KURT GRELLING: STEADFAST SCHOLAR IN A TIME OF MADNESS^{*}

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Kurt GRELLING (1886-1942) was probably best known for the paradox or antinomy that bears his name; it was also called the "not autological" or the "heterological" paradox.¹ Paul OPPENHEIM wrote to us in 1964 that GRELLING was famous for this paradox. In recent years GRELLING, as well as OPPENHEIM, have become known for their analysis of Gestalt concepts. [The article on *Gestalt as a functional whole* by GRELLING and OPPENHEIM and our *Overview* of it appeared in *Gestalt Theory*, 21 (1/1999), pp. 49-54 and pp. 43-48 respectively.]

GRELLING's Paradox, NELSON, and BORN

In the winter term 1905/1906, GRELLING came to study at the University of Göttingen, world-famous for mathematics and for the great David HILBERT (1862-1943). HILBERT's efforts to axiomatize mathematics were shaken, as were the entire foundations of mathematics, by the announcement in 1903 of Bertrand RUS-SELL's antinomy or paradox.²

In a biography of HILBERT, Constance REID (1970) wrote:

By 1904, after its publication by RUSSELL, the antinomy was having – in HILBERT's opinion - a "downright catastrophic effect" in mathematics. One after another, the great gifted workers in set theory ... had all withdrawn from the field, conceding defeat. The simplest and most important deductive methods, the most ordinary and fruitful concepts seemed to be threatened, for this antinomy and others had appeared simply as a result of employing definitions and deductive methods which had been customary in mathematics. (p. 98)³

At the 1904 International Congress of Mathematicians in Heidelberg, HILBERT spoke of the importance of laying a sound foundation for both logic and arithmetic that would avoid the antinomies. In Göttingen mathematicians and philosophers (both belonged to the Philosophy Faculty) turned to these issues, engaging in collaborative research. Volker PECKHAUS has written extensively about these collaborative efforts and about HILBERT's program to axiomatize mathematics.⁴

The expanded version of this paper including additional photographs and links to related web-sites can be found on the Internet at http://www.enabling.org/ia/gestalt/gerhards/grellbio.html

particular, he has written about the collaboration between Kurt GRELLING and the philosopher Leonard NELSON (1882-1927).⁵

Soon after GRELLING's arrival, he had become allied with NELSON who in 1903 had changed from the University of Berlin to the University of Göttingen, which granted him the doctorate in philosophy in 1904. GRELLING and NELSON worked together (as did other mathematicians and philosophers) to attempt to solve or resolve RUSSELL's paradox. In the course of these attempts, GRELLING discovered some new paradoxes, including the one named after him. It was published in the joint paper by GRELLING and NELSON.

An early version of GRELLING's paradox, then known as "not autological," was sent by NELSON to the mathematician Gerhard HESSENBERG (1873-1925), who responded enthusiastically:

The paradox of "not autological" is so wonderfully formal … by propounding new paradoxes GRELLING earns great honors. One can see from it that they [the antinomies] are not so singular and that they have by no means only one origin that was called "The Contradiction" by RUSSELL. $(p. 9)^5$

NELSON was already the head of a school of philosophy, the *Neue Fries'sche Schule*, in the spirit of the post-Kantian philosopher, Jacob Friedrich FRIES (1773-1843). The concern was with the revitalization and application of FRIES' critical philosophy to mathematics and to ethical and political issues. GRELLING was NELSON's closest collaborator, but he was no mindless disciple, according to a fellow scholar, Max BORN (1882-1970). BORN was HILBERT's assistant when GRELLING arrived and later a professor of physics at Göttingen and much later (in 1954) a Nobel Laureate in Physics. After BORN's habilitation [which gave him the title of Privatdozent and venia legendi: permission to lecture at Göttingen] he lived in the same rooming house as GRELLING and regularly lunched with him. BORN attended some of the Friesian school's meetings and referred to them in his autobiography:

The people of the Friesian school assembled in NELSON's room for discussions. Some of them were sincere, clever and straightforward like himself; for instance the mathematicians HESSENBERG (professor in Bonn) and GRELLING (from Berlin). But there were [others] who did not do much thinking for themselves but took NELSON's wisdom as dogma. (p.93)⁶

As a student, NELSON had helped establish, together with HESSENBERG, the new series of the *Abhandlungen der Fries'schen Schule*, to provide a forum for members of his school. It was in this journal that GRELLING's paradox was described in the 1908 article co-authored with NELSON, who admitted in a letter to HESSENBERG that the article could have had only GRELLING's name as author since he did most of the work. But NELSON thought the co-authorship might be helpful in his own efforts at habilitation. The thesis that NELSON presented for habilitation. NELSON's efforts were eventually successful, and with HILBERT's help, in 1909 he was appointed as Privatdozent, with the right to lecture. GRELLING attended his lectures and was a devoted student and collaborator.

Later NELSON also headed the *Internationaler Jugendbund* and the *Internationaler Sozialistischer Kampfbund*. GRELLING was a member of these societies and collaborated with NELSON on the societies' activities.

However, the close relationship between GRELLING and NELSON ended, in part because their philosophical (and political) views diverged. GRELLING moved away from Kantian or post-Kantian critical philosophy, concluding that it was incompatible with relativity theory, which intrigued him. Here he was close to the views of the philosopher Hans REICHENBACH (1891-1953). GRELLING was also influenced by RUSSELL's monism. Other factors that might have contributed to the breakdown of the formerly close association between GRELLING and NEL-SON were the rather bizarre changes in the latter's behavior, personality, and interpersonal relations, changes described by BORN in his autobiography.^{6a}

Lebenslauf and Family Matters

A glimpse into GRELLING's life is provided by the Lebenslauf (curriculum vitae) printed with his dissertation for the doctoral degree in mathematics at Göttingen University. His formal thesis advisor was David HILBERT; his actual supervisor was Ernst ZERMELO (1871-1953) who may have suggested the topic for GREL-LING's dissertation research.⁷ GRELLING had ten publications by the time his dissertation was published (1910) and went on to write hundreds of philosophical and political articles and reviews, as well as two monographs for which translations were also published.' Skilled in Italian, French, and English, Kurt GRELLING translated philosophy books in these languages into German, including four books by Bertrand RUSSELL. A listing of GRELLING's publications and translations is available through Volker PECKHAUS in a published report and on the web. GRELLING's Lebenslauf stated that he was born in Berlin on 2 March 1886 and that he attended the French elementary school there from 1893 until 1902 and then the Ernestinum Gymnasium (secondary school) in Gotha where he passed Reifeprüfung [Abitur] in 1904. Also, it noted that he studied mathematics, physics, and philosophy at Freiburg University in Breisgau as well as at universities in Lausanne and in Berlin. The vita further noted that his parents were the Doctor of Jurisprudence and lawyer Richard GRELLING and his (first) wife Margarethe (née SIMON). Kurt GRELLING did not mention that his father, a nominal Christian, had Jewish parents. Nor did the Lebenslauf mention that Kurt's mother was Jewish, a member of a wealthy merchant family. An earlier typescript of the vita that was sent to us had the words "Evangelische Konfession" written in, inserted with a caret as if in an after-thought, after Kurt GRELLING's name, but the words were printed in the final version. Although Kurt GRELLING was a baptized Protestant, and although formal religion was not important to him or to his parents, his "Jewish origins" might have been a factor in the persistence of the "bad luck" that marred his attempts to obtain a university position.

Further biographical information was obtained from a chart tracing the genealogy of the GRELLING and SIMON families.^{7b} Richard Martin GRELLING and Margarethe Anna SIMON (8 September 1862 - 25 August 1934) had three children: their son Kurt and two daughters. The oldest daughter, Adelheid Sophie Charlotte (11 November 1884 - 25 May 1978) married Hans SACHS (6 June 1877 - 23 March 1945). The youngest daughter, Else Clara (6 January 1890 - 27 March 1967) married Victor SAMTER (12 September 1879 – 13 November 1914). After the senior GRELLING'S divorce, Richard married Martha SCHOEPS and Margarethe married Richard LANDSBERGER.

Richard GRELLING was active in politics.^{5a} In 1887 he was a candidate in Berlin for the Progressive German Party. Later he ran unsuccessfully for election to the Reichstag from outside of Berlin. During the reign of Kaiser Wilhelm, the senior GRELLING gained fame as the corporation lawyer of the German Writers' Union when he successfully defended the publication of Gerhard HAUPTMANN's *Die Weber* [The Weavers] and Otto Erich HARTLEBEN's Hanna Jagert in 1892/1893 against being banned by the censorship office. About that time he also helped establish the German Peace Society ("Deutsche Friedensgesellschaft," or DFG), and became its vice president, a position he held for several years. At about the turn of the century, the senior GRELLING left Germany and his family, and traveled to Switzerland and Italy. By 1907, he had established a home in Florence (described as a villa or small estate) which he kept even when he went to Zurich, as he did at the beginning of World War I. It was in Switzerland that he wrote *J'Accuse*, charging that Germany, in cooperation with Austria, was responsible for having started an aggressive war that was falsely labeled a war of liberation.

After an unsuccessful attempt at habilitation at the University of Göttingen, Kurt GRELLING seemed to be following in his father's political footsteps when he studied political economy in Munich in 1912/1913 (without obtaining a degree there). The younger GRELLING then returned to Göttingen, where in 1914 he joined the Free Students Corporation. Later he became a member of the Social Democratic Party (SPD) in Göttingen. In 1919 he was elected to the Göttingen City Council and served as a delegate to the SPD convention at Weimar.

As early as 1914 Kurt GRELLING had been a co-founder of what might be considered the Göttingen branch of the German Peace Society, the organization that his father had co-founded in Berlin. "Regarding this fact it is rather astonishing that when his father Richard GRELLING published his startling *J'Accuse* anonymously in 1915, in which he accused the German Reich of having intentionally unleashed the First World War as a preventive war, it was Kurt GRELLING who opposed with an *Anti-J'Accuse* in 1917" (p. 12)^{5a}. Kurt GRELLING started his response in 1915, but before he could complete it he was drafted for Army service. The senior GREL-LING's *J'Accuse*, a book of several hundred pages, was immediately banned in Germany but was smuggled in; it was widely available elsewhere, having been translated into ten languages, including English.^{5a} It did not remain anonymous for long. The book reported speeches by Dr. Theobald von Bethmann HOLLWEG, the

German chancellor (until he resigned in 1917), who candidly admitted that the invasion of Belgium was a breach of the treaty with that country. In Anti-J'Accuse: A German Answer, Kurt GRELLING denied these claims and the charges made by his father. The work was initially banned in Germany but the ban was removed in a few weeks. It received considerable attention, including a long review by Franz OP-PENHEIM in the Vossische Zeitung, and was translated into French and Swedish. Regarding war as a last resort after all peaceful means have been tried, Kurt GREL-LING rejected both the theory that only Germany and Austria were responsible for starting the war, as well as Germany's official argument of a surprise attack. GRELLING claimed that circumstances internal and external to Germany, including internal political relationships in the German empire and czarist Russian politics, made the war unavoidable. To avoid wars he called for the "establishment of international law." The older GRELLING published a three volume disputation with his critics, entitled *The Crime* (1918/1919).^{5a} The first volume aimed at his son's "polemical annihilation." Richard GRELLING called Anti-J'Accuse "a still-born child," the work of "a bloody dilettante," of a "political novice." He mentioned "ridiculous shreds of thought from the atrophied brain of my opponent," and concluded that his son did not deserve serious criticism but, rather, a whipping "which such a spoiled boy deserves". The resulting publicity greatly embarrassed family members. It is not known if the rift between father and son healed. It is known that Kurt made some trips to Florence but not known if he visited his father there. Years later, for medical treatment Richard GRELLING returned to Berlin, where he had been born on 11 June 1853 and where he died on 15 January 1929. [An erroneous claim that he had died in Italy had been made in an earlier obituary that was referred to in the 1929 Berlin obituary, according to our correspondence with Volker PECKHAUS.]

In 1912 Kurt GRELLING had married Malvine HAASS (1884-1954). The couple had no children of their own but adopted a daughter, Eva Maria RUMPF. GRELLING returned to Göttingen in 1913 but did not apply for habilitation, because of an informal numerus clausus for Privatdozenten (informal restriction on the number of private lecturers) in philosophy. He was conscripted for military service in World War I in late 1915 or early 1916 and served as a "Sanitätsoffizier" (Army medic). After the war, GRELLING again attempted to be habilitated at Göttingen but failed. To make a living, he became a Gymnasium (secondary school) teacher of philosophy, mathematics, and physics. This position allowed him to use his pedagogical skills and probably gave him the title of professor but did not satisfy his yearning for a university career. After service in several secondary schools, he became a trade union archivist in Berlin. In 1920 he responded to a questionnaire for members of the International Youth Union. To the question about special skills he answered [in German]: "Grasping of complicated logical connections, good memory, skill for teaching." To a question about the motives for choosing his present job he wrote, "Should actually have become a university teacher." About this time, he resumed teaching in Gymnasiums, as Studienrat in 1923 and later as Oberlehrer.

