Jörg Guido Hülsmann.

Wald, Abraham 1931a, "Axiomatik des Zwischenbegriffes in metrischen Räumen", Wiener Akademischer Anzeiger, No. 16, pp. 1-3.

_____ 1931b, "Axiomatik des Zwischenbegriffes in metrischen Räumen", Mathematische Annalen, Vol. 104, pp. 476-484.

_____ 1931c, "Axiomatik des metrischen Zwischenbegriffes", Ergebnisse eines Mathematische Kolloquiums, Vol. 2, p. 17.

_____ 1933, "Zur Axiomatik des Zwischenbegriffes", Ergebnisse eines Mathematische Kolloquiums, Vol. 4, pp. 23-24.

_____ 1934, "Über die eindeutige positive Lösbarkeit der neuen Produktionsgleichungen", in Karl Menger (ed.) (1935), Ergebnisse eines Mathematischen Kolloquiums, Vol. 6, 1933-34, Leipzig and Vienna: Franz Deuticke, pp. 12-18. Translated and reprinted as "On the Unique Non-negative Solvability of the New Production Equations, Part I", in Baumol and Goldfeld 1968 (Trans. W.J. Baumol).

_____ 1936, *Berechnung und Ausschaltung von Saisonschwankungen.*, Vienna: Julius Springer

_____ 1936b, "Über die Produktionsgleichungen", in Karl Menger (ed.) (1936), Ergebnisse eines Mathematischen Kolloquiums, Vol.7, S.1, Leipzig and Vienna: Franz Deuticke, pp. ?

_____ 1937, "Zur Theorie der Preisindexziffern", Zeitschrift für Nationalökonomie, Vol. 8, pp. 179-219.

_____ 1939, "A new formula for the index of cost of living", Econometrica, Vol. 7, pp. 280-306.

_____ 1940, "The approximate determination of indifference surfaces by means of Engel curves", Econometrica, Vol. 8, pp. 96-100.

Weber, Wilhelm (1961) "Hans Mayer", Handwörterbuch der Sozialwissenschaft, Bd. 7, Stuttgart: Gustav Fischer.

Weintraub, E. Roy 1985, General Equilibrium Analysis, Studies in Appraisal, Cambridge: Cambridge University Press

Whitehead, Alfred N. 1967 (1925), Science and the Modern World, New York: Free Press

Wistrich, Robert S. (ed.) 1992, Austrians and Jews in the Twentieth Century: from Franz Joseph to Waldheim, New York: St. Martin's Press