After twelve years of marriage, Kurt and Malvine were divorced in 1924. A year later Kurt married Margarethe (or Margareta) Alma BERGER, usually called Greta, who worked for a trade union. They had two children: Karin, born on 31 August 1927, and now married to Hans GIMPLE and living in Zurich, and Claude (Klaus-Peter), born on 2 June 1930, and now married to Audrey GAHL and living in Minnesota. The GRELLINGS saved their children by sending them in 1939 to a private boarding school in Switzerland. [Claude GRELLING wrote that he was quite sure that his parents sent his sister and him to this school to have them learn French and to get them out of Germany. He e-mailed: "The name of the boarding school my sister and I attended from 1939 to 1942 was simply 'Les Rayons'. It was located in the small village of Gland, near Nyon, about half way between Lausanne and Geneva on the northern (Swiss) shore of Lake Geneva. It was attended mostly by children of German parentage, with a few British children in the student body. I believe the school closed its doors during or shortly after WW II".]

Kurt GRELLING's mother died in 1934, leaving him a sizable estate to manage. The inheritance allowed the comfortable living Claude remembers from his childhood.

GRELLING, the Berlin Group, and REICHENBACH

After his return from Göttingen to Berlin in about 1920, GRELLING became an active member of the so-called Berlin Group or Berlin Society for Empirical Philosophy, *Gesellschaft für empirische Philosophie*. Later Hans REICHENBACH became its leading member. He had been teaching at the Technical University (Technische Hochschule) in Stuttgart when, after much controversy, he was invited to Berlin University in 1926. The controversy arose in part from the objections by some professors to REICHENBACH's empiricism; they claimed that his philosophy of science was not philosophy. There was also some concern about his never having studied Latin, about his having belonged to a student group linked with socialism, and possibly about his Jewish background. But other professors, including Albert EINSTEIN and David HILBERT, supported the nomination and they prevailed. REICHENBACH stayed in Berlin only about seven years. He was dismissed abruptly from his chair at Berlin University in 1933, just after HITLER became Chancellor. That same year he left for a position as Professor of General Philosophy at the University of Istanbul, Turkey; from there he went to the University of California in Los Angeles. In Turkey and in California, as in Germany, he developed a following of loyal disciples.

Kurt GRELLING may have met REICHENBACH in 1914 when the latter studied at Göttingen, or two years earlier when they were both in Munich. GRELLING attended REICHENBACH's lectures at Berlin University, although he was not registered there as a student. GRELLING also worked closely with REICHENBACH in the Berlin Group. In our interview with Carl Gustav HEMPEL, he said that GREL-LING and Walter DUBISLAV - a philosopher who worked on the concept of definition - handled the details of the monthly meetings of the Berlin Group. They conferred frequently with REICHENBACH to plan the meetings, which drew about 200 people, and were held in the medical school of Berlin University in the large amphitheater of the Charité Building. HEMPEL added that there was a close connection between the Berlin Group and the Vienna Circle, with some of the latter's members coming to the meetings in Berlin, notably Otto NEURATH and Rudolf CARNAP. HEMPEL also pointed out that Gestalt psychologists sometimes attended the Berlin meetings, for example, Wolfgang KÖHLER (1887-1967) and Max WERTHEIMER (1880-1943). Also, Kurt LEWIN (1890-1977) presented for discussion at one of the meetings the thesis with which he was habilitated.¹⁰

HEMPEL mentioned that Olaf HELMER had been a fellow student of his when he studied with REICHENBACH. We wrote to HELMER who was on the faculty of the University of Southern California at Los Angeles. His response of 12 April 1974 was the following:

While I knew GRELLING well from his participation in the meetings of the *Gesellschaft für empirische Philosophie*, I never was on close personal terms with him. He was an exceptionally clear expositor, but I do not recall him as being particularly original in his own right (although this may be doing him an injustice).

I first met HEMPEL when he reported to REICHENBACH's seminar ... Both the seminar meetings and, particularly, the meetings of the [Berlin Group] were among the intellectual highlights of the day. At the latter I remember hearing, for the first time, Rudolf CARNAP (with whom I later got on very close terms) and Lise MEITNER [the latter at a meeting of the Berlin Group] around 1932 gave the first indication of the possibility that an atomic bomb might eventually be developed.

REICHENBACH, who was supposed to examine me in philosophy for my doctoral degree, left for Turkey before he could do so, and Wolfgang KÖHLER, of Gestalt Psychology fame, took care of that chore in his place. [Cf. the similar situation at HEMPEL's examination.]

DUBISLAV, whom you also mentioned, I knew and liked well, and for one semester I went regularly to the Technische Hochschule, where he taught, in order to attend his weekly seminar. He was a brilliant logician and teacher, but he began to exhibit what were then considered to be paranoid tendencies, abetted no doubt by the political circumstances of the time.

REICHENBACH I saw again many times, after we both settled in Los Angeles. Here too, as in Berlin and - I understand - in Turkey, he had soon accumulated a sizable group of students who looked to him for intellectual stimulation and leadership. (Vol. II, pp. 958-959)¹¹

After REICHENBACH's departure, GRELLING and DUBISLAV became the leading members. But DUBISLAV, who was developing paranoid tendencies (probably reinforced by the political situation, as HELMER suggested), was arrested in 1935 for assault and battery; on his release he left for Prague. In December 1937 he killed his girlfriend and then committed suicide. In a letter to REICHENBACH, GRELLING characterized the Berlin Group as having fallen into ,,the sleep of the sleeping beauty." GRELLING struggled to arouse and revive the group, but with the shadow of the Nazis upon them, meetings became more stilted and discussions of political and social issues less free. For GRELLING, in whose home some mem-

bers had often met to continue the discussions, "things became very sticky," to use HEMPEL's phrase in our interview.

GRELLING was an avid correspondent whose letters are in the REICHENBACH archives and in those of Leonard NELSON. They are also in the archives of Paul Isaac BERNAYS (1888-1977, descendant of the Grand Rabbi of Hamburg), who in his student days at Göttingen was - like GRELLING – close to Leonard NELSON and who later became HILBERT's assistant and his co-author of two volumes on the foundations of mathematics. Many of GRELLING's letters are in the archives of the Austrian philosopher Otto NEURATH.¹² Together with the German philosopher Rudolf CARNAP, he led the Vienna Circle, whose other major figures included Moritz SCHLICK, Hans HAHN, and the mathematician Karl MENGER. The history of the Vienna Circle has been described by A. J. AYER^{12a} and by Friedrich STADLER.^{12b} The Vienna Circle interacted closely with the Berlin Group, although their philosophical viewpoints differed somewhat. Contemporary literature shows considerable interest in the relationships among Kurt GRELLING, Hans REI-CHENBACH, the Berlin Group, and logical empiricism, with Gestalt theory sometimes included.¹³

Shortly after the Nazis came into power, they issued the Edict of 28 March 1933. That edict and others that followed impacted heavily on GRELLING, on REI-CHENBACH, on the Berlin Group, on BERNAYS, and on his colleagues. HIT-LER's decrees devastated the Mathematical Institute at Göttingen.^{13a} They led to the expulsion (and in some cases imprisonment and death) of Germany's mathematicians, scientists, and philosophers.^{13b} More broadly, they led to the murder of millions of civilians - men, women, and children - among them six million who were Jewish or of Jewish descent.

GRELLING was removed from his position at the Gymnasium in 1933, ostensibly to "simplify administration," although he should have been exempted initially from dismissal for "racial reasons" by his services in World War I. The financial burden was lifted by his management of his mother's estate beginning in 1934. However, GRELLING was anguished and angered by the enforced retirement. A July 1934 letter to NEURATH told of being superannuated at 48 years, of his reading the scientific literature, organizing a philosophical discussion group, and spending time with his family, especially his children, then four and seven years old, "my comfort when I'm too angry about people's stupidity."

GRELLING published in the journal *Erkenntnis*, journal of the *Gesellschaft für empirische Philosophie*, co-edited by REICHENBACH and CARNAP. Its name was changed about 60 years ago to *The Journal of Unified Science*, but has been changed back to *Erkenntnis* since the 1970s.¹⁴ He also published in *The Journal of Symbolic Logic*, journal of *The Association for Symbolic Logic*, which he joined in 1936, the year of its founding.

GRELLING would not allow the Nazis to stop intellectual discussions. Thus 1936/1937 found him heading a "new Berlin Group," a small group that discussed problems of logic and philosophy, as well as a colloquium and a seminar that he had

established, as he wrote to REICHENBACH in May 1937. These activities were described in a letter that year by HEMPEL to the Finnish librarian, logician and linguist Uuno SAARNIO who in 1937 published an article on the heterological paradox.^{11a} Perhaps HEMPEL was trying to broaden GRELLING's emigration possibilities by making colleagues aware of his continuing intellectual activities in Berlin. PECKHAUS characterized this period of activities by Grelling as follows:

For GRELLING began a period of intensive scientific activities, in spite of all the everyday suppression in Germany at that time. He did not only resume former fields of interest like mathematical logic, and especially the antinomies, he also began to research into directions which were entirely new for him, like behaviouristic psychology and gestalt theory. $(p. 15)^{5}$

[It fits PECKHAUS' observations that not until 1936 did GRELLING publish a review of Egon BRUNSWIK's psychology text, which had appeared in 1934, and not until 1937 did GRELLING publish a review of Karl DUNCKER's now classical monograph on productive thinking that had appeared in 1935. Moreover, only in 1937 and 1938/1939 did he and Paul OPPENHEIM write their papers on Gestalt concepts and the new logic. However, it should not be overlooked that Berlin was a leading center of Gestalt psychology. Moreover, the broad range of topics considered in the meetings of the Berlin Group, in some of which Gestalt psychologists had participated, as well as GRELLING's acquaintance with KÖHLER, WERTHEIMER and LEWIN, suggest that GRELLING may have been acquainted earlier with Gestalt theory.]

PECKHAUS attributed some of GRELLING's activities to a desire to create a new beginning as a basis for emigration. But he believed that GRELLING's family situation and financial independence kept him from seriously considering emigration in the early years of National Socialism. GRELLING was concerned that he might be too old to start a new career in another country. He worried that he would not be able to provide for his family. His inheritance enabled the GRELLINGS to buy a house and car, with enough funds left to live comfortably. But it was almost impossible to get the money out of the country. Moreover, his love for Germany might have blinded him to HITLER's true motivations.^{11b} GRELLING's son wrote in response to our inquiry about his father: "It seems to me that he must have loved Germany in the way a native son loves his own country, e.g., his 'Anti-J'Accuse,' his army service in WWI, and his apparent reluctance to grasp what HITLER had in mind until it was too late." [Notes 11b, 21, 21a-21d, and 22, 22a-22j give examples of other academics whose love for their homeland made them reluctant to leave despite growing oppression and danger during the Nazi era.] Virtually all his relatives and friends had emigrated and urged GRELLING to do so. It seemed that not until 1937 did GRELLING really consider leaving Germany. That year he was impressed by the philosopher Karl POPPER's emigration to New Zealand where he had obtained a lectureship. About this time GRELLING wrote to Felix KAUFMAN, the Viennese philosopher and sociologist, expressing the hope that "somewhere in the world" there might be a lectureship for him in logic and philosophy of science. The seriousness of his situation had become more evident to GRELLING when he was prevented from participating in the Third Congress for the Unity of Science in Paris in 1937 because he could not produce evidence that he was an "Aryan."

GRELLING corresponded with Paul OPPENHEIM who in 1933 had fled from Germany to Brussels, Belgium. In 1937 and again in 1938 GRELLING traveled to Brussels to work as OPPENHEIM's collaborator, replacing Carl HEMPEL who emigrated to the U.S.A. in 1937.

Grelling was probably in Belgium when a pogrom of unprecedented magnitude occurred in Germany on 9/10 November 1938. The event came to be known as *Kristallnacht* because of the vast amount of glass that was shattered. During that terrible night and day "approximately 1,000 synagogues were destroyed or severely damaged (not the 191, as previously claimed on the basis of Nazi sources!), 7,000 Jewish-owned shops were vandalized, 30,000 Jewish men were arrested and taken to unknown destinations - which we now know to have been the concentration camps of Buchenwald, Dachau, and Sachsenhausen - and nearly 100 Jews were beaten and killed and thousands underwent torments in a wild orgy of destruction" (p. 9).¹⁵ After Kristallnacht GRELLING did not return to Germany.

NEURATH repeatedly encouraged GRELLING to emigrate. Their letters discussed the possibility of GRELLING coming to France to serve as a correspondent for the institute that NEURATH hoped to establish in the Netherlands, where he had come after fleeing from Austria to escape from the Nazis.¹² One plan was for GRELLING to compile bibliographic and historical material centering on the history of mathematical logic in France, particularly the influence of Louis COUTU-RAT.^{15a} (Any plans NEURATH and GRELLING had for joint work were shattered when the Nazis invaded both the Netherlands and Belgium on the same day, 10 May 1940; GRELLING was arrested and NEURATH had to escape again, this time to England.)

NEURATH had advised GRELLING to attend the Fifth International Unity of Science Congress at Harvard University in 1939. However, by June 1939 GREL-LING had not yet received his tourist visa. He began to have doubts about whether the expensive journey was worthwhile. NEURATH admitted that whether or not GRELLING would be noticed at the Harvard meeting was a risk, but if one didn't take the risk, one could not win. "I do not think that you will attract attention with your lecture at Harvard [but] you will talk to many people personally. And the personal is the point for Anglo-Saxons" (p. 16). He also encouraged GRELLING to write to RUSSELL, reminding him of how devoted he was to his work, and inquiring if there was any way he could help him. [This inquiry might refer to either RUSSELL helping GRELLING or GRELLING being of service to RUSSELL, or both.] All this advice did not help and GRELLING abandoned his plans to attend the meeting at Harvard University. Recognizing that his decision might be wrong, he wrote to NEURATH, "It's a pity...that one is restricted to such a low rate of rationality in decisions most important for the personal fate" (Ibid.). The decision turned out to be of vital importance. Of course it is not known if he would have been permitted to attend, or if he would have been denied a visa, as in 1937, because he could not provide evidence of being an "Aryan."

OPPENHEIM and HEMPEL

Paul OPPENHEIM (1885-1977) studied in his native city Frankfurt as well as in Giessen where he earned a doctorate in chemistry. In 1912 OPPENHEIM married Gabrielle ERRERA who was born in Brussels, Belgium. He joined his father's wholesale jewelry firm, but left in about 1924 to become the director of a chemical firm, which became part of I.G. FARBEN.

OPPENHEIM was active in the intellectual and artistic life of Frankfurt before fleeing from Germany in 1933.¹⁶ The OPPENHEIMS settled in Brussels for six years before coming to the United States in 1939.

These details about OPPENHEIM were obtained from an obituary article in the New York Times.¹⁶ They were supplemented by information obtained from his son, Felix OPPENHEIM, who also referred us to a report on his father that concentrated on his scholarly activities.^{16a} Its analysis of his writings provided the basis for our analysis.^{16b} Its listing of publications contributed to the bibliography we compiled. OPPENHEIM preferred working in the philosophy of science outside of academe with intellectual collaborators, among them Carl G. HEMPEL and GRELLING, and later Olaf HELMER, John G. KEMENY, Nicholas RESCHER, Nathan BRODY, and others.

After 1939, when the OPPENHEIMS came to the U.S.A., all of his publications were in English. Noteworthy for its influence was the 1948 work written with HEMPEL on scientific explanation as verification. The authors indicated their indebtedness to discussions with their common friend GRELLING who, together with his wife, were victims of the Nazi terror. Two papers in 1945 discussed the "degree of confirmation," one paper co-authored with HEMPEL and another with HEL-MER. Related reports were co-authored with KEMENY on "degree of factual support" (1952) and on "systematic powers" (1955).

The themes of his 1928 book were revisited by OPPENHEIM in his writings on a natural order of scientific disciplines (1959) and on dimensions of knowledge (1957/1968). A paper written with PUTNAM (1968) advanced the unity of science as a working hypothesis.

A 1966 paper with BRODY discussed the tensions in psychology between behaviourism and phenomenology. There were also papers investigating theories of biology and physics, e.g., quantum theory, such as the paper with BRODY (1969) applying BOHR's principle of complementarity to the mind-body problem, and the work with LINDENBERG (1974, 1978), the latter published posthumously, on a generalization of complementarity. Thus for over 50 years, from his first book in 1926 until his death in 1977, OPPENHEIM was engaged in scholarly thinking and exposition. OPPENHEIM, who was born on 17 June 1885 in Frankfurt, died on 22 June 1977 in Princeton. His wife, who was born on 2 June 1892 in Brussels, died in Princeton on 25 August 1997, at age 105! According to their son, Felix OPPENHEIM, her mind was clear almost to the end. Claude GRELLING, who also was born on 2 June (in 1930), still remembers his family's visit to the OPPENHEIMS in Brussels when he was 6 or 7 years old, and the elegant party Mrs. OPPENHEIM made to celebrate the birthday of "the twins." Even granted that memory may have added to the magnificence of the event, the fact that it was recalled sixty years later attests to what this gallant gesture by a gracious hostess meant to a little boy at a difficult time in his family's life.¹⁷

Carl Gustav HEMPEL (known as Peter to his friends), a younger member of the Berlin Group, was born on 8 January 1905 in Oranienburg, Germany, near Berlin. Preparing for what he thought would be a career as a Gymnasium mathematics teacher, HEMPEL studied mathematics, physics, and philosophy (as had GREL-LING) at the universities of Göttingen, Heidelberg, Vienna, and Berlin. Just a week before HITLER became Reichskanzler, HEMPEL received his doctorate from the University of Berlin in 1934. His dissertation on the logical analysis of probability concepts was done mainly under the supervision of Hans REICHENBACH, whose abrupt dismissal and departure for Turkey raised the problem of who was to be his replacement during HEMPEL's defense of his thesis. Wolfgang KÖHLER stepped in to take REICHENBACH's place, as was the case in Olaf HELMER's defense; psychology and philosophy (and physics) were in the same faculty. Although HEM-PEL was of "Aryan" stock, he manifested so-called Philosemitism, "an offense [in Nazi Germany] against which his father and other well-wishers had warned him more than once" (pp. 147-148).¹⁸ His wife, Eva AHRENDS, had inherited "Jewish blood" from her father, as had been the case with his mentor. [Eva died in 1944 shortly after giving birth to their first child, Peter Andrew. Two years later HEM-PEL married Diane PERLOW, who is Jewish.]

Germany in 1934 was "uninhabitable" for Peter and Eva HEMPEL. They went to Brussels, Belgium, where he collaborated with OPPENHEIM. [REICHENBACH may have provided the link to OPPENHEIM who was interested in logical empiricism.] The OPPENHEIMS supported the HEMPELS, or better, "made it possible for them to support themselves" (p. 147).¹⁸

In 1937 the HEMPELS came to the United States and moved to Chicago where Rudolf CARNAP had obtained ROCKEFELLER research fellowships for HEMPEL and also for his friend and collaborator, Olaf HELMER, who also collaborated with OPPENHEIM. In 1939/1940, HEMPEL taught summer and evening classes at City College, New York. From 1940 to 1948 he taught at Queens College in New York, first as instructor and then as assistant professor. Then he became associate professor in the Philosophy Department of Yale University where he remained until 1955 when he accepted Princeton University's invitation to be Stuart Professor of Philosophy, a position he held until his mandatory retirement in 1973, after which he continued to teach as a lecturer. He became University Professor of Philosophy in

1977 in the University of Pittsburgh, retiring again in 1985, when he returned to Princeton, "his adoptive home," where he continued his philosophical work for another decade. Among his many honors were ten honorary degrees, including one from Princeton University. Like OPPENHEIM, HEMPEL "welcomed opportunities for kindness, generosity, courtesy" (p. 149). HEMPEL died in a nursing home near Princeton on 9 November 1997, at 92 years of age. He was survived by his wife, by his son, and by his daughter, Miranda Tobyanne HEMPEL, as well as by two granddaughters.

The obituary in the *New York Times* focused on HEMPEL's empirical approach and the central role it played in philosophy of science in America.¹⁸⁴

THE FINAL YEARS OF KURT GRELLING

First a brief overview to bring us to the final years:

When Carl Gustav [Peter] HEMPEL went to the United States, Kurt GRELLING left Berlin to come to Brussels in 1937 and again in 1938 to take his place working with Paul OPPENHEIM. When an apparent opportunity arose to return to his "beloved fatherland," instead of undertaking emigration "at random," GRELLING gave it some thought, as he wrote to Otto NEURATH in January 1938. This hesitation might have slowed down the attempts to help him come to the U.S.A. However, after the Kristallnacht (9/10 November 1938), GRELLING did not set foot on German soil.

It was planned that the HEMPELS (Peter and his first wife Eva), on arrival in the U.S.A. in 1937, would help find employment for GRELLING here, later aided by the OPPENHEIMS (Paul and Gabrielle), who had come to the U.S.A. in 1939, and settled in Princeton, New Jersey. The OPPENHEIMS and the HEMPELS spear-headed the efforts to rescue GRELLING by securing an appointment for him at the New School for Social Research. They had obtained strong testimonials from Hans REICHENBACH and others. Max WERTHEIMER's papers suggest that he had endorsed the nomination, which came through on the second attempt.

We first learned of GRELLING in WERTHEIMER's 1936/1937 graduate course, Logic and the Scientific Method, at the New School for Social Research in New York City. [When WERTHEIMER was at the University of Berlin from 1916 to 1929, he knew GRELLING, and when he was at the University of Frankfurt from 1929 to 1933, he knew OPPENHEIM.] In other classes and seminars conducted by WERTHEIMER, we heard of joint work by GRELLING and OPPENHEIM. We learned of efforts, by GRELLING alone and in conjunction with OPPENHEIM, to develop a Gestalt logic, a logic that dealt with structures. WERTHEIMER was also intensely interested in the development of a Gestalt logic. Some of the students envisioned lively discussions between WERTHEIMER and GRELLING when they heard the rumors that GRELLING was invited to join the other refugee faculty members in the New School's University in Exile. The rumors intensified in 1940 – but GRELLING did not come.

10 May 1940 - 18 September 1942

Meanwhile things had not gone well for GRELLING. On 10 May 1940, the first day of the German Army's invasion of Belgium and of the Netherlands, GRELLING was imprisoned in Joelles, Belgium as an undesirable alien. Four days later he was deported to France: to "free" France, the part not yet under German rule. [Claude GRELLING commented: "I was struck by the irony of my father's arrest in Belgium and deportation to France - presumably, the Belgians arrested him as an 'undesirable alien' because he was German, while the Vichy French interned him because he was a Jew."] He was interned under the Vichy regime for more than two years in camps in Southern France: Camps St. Cyprien, Gurs, Les Milles, and Rivesaltes. His wife Greta refused to divorce him and thereby to be safe as an "Aryan." In January 1941 GRELLING wrote from Camp Gurs to BERNAYS:

In my sad situation I try to keep myself balanced {upright} by working scientifically. I was successful so far since I have found here in the camp two younger friends. One is a very capable mathematician, the other a writer who is interested in philosophy. With both I discuss philosophical and mathematical problems.

PECKHAUS did not succeed in identifying the mathematician but identified the writer as the Austrian Jean AMÉRY (1912-1978) who became a prolific writer about the Holocaust.¹⁹ In 1971 he published a semi-autobiographical book covering several periods of his life in essays. In the third chapter, "Debakel," he dealt with his internment in Camp Gurs. AMÉRY opened the chapter with the philosophical discussions he had with Kurt GRELLING whom he called "Georg GRELLING."^{19a}

On 22 January 1941 a cable from Alvin JOHNSON, first Director of the New School for Social Research, reached the commander of Camp Gurs. It told of GRELLING's appointment for two years to the New School as "professeur adjoint" of philosophy, at a salary of \$2,000 per year, and requested the commander's help in obtaining the necessary visa outside of American quotas. GRELLING's postcard from Camp Gurs to Paul BERNAYS, dated 10 February 1941, revealed the "happy news" that his friends already in the U.S.A. had succeeded in obtaining an offer for him of a two-year appointment as an assistant professor of philosophy at the New School for Social Research.^{11e} GRELLING dared to hope that he would be released. On March 1, 1941 GRELLING got a visa for the departure to U.S.A. [possibly] via Spain and Portugal. He was then transferred to the camp of Les Milles near Aix-en-Provence [for internees awaiting emigration]. In the meantime GRELLING's wife Greta had arrived from Belgium. Both tried to manage their departure with the help of Varian FRY's Emergency Rescue Committee, a relief organization for refugees in Marseilles. It was delayed more and more because the States increasingly added conditions for immigration, and finally there were no ship places available. (p. 17)

[The above citation from PECKHAUS also noted that U.S. State Department may have had some concerns because of GRELLING's political past. HEMPEL remarked in our interview that the State Department questioned him several times about GRELLING's political views. He linked the State Department to the GRELLINGS' fate in a 1946 letter to the Finnish librarian, logician, and linguist Uuno SAARNIO.^{11c} An unsigned memo on the Interpet about Kurt GRELLING referred to an interview HEMPEL granted to an Italian journalist. HEMPEL is said to have reported that the State Department was concerned that GRELLING might have been a Communist. Although GRELLING was a Socialist (for example, he belonged to the Social Democrats, widely regarded as socialists, and from 1911-1914 he surveyed current happenings for a monthly newsletter or journal of a socialist organization), there is no evidence that he was a Communist. The State Department's concerns contributed to delaying the rescue of the GRELLINGS until it was too late.]^{11d}

In November 1941, GRELLING and his family officially lost their German citizenship and their property was confiscated. The so-called "final solution to the Jewish problem" reached France in August 1942. Highest priority - higher than the war effort - was given to killing those with "Jewish origins" and their families. Their deportations from the French camps began, with the cooperation of the Vichy Regime.^{11f}

Greta GRELLING was arrested in August 1942 and not permitted to leave Camp Les Milles. Pastor Henry MANEN, who had previously volunteered to assist Greta in getting out of the camp, now was unable to help. In early September 1942 the GRELLINGS were brought from Camp Les Milles via Camp Rivesaltes into Camp Drancy near Paris. The GRELLING children have documents listing their parents' names on the roster of those who were sent on 16 September 1942 from Drancy with Convoy #33 to Poland, arriving at the notorious concentration camp, Auschwitz, on 18 September 1942. It must be assumed that they perished there or in the adjoining extermination camp, Birkenau, probably on the day of their arrival. [Claude GRELLING wrote to us: "September 16 was the date the train left the Bourget station in Drancy, on its way to Auschwitz. As far as I know, there is no accurate information concerning the actual date of my parents' extermination, but since they were probably judged unsuitable for work in the labor camp, it seems likely that they went to the gas chambers the day the train arrived."]

Their tragic fate accounts for the revealing title, Internment and Extermination, that PECKHAUS gave to the final section of his report, which he concluded with these words: "GRELLING had received the call to the New School which seemed to rescue him, but in the end he got into the lethal machinery of the Holocaust in France" (p. 19)⁵.

Words of Explanation

It should be kept in mind that the camps in which GRELLING was interned were in "free" France, the portion not yet under control of the German Army. Although these internment camps are sometimes referred to in the literature as prison camps

and concentration camps, they should not be confused with such camps under German rule and with the horrors associated with them. Because the rules (until August 1942) were more relaxed in the internment camps, it was possible for GRELLING to receive and write letters and also to receive a box of books in Camp Gurs. Although the internees were not free to leave without permission, leaves were granted, for example, for GRELLING to study in the library in the city of Aix-en-Provence. Some food could be purchased and brought in by visitors, for example, by Greta who lived in the city of Aix-en-Provence and visited Camp Les Milles. The conditions changed in August 1942 when Greta was arrested and not allowed to leave the camp. In early September 1942, Camp Les Milles was closed. A number of internees who remained at Les Milles, including the GRELLINGS, were relocated to Camp Rivesaltes, located near Perpignan in the far southwestern corner of France, near the Spanish border. From Rivesaltes, large numbers of immates were sent to Auschwitz, via the railroad station at Camp Drancy/Bourget near Paris in occupied France. At Drancy/Bourget, the shipments of Jews from unoccupied France were combined with Jews arrested in the Paris area, to make up deportation trains (,,convoys") for Auschwitz.

Kurt and Greta GRELLING as Described in Survivors' Letters

Even in the camps GRELLING had manifested a love of learning and an eagerness to share the learning with others. A 1941 note from GRELLING in Camp Gurs thanked the mathematician BERNAYS effusively for a box of books that arrived without a sender's name, but which GRELLING assumed was sent by BERNAYS. He could not know, GRELLING added, what books - these were mainly in mathematics and philosophy - meant in these surroundings. GRELLING hoped that others would join him in studying and discussing the books. To GRELLING books were as essential as air. In his letters and cards from the camp to BERNAYS he asked for clarification about what he was reading and could not comprehend. He wanted to know what was happening in mathematics and in philosophy. His correspondence during internment showed the same characteristics as it did when he was free: modesty in evaluating his own work and abilities, eagerness to understand others' work, and a yearning for intellectual discussions.

GRELLING was depicted as a scholar, eager for discussion, a thoughtful, good, principled individual, and his wife was vividly portrayed, in the letters sent to his daughter Karin in Zurich by two survivors, Hans FRAENKEL and W. TRAUMANN, who had been interned with her parents in Camps Les Milles and Rivesaltes. FRAENKEL wrote to her in September 1945, only weeks after the end of the war in Europe. TRAUMANN wrote two letters in the summer of 1946. Both survivors portrayed Greta as a friendly, intelligent, strong woman, who handled the day-to-day decisions that would have overwhelmed her absent-minded husband. Daily she affirmed her loyalty to him. She was caring enough to bring cooked food for the camp internees, and brave enough to have previously fed fugitives hiding in the forest. Moreover, she understood the need for the internees to exercise their

minds. Decades later, when PECKHAUS requested copies of the letters, Karin remarked that she had trouble reading the difficult-to-decipher script. He prepared and sent to her typed transcriptions of the letters. We present portions of the letters that were translated in 1995 from the typed transcriptions by Claude GRELLING for his three children. In 1998, in response to our request, he kindly translated the survivors' letters in their entirety. Claude's comments to his children are set in square brackets. Our insertions are set in curly brackets.

Letter from Hans FRAENKEL to Karin GRELLING, dated 20 September 1945

[At the time he wrote this letter, three or four months after the end of the war in Europe, FRAENKEL was in Switzerland, but I believe he was German by birth. From what he says in his letter, he was an evangelical Christian, and probably an ordained minister. He first met my parents at Les Milles, and was transported with them to Rivesaltes from which the deportation trains for "forced labor for Germany" were filled. Giving the purpose of these trains as "forced labor for Germany" may well have been an attempt to avoid panic in the camps, and outrage on the outside, since many French citizens (including the courageous Pastor DU-MAS) were aware of these deportations ²⁰ The description may even have been substantially correct, since Auschwitz, the forced labor camp, had an associated extermination camp called Birkenau. In any case, the train from Rivesaltes carrying your grandparents didn't go directly to Auschwitz, but rather to the Paris area where these prisoners were combined with Jews arrested in and around Paris, to make up train #33 which left Bourget/Drancy for Auschwitz. I think some excerpts will be of interest to you. FRAENKEL wrote, among other things:]

Your father was a studious [or hard working] man. Day after day he studied his thick books, and he was always willing to make himself available for lectures. One saw him often, armed with his folding chair and a book, aiming for the sunny side of the courtyard to sit down there, or in summer [seeking] a shady corner. He sported a well-cared-for square beard – until your mother arrived [at camp, in 1941 or 1942] and his expressive face became visible without cover or adornment.

At first, we did not understand each other very well, because his philosophical and my theological interests were opposed to each other. I became very angry with him once when he demolished a lecture I had given with the brief comment, "I could not make sense of a single thing you said". Today I must admit he was right -- the lecture was miserable. Nevertheless, I treasured his intellectual honesty, and he valued me highly, too. It became clear that we respected each other. And when your mother surfaced [came to Les Milles], (I do not remember any more when that was) our relationship became visibly more cordial, because I found her immediately approachable. And through her, I also came closer to your father. Our relationship also became more concrete because, as leader of the Protestant group, I had specific questions to discuss with your parents. [My father was nominally Christian, as you know, and therefore my parents would have been counted among the "Protestant" group.]

In May 1942 I was sent with others to a [forced] labor camp. The members of my bible study group organized a farewell event, which made me feel touched and honored, and for me it was really a great thing that your father attended, to show me his sympathy. It became clear to me what attracted us, two such different people to each other, namely, the mutual recognition that we were both, in our own way, men of character, who publicly acknowledged our beliefs -- his philosophical, and mine Christian.

When the deportations began [i.e. when the French began to cooperate in the "final solution to the Jewish problem"], I was returned to Les Milles, and now, through our constant association, your mother and I developed a real fellowship. Her presence [in the camp] was of course a brave act of affirmation for her husband. As an "Aryan" woman, she could have remained in Aix [-en Provence]. But she courageously supported her husband, who had no hope left. In earlier days, she had brought food to people hiding in the forest. She held her head high. I came to understand that she was the one who carried your father, a man of the intellect, through life. He was helpless in the face of [the realities of] life, seemed at first glance to be absentminded and absorbed within his thoughts, but he was a good human being, a man who loved disputation and who firmly held to his own views.

[I suspect that FRAENKEL, despite his words to the contrary, was offended by my father's lack of belief. I think there was much truth in his description of my mother's role in the life of my father, and our family in general. She was the day-to-day decision maker.]

We made the train trip to Rivesaltes together in the same cattle car, slept next to each other in the barracks, and had a lot of time to talk. Young Pastor DUMAS²⁰ did everything for us; we were with him, he read the Bible with us, gave us a gift of date bread, and informed us the evening before the deportation that 8 of us had been removed [from the list of those to be deported]. So we spent the morning of that terrible day in peace. At one o'clock it was finished. We were released to our new barracks, had our mid-day meal, bought some grapes, and enjoyed ourselves in the warm air in total comfort.

That evening at 8 o'clock came the sudden alarm. Once again, we were lined up alphabetically, in the darkness. The commandant read names and more names from his list by flashlight. Three times he combed though the list. He came near to our names again. I was standing near your father and mother, who were chatting with someone. Then both names rang out. Your father stepped forward to explain that there must be some mistake. But the commandant is rude and doesn't let him say a word. Two policemen were sent with them to get their luggage. After a while, I heard your mother call my name. I answered ",Here" and she said ",Tell DUMAS." ",Yes", I said, ",as soon as I can, first thing in the morning." ",Too late," was the last thing I heard from her. Your father remained silent. He carried a backpack and a suitcase, silently entering his fate.

Pastor DUMAS had been at the train. The commanding officer there assured him, in good faith that his list of 8 names had been respected. In the darkness he {DUMAS? the officer?} did not see your parents. So DUMAS first learned about the misfortune the next morning, and he telegraphed as usual to [the train station at] Lyons, so that the error could be cleared up there and the people pulled from the train. But for the first time, the train was routed through Toulouse and by the time DUMAS telephoned, the train had already crossed the demarcation line [between "free" and occupied France.] DUMAS and all of us were heavy with sorrow at the loss. Your parents were our good comrades. I cannot do otherwise but to believe that we must not stop praying to God to show us the right way. Perhaps you will see them again {in the hereafter}. But you and your brother can be certain to know that your parents were people of character and that is rare today.

In heartfelt fellowship, your

Hans FRAENKEL

Letter from W. TRAUMANN to Karin GRELLING, dated 18 June 1946

[TRAUMANN, a lawyer, was interned with my parents in both Les Milles and Rivesaltes from March 1941 to September 1942. He wrote Karin from Bern {the capital of Switzerland}, but I assume he was German. The name may be Jewish. Without repeating information from the FRAENKEL letter, I think you may be interested in some additional details about your grandparents from TRAUMANN's letters. From the first letter, dated 18 June 1946:]

Allow me to introduce myself as one who shared the fate of your father in the camps Les Milles and Rivesaltes. [I] heard there from him that his children were in Switzerland, and since I have also been in this country for some time, I felt it my duty, now that I can write without hindrance, to tell you about the last time we were together.

Your mother lived in freedom in town [Aix-en-Provence] and was able from time to time to visit her husband in the camp [Les Milles]. When she showed up [once again] one day in August 1942, she was forbidden to leave the camp, and so stayed with us from then on. The reason was probably that the transport back to Germany of inmates who were able to work had started August 4, and the French authorities did not want news of this barbarity to become known on the outside. While until that time, residence in the camp had been tolerable, because frequent leaves to go to Marseilles were granted and for your father visits to Aix, but after that not only were leaves ended, but there also began the selection of sacrifices. This led to terrible scenes, because families were torn apart without mercy. Among married people, the younger ones were shipped off, while the older ones - over 60 or 65 - remained behind. Or the "Aryan" member of the marriage was spared, and the other one taken away. Older children were deported, younger ones remained in the care of charitable organizations. In the courtyard where these selections were made, pitiful scenes were spelled out.

Your father was to be deported. That it didn't happen was either because of his Aryan wife, or because he had been baptized. At any rate, this case as well as several similar ones, were taken on with great energy by the admirable pastor from Aix, who for days on end never left the camp. In early September, when the deportations were completed, the camp was closed and the remaining inmates, among them your parents and me, were brought to the camp Rivesaltes near Perpignan. There, there was another examination and selection of who was to go to Germany. For that purpose, we were pulled out of the barracks, which were in very bad shape because of unbelievable infestations of bugs. We had to carry our baggage outside, and spend hours standing in the hot courtyard of the camp. Once again, your parents were spared, were permitted to stay, and we believed they had been finally saved. Then the following happened: Several of those who had been selected for transport thought to avoid deportation by getting across the barbed wire fence and fleeing. Now there was a specific number of forced laborers that had been prescribed and that the camp administrators were required to deliver, so they had to make up this deficit. So they grabbed at random from those who had been protected until then, among them your father. Late one evening, around 10 o'clock, somewhere about September 20 [actually, September 15], I saw both of your parents, backpack on the back, suitcase in hand, leaving. Your father yelled to me - we were unable to come closer - "We're leaving." I yelled back, "God protect you." That was it. Your mother went of her own free will. I'm afraid they may have been separated soon thereafter [apparently not, since both of their names are on the list for train #33.] The rest of their fate you know.

Of the many cases like this, this one is especially close to me, because I had become close friends with your father, and had learned to treasure your mother. Your father and I were very active in the well-developed lecture circuit at Les Milles. He listened to my history lectures. We bunked in the same hall, and shared there, in the courtyard, and in Aix, many hours of stimulating conversation. I admired his penetrating intelligence and valued highly his distinguished mind. The memory of these two wonderful outstanding personalities puts my time in the camps in a better light. I am glad to have the opportunity to share these memories with you and your brother.

With best greetings to both of you, your devoted

W. TRAUMANN

TRAUMANN's second letter, of 24 July 1946

Since you wrote that you know little about your parents [in the camps], I will try to see if I can tell you anything of importance. Your father was a keen thinker, clear and penetrating. One realized quickly that mathematics and logic were his fields. He kept busy with these things, despite the unfavorable conditions in the camp. He would sit for hours at his place near the window, or working in the library at the University of Aix. In the camp, he gave lectures on mathematics and taught a course in modern logic, the so-called "new logic" of which he was a disciple; he had translated from English a central work by RUSSELL. Because of the difficulty of the subject, he naturally didn't have many people in his audience. He also participated in our "seminar" which examined the unification of several new approaches to the problems of the future peace. He heard my history lectures. The Quakers, who sponsored these activities in the camps, published in 1945 a brochure of these activities in the various prisoner of war camps in the entire world. There is found a photo from Les Milles, representing the circle of my listeners, among them your father. Your father wore a beard in camp, which he later shaved off.

The travel of your mother to France, which was illegal, was difficult. [I have never known how she managed to cross from occupied Belgium to occupied France, and then across the demarcation line into the "free" French zone.] She lived in Aix in a very modest garret, where I occasionally visited her. In the camp, she cared for us men with great energy. I remember vividly how she cooked delicious lentils for us. Her only weakness was her heavy smoking of cigarettes. Obviously a very well-read woman, she understood our {need for} intellectual endeavors. You probably know that your father was to come to a university in the U.S.A. All these projects - including my own emigration plans – were smashed because the U.S.A. twice made the immigration requirements more difficult until finally there were no more places on the ships.^{11d}

In Les Milles, in August 1942, when the selections for return transport to Germany started, your father was supposed to go there. I believe he was already sitting on the train. However, the efforts of the pastor from Aix, Mr. MANEN^{20a}, who took on his situation with total devotion, succeeded in freeing him, but as we know, ultimately in vain. Mr. MANEN described these efforts in a church pamphlet, under the case title "Gr." Unfortunately I do not know the name of this publication.^{20a} It should be easy to find that out through the help committee in Geneva or other places. Perhaps Mr. H.G. FRAENKEL knows

In earlier times I lived in Heidelberg, where I knew your aunt, Mrs. SACHS, by sight. [This would be my Aunt Charlotte, my father's oldest sister and the wife of Professor Hans SACHS, who worked in bacteriology and was a close collaborator of Paul EHRLICH at the Chemotherapy Institute in Frankfurt.] She knew my relatives there.

I also want to tell you that your father was a passionate democrat who loved to talk politics. That was apparently a family tradition, since your grandfather wrote "J'Accuse," a political brochure [hardly a "brochure" - almost five hundred pages in the English edition] which became widely known in his time. It was called "J'Accuse" after the book by {Émile} ZOLA {1840-1902}.

I hope that for both of you this additional information will give you some pleasure in your sadness. If you want more information, write to me.

With my best greetings also to your brother, yours

W. TRAUMANN

[So much for these three letters. You may wonder why I was not familiar with these letters before now. I do remember that Karin and/or I heard from persons who had known our parents in the camps, shortly after the war. I have no recollection of ever having seen these letters, however. There may be several reasons besides poor memory on my part. The letters were handwritten, and PECKHAUS sent Karin copies of the typed transcriptions because she told him that she had great difficulty reading the handwriting. He made copies of the originals which I have and I can't read them either, although that may have more to do with the quality of the copy than that they're in German script. (I need a good dictionary to read printed German; handwritten German is very difficult for me.) Also, at the time Karin received these letters in 1945-46, we had been separated in Switzerland for three or four years after my parents were no longer able to pay our fees at the boarding school "Les Rayons," and the school could no longer keep us for free. In 1942, at the age of 15, Karin went to Zurich where she eventually was accredited as a nurse. At the age of 12, I was taken in by a Swiss family in Baugy-sur-Clarens, near Montreux, and finished high school at the Collège de Montreux in 1946. This was of course before the invention of copy machines (except expensive photo copying) and faxes, and neither Karin nor I had the money to travel, so we saw each other only once or twice after 1942, before I came to the U.S. under the auspices of Lutheran World Relief.1

[In any case, these letters add more detail for me about the last days of my parents' lives. One is tempted to say "if only!" If only others who were due to be deported had not escaped at Rivesaltes. If only Pastor DUMAS had been in the camp when they were selected that night. If only the train had been routed through Lyons as usual, instead of Toulouse. If only DUMAS had gotten through before the train crossed the demarcation line...But would I really wish that others - perhaps parents of other children - had been sent on that train instead of Kurt and Greta GRELLING? I only hope that those who escaped survived the war. That would give some meaning and dignity to your grandparents' otherwise so meaningless death. And if my parents had survived, I might never have come to the U.S., and would certainly never have fallen in love with and married your mother and had three wonderful children, all of which has given joy and meaning to my life for the last nearly 50 years. So, for me at least, if not for my parents, the tragedy of Auschwitz had a happy ending. And if you suspect that I may sometimes feel a touch of "survivors' guilt," of course. But I also know that changing the past is neither possible nor desirable. May they rest in peace!]

A Comment on the GRELLINGS' Fate

Note that the survivors' letters agreed on the essentials of the dramatic turn of events preceding the GRELLINGS' shipment to Auschwitz. The GRELLINGs had been assured that for the time they were safe; they were not among those scheduled to go to Auschwitz. But then some inmates who were so scheduled were able to escape from the camp. By the Nazi-Vichy logic the escapees had to be replaced. By a "cruel twist" of fate GRELLING was chosen as one of the substitutes. He was accompanied by his wife, either because she was forced to go with him or because she chose to do so. A caring pastor tried to help them but it was in vain. He could not stop the train on its trip to Auschwitz and the GRELLINGS' death.

It should be noted that the GRELLINGS might in any case have been scheduled in a few days for the dreaded trip. Had GRELLING not been arrested in Belgium when the German army invaded it, and had he not been deported to France, and had he not been interned for more than two years by the Vichy French, and had they not been so ready for the "final solution to the Jewish problem," GRELLING and his wife would not have been sacrificed in the gas chambers. To attribute the GREL-LINGS' death to "bad luck" or to a "twist of fate" or to the escape by some camp inmates, should not lead us to overlook the culprits responsible for their death and the death of millions of other victims of the Holocaust. Nonetheless, GRELLING's apparently "random" selection as a replacement might be regarded as an extreme example of the "bad luck" that supposedly marred many life opportunities for Kurt. But he should not be remembered in terms of "bad luck" or in other negative ways. That Claude GRELLING concurs with this view is seen in his e-mail of 9 May 2000:

I have long been uncomfortable with the idea that some may ascribe the negative events in my father's life, and ultimately my parents' death, to "bad luck" or some "twist of fate". To my mind, there was nothing "random" in these events. All can be ascribed to the virulent anti-Semitism which pervaded most of Europe (and much of America, too) before Hitler, and which that madman brought to a terrible apotheosis. Kurt and Greta GRELLING were not unique, and their experiences were not unfortunate accidents. These events were shared by millions of other Jews, and were the result of deliberate governmental policy under Hitler, and less overt but nevertheless ugly discrimination before that. "Bad luck" had nothing to do with it.

We like to think of the "good fortune" Kurt GRELLING had: a powerful, inquiring, analytic mind; utmost intellectual honesty; outstanding teachers and mentors; the talent to teach; a devoted wife; the opportunity to save their children and through them, their children's children and future generations; colleagues and friends who endeavored valiantly to rescue the GRELLINGS and to make sure his scientific contributions received due credit and his intellectual heritage endured. Thus, six decades after his work was done, it is the focus of increasing attention. The Nazis and the Vichy French did not extinguish the flame!

Parallels with Academic Diarists

We found striking parallels between Kurt GRELLING's behavior and philosophy and those of Jewish academics who kept diaries during the Nazi era. Victor KLEM-PERER²¹, a professor of Romance languages in Dresden, wrote a searing account of his survival during the Nazi era. Aldo NEPPI MODONA^{21a} was an Italian Jew, a secondary school teacher and summer university lecturer, who also survived; he had kept a war-time diary, as had his young son.

Readers interested in additional information concerning these diarists are invited to go to the expanded version of this paper which can be found on the Internet at http://www.enabling.org/ia/gestalt/gerhards/grellbio.html.

A Parallel to Otto SELZ

Closer in professional interests and ultimate fate to GRELLING than the academic diarists was the psychologist Otto SELZ. The immediate impetus for a volume on his life and work, edited by Nico H. FRIJDA and Adriaan DE GROOT, was the centennial of SELZ's birth in Munich on 14 February 1881.²² Many of the details that follow come from a chapter on SELZ's life contributed by Hans-Bernard SEEBOHM.^{22a} SELZ's father was a partner in the banking house of FRÄNKEL & SELZ. One of many children of a rabbi, SELZ's father had married the daughter of a rich vinegar manufacturer, who descended from a family of Spanish Jews with a long tradition of refined culture. SELZ's parents also had a daughter four years younger than Otto. In this well-to-do, well-regulated family, where there was strict observation of standards, "particularly where loyalty to the state was concerned, [SELZ] learned not only to be an exemplary citizen but also to attach great impor-tance to education and cultural accomplishments" (p. 2).^{22a} At the Royal Ludwig Gymnasium in Munich, SELZ was so uniformly brilliant that he was excused from the oral part of his final examination in 1899. The examiner's comment on his German essay was that it was fluently written but that, in its effort at completeness it allowed subordinate matters to achieve prominence at the expense of emphasis on the main theme. This tendency was reflected in all of SELZ's professional writings, with the result that the reader tended to lose the thread of the argument.

Although Otto wanted to study philosophy, his father wanted him to take up a profession open to Jews that would ensure a decent living: medicine or law. SELZ dutifully studied law, passed the two qualifying exams with high honors, and in 1908 was admitted to the bar in Munich. But he never practiced law. Even during his law studies, he had attended lectures in philosophy and psychology in Munich as well as during one semester in Berlin. Now he concentrated on these areas, and by 1909 he completed his studies magna cum laude for a doctor of philosophy degree, with a thesis on cognition, which was highly regarded by his teacher, Theodor LIPPS. In 1912 he was admitted as Privatdozent in Philosophy at the University of Bonn; his dissertation and inaugural lecture dealt with "the laws of ordered thought." Immediately he asked that his name be removed from the bar register.

Oswald KÜLPE in Würzburg (where SELZ and Max WERTHEIMER were his students) had undertaken an intensive experimental study of thinking, using a method of introspection. Working in KÜLPE's laboratory, and with KÜLPE as one of his subjects, SELZ modified the methods and the theories advocated by the Würzburgers. On a series of cards, he presented typed words, a stimulus word and a task or Aufgabe, and asked the subjects for a careful introspective description of their thinking. Examples follow of the stimulus word, the *Aufgabe*, and a particular final response word, but not the detailed protocol:

Hunting - Coordinate? Rowing

Hunting - Superordinate? Sport

Parson - Coordinate?	Chaplain
Poem - Superordinate?	Work of Art

Sometimes the task was to find the opposite of a stimulus word, or to name a part of the stimulus word or a whole of which the word was a part.

Based on analysis of hundreds of protocols, SELZ accepted the Würzburgers' ideas that thought need not be accompanied by images and that association was not adequate to explain thinking, but rejected the notion of a determining tendency inherent in the stimulus word. Rather, he emphasized the integration of the stimulus word and the *Aufgabe* into a *Gesamtaufgabe*, a complex of relationships. In difficult tasks, the complex may be incomplete but may serve as an antizipierendes, a schematic anticipation or anticipatory scheme, whose completion yields the response word. To SELZ, both reproductive and productive thinking consisted essentially of the completion of the anticipatory schema.

SELZ described his experiments in two large books, the first one published in 1913 and the second in 1922.^{22b} Portions of them are translated into English in the volume edited by FRIJDA and DE GROOT,²² which also includes a condensation, both in German and English, of SELZ's 1924 work on productive and reproductive thinking.^{22c} SELZ had about 30 publications.

SELZ never married. All his life he found it difficult to engage in close relationships, perhaps a consequence of the "fundamental aloofness between father and son" (p.3).^{22a}

In 1920 SELZ was offered a lectureship in the philosophy of law at the University of Bonn where in 1921 he was appointed "professor extraordinary," which obligated him to give a weekly one-hour lecture on the philosophy of law each semester. This occupation with law may have contributed to his writing style "that is nothing short of torture to his readers" (p. 4).^{22a}

In 1923 he accepted an invitation to the Chair of Philosophy, Psychology, and Pedagogy in the Handelshochschule of Mannheim. On 4 December 1923 the Minister of Education and Culture appointed him a full professor. For ten years he held the position, even attaining the honor of Vice-Chancellorship in 1929. Thus, at the start of April 1933, SELZ was 52 years old, and the incumbent of the Wilhelm WUNDT Chair and Director of the Manheim Institute of Psychology. But along with other Jews, in 1933 he was dismissed from his position, his fortunes forever changed by the Nazis. "By Decree No. A 7642 of the Baden Minister for Culture and Education, issued on April 6, 1933 and conveyed on the morrow by the Rector of the school, he had been notified that in the interest of the maintenance of security and public order he was sent on indefinite leave of absence" (p. 13).²² From then on he no longer had access to the Mannheim Institute. SELZ suffered terribly from being cut off from the Institute and his colleagues. Initially he was allowed to remain in his apartment and was better off materially than his relatives, whom he tried to help. Perhaps this "lenient" treatment was related to his former high position and to his war service. As a sergeant-major, he had served from July 1915 until December 1918 and was decorated with the Iron Cross on 26 May 1917 (p. 6).^{22a} SELZ was a patriotic German who "felt himself first and foremost a German and only secondarily a Jew" (Ibid.). After he had become Privatdozent, it had been suggested that he undergo baptism because that would make it easier for him to be considered for a university chair, but SELZ refused. As SEEBOHM put it, "Conversion would have been a lie and one cannot introduce such a lie into the soul without losing one's self-respect" (Ibid.). This same drive to save his self-respect kept him from accepting help when he was in great danger. His position seemed to be: "I have always lived as a good citizen - so nothing can happen to me" (p. 9).^{22a}" His eyes were somewhat opened by the Kristallnacht (9/10 November 1938) in whose wake he was detained in Dachau. Released from there after five weeks, due to the intervention of friends, he agreed to move to Holland. In Amsterdam he was befriended most of all by Géza RÉVESZ, and was able to teach and to do research at the Psy-chological Laboratory of the University of Amsterdam (p. 14).^{22d} But in 1941 he was deprived of his German citizenship. After the Nazis invaded Holland, he was arrested in Amsterdam on 24 July 1943 and sent to the Westerbrook transit camp from where he was deported to Auschwitz on 24 August 1943. Efforts by some of his former colleagues to obtain preferential treatment for SELZ, seconded by a letter from the Vice Chancellor of Milan, were all in vain; SELZ was killed on 27 August 1943.

Thus, SELZ suffered the same fate as GRELLING. Both had been blinded, in part by their devotion to their native land, to the evils of the Nazis until it was too late. At the New School, there were rumors that SELZ might join the faculty just as there were rumors about GRELLING, but in each case the rescue efforts were unsuccessful. That their lives were extinguished has not stopped recognition of their contributions.

The most detailed descriptions, and both positive and negative evaluations of SELZ's work, were provided by George HUMPHREY in 1951.^{22e} SELZ's "pivotal notions remained absent from mainstream psychology until the fifties. One of the causes of this neglect was certainly the climate of the times, dominated as it was by behaviorism in America and by Gestalt psychology in Europe" (p. viii).²² The nature and the rate of recognition were not uniform either before or after the fifties.^{22g} Karl DUNCKER frequently referred to SELZ in his study of productive thinking.^{22g} Kurt KOFFKA published a critique of SELZ's *Denk-Psychologie* in 1927; brief mention of the critique is essentially the only reference to SELZ in KOFFKA's book on Gestalt psychology, except for inclusion of the 1913 and 1922 publications in the bibliography.^{22h} There were even fewer references to SELZ in the writings of the other founders of Gestalt psychology, but there were discussions of his work in which WERTHEIMER participated.^{22f} SELZ's work has been related to information processing approach to the psychology of thinking" (p. viii).²² Herbert A. SIMON noted that in hindsight he and Allen NEWELL could see quite specific connections between their formulations and those of both SELZ and Karl DUNCKER.²²ⁱ In 1995, David MURRAY concluded that "the Gestalt psycholo-

gists, along with SELZ, foreshadowed the modern developments" in the cognitive revolution in psychology (p. 163).^{22j}

In short, for both SELZ and GRELLING there has been a resurgence of recognition in recent years. In our opinion, their contributions are worthy of even wider recognition.

Epilogue

Kurt GRELLING and Paul OPPENHEIM's report, "Logical analysis of 'Gestalt' as 'functional whole', " and our overview of it, appeared in the March 1999 issue of *Gestalt Theory*, 21(1), pp. 43-54. Copies of the issue were sent by Gerhard STEM-BERGER to Claude GRELLING who e-mailed thanks to him and to us. He thanked us "for all your efforts in keeping my father's work alive." His note continued:

Reading your paper again in the journal brought home to me once again that my father's chief interest was always in formal logic, no matter what subject matter he was writing about. I remember his letters to my sister and me when we were children (how I wish now that I had saved them, but we did not then know what fate had in store for him and my mother). More than once, he urged us to think clearly and not to be misled by appeals to fuzzy emotions such as the Nazi glorification of torchlight parades, banners and stirring songs and yet in the end he himself waited too long before recognizing the terrible logic of Hitler's final solution. I look forward to the publication of your biography of my father in a future edition of *Gestalt Theory*!

We sent Claude GRELLING a draft of the manuscript in November 1999 and asked his opinion about the comparisons we drew between his father and other academics. His reply of 12 November included the following:

You ask for my opinion about your discussion of parallels between the fate of my father and that of Victor KLEMPERER, Aldo NEPPI MODONA and Otto SELZ.

Of these three men, I think the history of Otto SELZ is most comparable to that of Kurt GRELLING. Although his academic stature (full professor, vice-chancellor) and his service in WW1 (sergeant-major, holder of the Iron Cross - presumably for valor in combat) considerably exceeded those of my father, in other ways the two men appear to have had much in common. SELZ's interest in the nature of thought seems related to my father's interest in logic and clarity of expression, and SELZ's concept of "Gesamtaufgabe" seems related to the "Gestalt" concepts, which so interested my father and Paul OPPENHEIM in the 30s.

In some ways, I think there is a closer parallel between the fate of my parents and that of Ludwig and Alice KLEIN as described in the PBS [Public Broadcasting System] special "America and the Holocaust: Deceit and Indifference" [Note 11d]. Granted, their lives before the war may have been different, but both families were well-to-do assimilated German Jews who found it difficult to leave their country until it was too late. Their final years were closely parallel - flight to the "low Countries" - Holland for the KLEINS, Belgium for my parents - internment in Vichy French camps, including Gurs, protracted wrestling by friends and/or family members in the U.S. with the State Department about immigration, ending with shipment to Auschwitz for the KLEINS some four weeks ahead of Kurt and Greta GREL-LING.

As a possible title for our reports, Claude GRELLING suggested "Kurt GREL-LING: Jewish Scholar Under the Nazis". In our e-mail of 22 November 1999 we raised the question of whether the words "Jewish Scholar" were appropriate since his father possibly may not have thought of himself as Jewish. His reflective e-mail reply of 24 November gave us new insights into what being considered Jewish might have meant to his father, as well as how it affected Claude as a young school boy in Nazi Germany and later in life in Europe and in America:

Your last e-mail gave me much to think about. Among other things, you say that my father "may not have thought of himself as Jewish." I had never given that question a lot of thought, and of course I can't really know for sure. As you know, I was 9 years old the last time I saw him, and the question of our family's Jewishness was not one we discussed when I was a child. I know I was keenly aware that I was considered a Jew by my schoolmates in the first and second grades in Berlin. I was beaten once or twice, and my German school satchel (a kind of stiff backpack) was repeatedly marked with a large red "J." I remember running home crying. I cannot remember specifically what my father said on those occasions, but in general he told me not to get into fights about it. That, of course, was in 1936-38, after HIT-LER had come to power and my father had already lost his job (although I did not know that at the time).

Will it strike you as strange that I have considered myself a "Half-Jew" all my life, and still do? That formulation is certainly part of the Nazi system of racial classification, but I wonder if the concept of "Half-Jewishness" does not predate the Nazi period. I tend to think that many assimilated Jews in Western Europe considered their "Jewishness" to be a matter of parentage rather than religion--i.e., that even Jews who had converted or had been born into Christian families still thought of themselves as Jews. I do understand, I think, that the very concept of a "Half-Jew" is foreign to traditional Jewish belief and practice. One is either a Jew (through matrilineal descent?) or one isn't. In which case, my mother not being Jewish, I cannot be Jewish, never mind "Half-Jewish." Did the concept of Jewishness as a function of "blood" rather than religion originate with the Nazis? I think that idea is older than the 1930s, and that HITLER adopted and adapted it as a matter of convenience for his own purposes. But perhaps some of your academic colleagues could address this question with more authority. I would be interested, entirely apart from anything to do with your paper about my father.

But back to my father. Did he think of himself as Jewish, even before the Nazi race laws made that decision for him? The handwritten insertion "Evangelische Konfession" in his "Lebenslauf" (which dates from the first decade of this century, I believe [1910]), suggests to me that he thought it important to clarify that he was not of the Jewish faith - hence, that he was very aware that others considered him to be a Jew. I am certain that his motive for that assertion of his Christian bona fides was NOT religious. As I mentioned to you before, we never attended any religious services, and religion was not discussed with us children. My sister and I were both baptized in a Swiss church, presumably at the request of our parents, while we attended the boarding school "Les Rayons", probably in 1939. I have always assumed that our being baptized then was a kind of social insurance policy for us, rather than a religious affirmation by our parents. It certainly was not a religious affirmation by Karin or me - we had no idea what the ceremony meant, even though I was 9 and she was 12 at the time.

So, did my father consider himself to be a Jew? I think he probably did, but only in the ,,racial" and not the religious sense.

Finally, you conclude your 22 November e-mail by saying that I have enriched your lives! Dear Professor Luchins, you have that backwards. Your and your husband's research has added immeasurably to my understanding of who my father was, of his mind and thought, of his place in European culture and philosophy. Thanks to you, I have finally come to know my father.

Acknowledgements

Our thanks are extended to the many individuals, some no longer among the living, who helped us learn about the life and work of Kurt GRELLING:

Max WERTHEIMER, in whose seminars at the New School for Social Research in New York City, we first heard about GRELLING and about Paul OPPENHEIM.

Paul OPPENHEIM, who provided us with GRELLING's unpublished manuscripts and who, together with his wife Gabrielle, invited us into their home for a lengthy discussion about GRELLING.

Carl (Peter) HEMPEL, who actively participated in that discussion, and who gave us much information about GRELLING as well as the first clues about the GRELLINGS' fate.

Felix OPPENHEIM, who provided helpful information about his father and read portions of the biography and notes.

Kurt BING, then a colleague at Rensselaer Polytechnic Institute, who helped translate and review GRELLING's manuscripts and who translated some of the source materials for the present biography.

The archivists of files that contained GRELLING's correspondence - including those of Paul BERNAYS, Leonard NELSON, Otto NEURATH, and Hans REICHENBACH - who kindly made copies of the correspondence available to us.

Volker PECKHAUS, who alerted us to these archival files, who granted permission for citations from his published and unpublished reports, who graciously replied to our e-mail queries, and who gave us the addresses of the GRELLING children.

The GRELLINGS' daughter, Karin, who permitted citations from letters sent to her by survivors who had been interned in camps with her parents, and who also provided family photographs.

The GRELLINGS' son, Claude, who has been of immeasurable assistance by sharing memories, photographs, and documents, by critically reviewing and commenting on every draft of the biography and notes, by permitting publications of his letters and e-mail messages to us, and by translating many of the letters in his father's correspondence.

Gerhard STEMBERGER, who encouraged the preparation and publication of the present work in *Gestalt Theory*.

Lorraine PISARCZYK, former Administrative Secretary of the Department of Mathematical Sciences at Rensselaer Polytechnic Institute, who patiently and efficiently typed most of the drafts of the biography and notes, and whose cheerfulness has brightened our endeavors.

It is hoped that this report will help to keep alive the memory of Kurt GRELLING and his contributions. It is a tribute to him, to his wife, to his children, to his friends who tried to save them, and to all who strove to preserve scholarship and reason in defiance of the Nazi tyranny.

Zusammenfassung

Kurt GRELLING wurde am 2. März 1886 geboren. Sein Vater Dr.jur. Richard GREL-LING und seine Mutter Margarethe (geb. SIMON) waren Juden. Obwohl Kurt GRELLING möglicherweise getauft war, setzten die Nazis seiner Laufbahn in der Lehre wegen seiner jüdischen Herkunft und seiner sozialistischen politischen Auffassungen im Jahr 1933 nach ihrer Machtübernahme ein Ende.

Kurz nach seinem Eintreffen an der Universität Göttingen im Jahr 1905 begann GREL-LING's Zusammenarbeit mit dem Philosophen Leonard NELSON (1882-1927). Gemeinsam versuchten sie Bertrand RUSSEL's Paradox zu lösen, das nach seiner Publikation im Jahr 1903 die Fundamente der Mathematik erschüttert hatte. Ihr 1908 veröffentlichter Artikel enthielt neue, von GRELLING entdeckte Paradoxe – eines davon wurde später nach GREL-LING benannt. GRELLING promovierte 1910 an der Universität Göttingen in Mathematik. Seine Dissertation behandelte die Axiome der Arithmetik unter besonderer Berücksichtigung der Mengenlehre.

GRELLING, in Sprachen hochbegabt, übersetzte philosophische Werke aus dem Französischen, Italienischen und Englischen, darunter vier Bücher von RUSSELL. Er wurde zu einem starken Fürsprecher von RUSSEL's Schriften in Deutschland.

Nachdem es ihm nicht gelungen war, in Göttingen oder Berlin eine Position an der Universität zu erlangen, lehrte GRELLING an verschiedenen Berliner Gymnasien Mathematik, Philosophie und Physik. Er arbeitete eng mit Hans REICHENBACH bei der Planung der monatlichen Treffen der *Gesellschaft für Empirische Philosophie* zusammen. Diese sogenannte *Berliner Gruppe* war eng mit dem von Otto NEURATH und Rudolf CARNAP geführten *Wiener Kreise* verbunden. Neben diesen beiden Repräsentanten des *Wiener Kreises* besuchten auch führende Gestaltpsychologen einige dieser Treffen in Berlin. 1933 entließen die Nazis REICHENBACH wegen seiner jüdischen Herkunft und zwangen GRELLING zum Ausscheiden aus dem Dienst. GRELLING bemühte sich, die *Berliner Gruppe* am Leben zu erhalten, indem er kleine Seminare und Kolloquia organisierte. Obwohl viele Verwandte und Freunde von GRELLING bereits aus Deutschland geflüchtet waren, dachte er selbst bis 1937 nicht ernstlich daran, Deutschland zu verlassen. In diesem und ein weiteres Mal im darauffolgenden Jahr ging er nach Brüssel, um mit Paul OPPENHEIM zusammenzuarbeiten. In Belgien verfaßte er eine Arbeit über Abhängigkeit und gemeinsam mit OPPENHEIM mehrere Arbeiten zur Analyse von Gestalt-Konzepten.

Nach der "Kristallnacht" (9./10. November 1938) entschloss sich GRELLING, in Belgien zu bleiben. Dort wurde er am 10. Mai 1940, am ersten Tag der deutschen Invasion, festgenommen. Er wurde nach Südfrankreich (in das "freie" Frankreich) deportiert, wo ihn das Vichy-Regime zwei Jahre lang internierte. OPPENHEIM und HEMPEL setzten sich an die Spitze der Bemühungen um die Rettung GRELLING's, indem sie ihm eine Berufung an die New School for Social Research in New York zu sichern versuchten. Die Nachricht über diese Berufung und ein Visum für die USA erreichten zwar noch das Internierungs-Lager, in dem inzwischen auch GRELLING's Frau Greta mit ihm lebte (sie hatte es abgelehnt, sich selbst durch eine Scheidung von ihm in Sicherheit zu bringen) - es war jedoch bereits zu spät. Die "Endlösung des Judenproblems" riss Kurt und Greta GRELLING mit sich – sie wurden in das KZ Auschwitz abtransportiert, wo sie am 18. September 1942 ankamen. Noch am selben Tag oder kurz darauf wurden sie in den Gaskammern ermordet.

Eine neuere Zusammenstellung der Publikationen von GRELLING im Internet (von Volker PECKHAUS) enthält mehr als 250 Arbeiten zwischen 1911 und 1922. GRELLING's 1924 veröffentlichtes Buch über Mengenlehre wurde 1943 ins Spanische übersetzt. Das Interesse an GRELLING's Arbeit nimmt zu. Den Nazis ist es nicht gelungen, die Flamme zum Erlöschen zu bringen!

Summary

Kurt GRELLING was born on 2 March 1886. His father, the Doctor of Jurisprudence Richard GRELLING, and his mother, Margarethe (née SIMON), were Jewish. Although Kurt GRELLING may have been baptized, his Jewish origins and his socialist political views ended his teaching career after the Nazis took control in 1933.

Shortly after his arrival in 1905 at Göttingen University, GRELLING began a collaboration with the philosopher Leonard NELSON (1882-1927). Together, they tried to resolve Bertrand RUSSELL's paradox, which had rocked the foundations of mathematics when it was announced in 1903. Their 1908 paper included new paradoxes discovered by GREL-LING, among them the one later named after him. GRELLING received his doctorate in mathematics at Göttingen in 1910 with a dissertation on the axioms of arithmetic with special reference to set theory.

A skilled linguist, GRELLING translated philosophy books originally written in French, Italian or English, including four books by RUSSELL. He became a strong proponent of RUSSELL's writings in Germany.

Unable to find a university position in Göttingen or Berlin, GRELLING taught mathematics, philosophy and physics at various Berlin Gymnasiums (secondary schools). He worked closely with Hans REICHENBACH in planning the monthly meetings of the *Gesellschaft für Empirische Philosophie*. This so-called Berlin Group was closely associated with the Vienna Circle led by Otto NEURATH and Rudolf CARNAP, who attended some of the meetings in Berlin, as did leading Gestalt psychologists. In 1933, the Nazis dismissed REICHENBACH as a Jew, and forced GRELLING to retire. He struggled to keep the Berlin Group going, organizing small seminars and colloquia. Although many of Grelling's relatives and friends had fled Germany, he did not think seriously about leaving until 1937. That year, and again in 1938, he went to Brussels to work with Paul OPPENHEIM. In Belgium, GRELLING wrote a paper on dependence and, with OPPENHEIM, several papers on analysis of Gestalt concepts.

After the *Kristallnacht*, (9/10 November, 1938), GRELLING resolved to stay in Belgium, where he was arrested on 10 May 1940, the first day of the German invasion. He was deported to Southern ("Free") France, where he was interned for over two years by the Vichy regime. OPPENHEIM and HEMPEL spearheaded a drive to rescue GRELLING by securing an appointment for him at the New School for Social Research in New York City. News of the position and a visa to the U.S.A. reached the camp where GRELLING had been joined by his wife Greta (who had refused to divorce him to be safe as an "Aryan"). It was too late. Kurt and Greta GRELLING were caught in the "final solution to the Jewish problem" and shipped to the Auschwitz concentration camp, arriving there on 18 September 1942. They perished in the gas chambers that day or soon thereafter.

A recent compilation on the Internet by Volker PECKHAUS of GRELLING's publications shows more than 250 titles between 1911 and 1922. GRELLING's 1924 book on set theory was translated into Spanish in 1943. Interest in GRELLING's work continues to grow. The Nazis did not extinguish the flame!

Notes

¹ Call an adjective autological if it has the same property that it refers to, and not autological or heterological if it does not. "English," "short," and "polysyllabic" are all autological: "English" is English, "short" is short, and "polysyllabic" has more than one syllable. "German," "long," and "monosyllabic" are heterological since they are not, respectively, German, long, or consisting of only one syllable. The paradox arises from the adjective "heterological." If it is heterological, then it is applicable to itself and therefore must be autological, and vice versa. GRELLING's paradox - worded somewhat differently - was included in a paper by GRELLING and Leonard NELSON in 1908 (*Bemerkungen zu den Paradoxieen von RUSSELL und BURALI-FORTI, Abhandlungen der Fries'schen Schule* N.F. 2, no. 3, 1907/1908, pp. 301-324). Also included were Appendix I by Heinrich GOESCH, *Bemerkungen zur Kapitel IV der vorstehenden Abhandlung*, pp. 324-328; Appendix II by Gerhard HESSENBERG, *Bemerkungen zur vorstehenden Abhandlung*, pp. 328-330; and Appendix III by GRELLING and NELSON, *Über zwei das Paradoxon betreffende Abhandlungen des Herrn E. ZERMELO*, pp.331-334. The first-cited paper by GRELLING and NELSON has been reprinted many times, for example, 1959, 1971, 1973, 1974, 1983, and 1986.

For the context of the development of the paradox, see Volker PECKHAUS, *The Genesis of GRELLING's Paradox*, in: Ingolf MAX und Werner STELZNER (Eds.), *Logik und Mathematik*, Frege-Kolloquium Jena, 1993, Walter de Gruyter, Berlin-New York, 1995, pp. 269-280; *Perspectives in Analytical Philosophy*, 5.

For background information on paradoxes and their impact on foundational issues of mathematics, see LUCHINS and LUCHINS, *Logical Foundations of Mathematics for Behavioral Scientists*, Holt, Rinehart and Winston, New York, 1965.

² The paradox that Bertrand (Arthur William) RUSSELL, 3d Earl RUSSELL (1872-1970), had discovered in the set theory of Georg (F.L.P.) CANTOR (1845-1918), concerned the set S of those sets, and only those sets, that are not members of themselves. For example, the set of abstract ideas is an abstract idea; the set of horses is not a horse. The supposition that S is a member of itself leads to a contradiction as does the supposition that S is not a member of itself. In other words, S is a member of itself if and only if it is not a member of itself. The contradiction rocked the foundations of mathematics and logic when it was announced in 1903 by RUSSELL and by F.L. Gottlob FREGE (1848-1925). The paradox dramatically ended FREGE's decades-long attempts to reduce arithmetic to logic. It also threatened HILBERT's program to axiomatize mathematics and place it on a consistent, logical foundation.

The identical paradox had been discovered independently in 1902 by Ernst ZERMELO (1871-1953), HILBERT's assistant and chief collaborator on philosophical matters. Therefore, RUSSELL's paradox was usually referred to as ZERMELO's paradox in Göttingen, but not in the title of the 1908 paper co-authored by GRELLING and NELSON, although ZER- MELO was mentioned in the title of their Appendix to the article. They had also succeeded in reducing the paradox of C. BURALI-FORTI (1861-1936) to RUSSELL's paradox, which accounted for the title of their paper [Note 1]. The criticism sometimes directed at RUS-SELL's paradox - that it pointed only to contradictions in CANTOR's theory of infinite sets - was countered by GRELLING's paradox: a semantic paradox that did not deal with infinite sets.

³ Constance REID, *HILBERT*, Springer-Verlag, New York-Heidelberg-Berlin, 1970: a delightful biography of David HILBERT (1862-1943) and the story of mathematics at Göttingen. REID also referred to Max BORN, to Leonard NELSON, and to Paul BERNAYS, all of whom figure in the present report.

⁴ HILBERT's program to axiomatize mathematics and to provide it with a consistent, logical basis, as well as the collaboration in Göttingen between mathematicians and philosophers, are described by Volker PECKHAUS in the published version of his distinguished doctoral dissertation at Erlangen: *Hilbertprogramm und Kritische Philosophie: Das Göttinger Modell interdisziplinärer Zusammenarbeit zwischen Mathematik und Philosophie*, Vandenhoeck & Ruprecht, Göttingen, 1990; *Studien zur Wissenschafts-, Sozial- u. Bildungsgeschichte d. Mathematik, 7.*

Further research is reflected in the following three essays on HILBERT by PECKHAUS:

--- HILBERT's Axiomatic Programme and Philosophy in: Eberhard KNOBOCH and David E. ROWE (Eds.), *The History of Modern Mathematics: Images, Ideas, and Communities*, Volume III, Academic Press, New York, 1994, pp. 91-112. It notes that RUSSELL's paradox led HILBERT to abandon the ,,direct proof" of the consistency of the axioms of arithmetic by means of logic and to pursue a ,,partly simultaneous" development of the laws of logic and of arithmetic, which he expected to be carried out by the mathematician Ernst ZERMELO and the philosopher Leonard NELSON, for both of whom HILBERT succeeded in securing jobs at Göttingen.

--- HILBERT, ZERMELO und die Institutionalisierung der mathematischen Logik in Deutschland, *Berichte zur Wissenschaftsgeschichte*, 15, 1992, pp. 27-38. It presents the history of the first German lectureship for mathematical logic, filled by Ernst ZERMELO at Göttingen.

--- HILBERTs Logik. Von der Axiomatik zur Beweistheorie, Intern. Zs. f. Gesch. und Ethik der Naturwiss. Techn. und Med., 3, 1995, pp. 65-86.

PECKHAUS surveyed HILBERT's changing attitudes toward logic: his early axiomatic approach to arithmetic prior to 1903; after the announcement of the set-theoretical paradox by RUSSELL and by FREGE, the efforts to axiomatize logic and set theory; and HILBERT's struggles with intuitionism, a philosophy of mathematics promulgated by L.E.J. BROUWER (1881-1966) of Amsterdam and by his most eloquent spokesman for a time, the German Hermann WEYL who was formerly HILBERT's student, and who later returned to Göttingen and was scheduled to be his successor. Assisted by Paul BERNAYS, HILBERT revised the

logical calculus of the Principia Mathematica (1910-1913) of Alfred North WHITEHEAD (1881-1947) and RUSSELL, and distinguished between mathematics proper and metamathematics (literally, about mathematics), the latter confined to finite means and concerned with proof theory (Beweistheorie).

⁵ Volker PECKHAUS, *Kurt GRELLING and the Genesis of his Paradox*, Report of lecture delivered on 16 August 1994 at the Minneapolis Mathfest, Minneapolis, MN, and on 5 April 1995 in the "Logic Colloquium," SUNY Buffalo, NY. PECKHAUS informed us that the listeners seemed particularly interested in the relationship between Gestalt theory and GRELLING's work. he material of this lecture was used in "The Genesis of GRELLING's Paradox", in: *Logik und Mathematik.* Frege-Kolloquium Jena 1993, hg.v.

Ingolf Max/Werner Stelzner, Walter de Gruyter: Berlin/ New York 1995 (=Perspectives in Analytical Philosophy; 5), 269-280.

^{5a.} The political activities and publications of Kurt GRELLING and of his father Richard GRELLING were described by PECKHAUS in a 1985 unpublished report (from the period when he started research on the topic) which he sent us in July 1998. In response to our request, Claude GRELLING kindly translated into English the report, entitled "Zur politischen Einstellung von Kurt GRELLING," under the title, "Concerning the political views of Kurt GRELLING." The report, which has been very helpful to us, offered a compendium of all that then had been written by and about Richard GRELLING, and of the few biographical facts then available about Kurt GRELLING. The references included the following by Richard GRELLING, published anonymously:

J'Accuse! By a German, Payot & Cie, Lausanne, 1915.

J'Accuse. By a German, translated into English by Alexander GRAY, Hoder and Stoughton, London-New York-Toronto, 1915.

The Crime, by the author of the book, J'Accuse, 3 volumes, Payot & Cie, Lausanne, Vols. 1, 2, 3, 1918-1919.

Belgium Documents, from the author of the book J'Accuse, Payot & Cie, Lausanne, 1918.

After the Belgium Documents, Richard GRELLING revealed his authorship of the above books, although it was long suspected.

PECKHAUS' report referred frequently to a paper by Kurt GRELLING: Philosophical Foundations of Politics, *Socialist Monthly*, 22, 1916, pp. 1045-1055. The report also told of *Anti-J'Accuse* by Kurt GRELLING and the vituperative attack on it and on its author by his father.

⁶ Max BORN, My Life: Recollections of a Nobel Laureate, Charles Scribner's & Sons, New York, 1978. (Original German edition 1975.) BORN also mentioned in his autobiography his "great friend," Max WERTHEIMER, who was interested in developing a new arithmetic and a new logic or meta-logic, based on different axioms, for example, without the axiom of the excluded middle. He introduced WERTHEIMER to EINSTEIN and the three of them became close friends. BORN told EINSTEIN that from WERTHEIMER he had learned about Gestalten. ,,It was most instructive for me...to learn something about the psychological phenomena, the 'Gestalten' which are the raw material of all observations" (p. 173).

^{6a} BORN wrote in his autobiography that NELSON had brought to his attention the plight of a brilliant mathematician, Walter RITZ, who had just been admitted to habilitation, but who was terribly ill with tuberculosis of the lungs and did not have the money to go to a sanatorium for treatment. NELSON and BORN raised a large sum of money that was given to RITZ as a prize for his scholarly work by an anonymous donor. The help came too late. RITZ died in 1909 at 31 years of age.

"NELSON was despondent and relieved his feelings by violently abusing our society in general and the Göttingen professors in particular. I am sure that this accident was only one in a long chain which drove him into opposition to everything and everybody and made him an outsider and crank. He owed his career as a lecturer mainly to the mathematicians, who appreciated his reasonable attitude to mathematics in his philosophy; but he had a row with HILBERT. There was a permanent feud with the other philosophers, in particular with the head of the department, Professor [Edmund] HUSSERL, whose "phenomenology" NELSON despised and publicly derided. Even my father-in-law, Viktor EHRENBERG, a man of mild and kind character, told me many years later that during the time he was Rector of the University he had a clash with NELSON.

NELSON's end was tragic. First his marriage went to pieces. He became lonely, badly looked after and neglected. He worked at night and began to suffer from permanent insomnia. This undermined his strength, so that when he fell ill, his body gave way and he died. I have told you his story as I think that he was one of the few who had a vision of the coming catastrophe; he suffered because his uncompromising liberalism and rationalism was offended by the reactionary tendency of the time and his noble heart could not bear injustice and selfishness." (1978, p. 95)

[BORN's recollections of NELSON's descent into depression and despondency seem to shed some light on NELSON's otherwise incomprehensible fury with Kurt GRELLING over a minor incident involving a packing case for books ("Die Kiste"), as shown in the NEL-SON-GRELLING correspondence, translated for us by Claude GRELLING.]

⁷ ZERMELO may have suggested the topic for GRELLING's thesis: *Die Axiome der Arithmetik mit besonderer Berücksichtigung der Beziehungen zur Mengenlehre (The Axioms of Arithmetic with Particular Regard to their Relation to Set Theory*), Diss. Göttingen, 1910; W.Fr. Kastners, Göttingen, 1910. That same year GRELLING, who already had ten publications, published a philosophical treatise: *Die philosophischen Grundlagen der Wahrscheinlichkeitsrechnung*, Vandenboeck & Ruprecht, Göttingen, 1910, *Sonderdruck aus den Abhandlungen der Fries'schen Schule*, n.f. III, Bd. 3, 1910, pp. 440-478. That same year GRELLING also published a translation from Italian of the book by Federigo ENRIQUE, *Probleme der* Wissenschaft, B.G. Teubner, Leipzig-Berlin, 1910. He translated into German from French the monograph by Émile MEYERSON, *Identität und Wirklichkeit*, Akademische Verlagsgesellschaft, Leipzig, 1930. GRELLING also translated into German four books by RUSSELL: *Die Analyse des Geistes*, Felix Meiner, Leipzig, 1927; *Das ABC der Relativitätstheorie*, Drei Masken Verlag, München, 1928; *Philosophie der Materie*, B.G. Teubner, Leipzig-Berlin, 1929; and *Mensch und Welt: Grundriss der Philosophie*, Drei Masken Verlag, München, 1930. GRELLING wrote a monograph on set theory, *Mengenlehre*, B.G. Teubner, Leipzig-Berlin, 1924, which was translated into Spanish as *Teoría de los conjuntos* by Francisco LARROYO and Alfonso JUÁREZ, Ediciones Lógos de México, 1943; referred to in *Journal of Symbolic Logic*, 10, 1945, p. 108. A political monograph was *Anti-J'Accuse. Eine deutsche Antwort* [A German Answer], Institut Orell Füssli, Zurich, 1916; also available in French as *Anti-J'Accuse. Une réponse Allemande*, Institut Orell Füssli, Zurich, 1917; and in Swedish as *Anti-J'Accuse. Ett tyskt svar* (mit einem Vorwort [Foreword] von Algot RUHE), Svenska Andelsförlaget, Stockholm, 1916.

Kurt GRELLING's essays and reviews also included the following:

- Die Paradoxien der Mengenlehre, in Mathematik-Büchlein: Ein Jahrbuch der Mathematik, Werner BLOCH and J. FUHLBERG-HORST (Eds.), Franckh'sche Verlagsbuchhandlung, Stuttgart, 1925, pp. 44-49.
- Das Unendliche in der Mathematik, in *Mathematik-Büchlein: Ein Jahrbuch der Mathematik, 2*, Werner BLOCH (Ed.), Franckh'sche Verlagsbuchhandlung, Stuttgart, 1926, pp. 41-51.
- Philosophy of the Exact Sciences, in *Philosophy Today. Essays on Recent Developments in the Field of Philosophy*, Edward Leroy SCHAUB (Ed.), Open Court, La-Salle, 1928, pp. 393-415.
- Philosophy of the Exact Sciences: Its Present Status in Germany, *The Monist*, *38*, 1928, pp. 97-119.
- Realism and Logic: An Investigation of Russell's Metaphysics, *The Monist*, 39, 1929, pp. 501-520.
- Bemerkungen zu Dubislavs "Die Definition," Erkenntnis, 3, 1932/1933, pp. 189-200.
- The Logical Paradoxes, *Mind* n.s. 45, 1936, pp. 480-486.
- Identitas indiscernibilium, Erkenntnis, 6, 1936/1937, pp. 252-259. Reprinted, 1982, 1.
- Review of C.G. HEMPEL and P. OPPENHEIM, Der Typusbegriff im Lichte der neuen Logik, A.W. Sighoff's Utgeresmi, Leiden. *Erkenntnis*, 6, 1936/1937, pp. 266-268.
- Review of Egon BRUNSWIK, Wahrnehmung und Gegenstandswelt, Deuticke, Leipzig-Wien, 1934. *Erkenntnis*, 6, 1936/1937, pp. 268-270.
- Review of Karl DUNCKER, Zur Psychologie des produktiven Denkens, VII, Julius Springer, Berlin, 1935. *Erkenntnis*, 7, 1937/1938, pp. 121-123.
- Review of Karl POPPER, Logik der Forschung: Zur Erkenntnistheorie der modernen Naturwissenschaft, Julius Springer, Wien, 1935. *Theoria*, *3*, 1937, pp. 134-139.

- Review of Ferdinand GONSETH, Les mathématiques et la réalité: Essai sur la méthode axiomatique, Felix Alcan, Paris, 1936. *Theoria*, *3*, 1937, pp. 139-143.
- Review of Rudolf CARNAP, Philosophy and Logical Syntax, Kegan Paul, London, 1934. *Theoria*, *3*, 1937, pp. 355-357.
- [In 1937 and again in 1938 GRELLING wrote about GÖDEL's work, agreeing with Chaim PERELMAN that it was not based on an antinomy akin to RUSSELL's paradox.]
- Gibt es eine Gödelsche Antinomie? Kurt GRELLING's Bemerkungen zu einer Abhandlung von Ch. PERELMAN, *Theoria*, *3*, 1937, pp. 297-306.
- Nochmals: "PERELMAN-GÖDEL," Zusatz und Berichtigungen zu Kurt GREL-LINGS Bemerkungen in *Theoria* III, pp. 297ff. *Theoria*, 4, 1938, pp. 68-69.
- [A report on Kurt GRELLING, on the Internet, refers to collaboration between GRELLING and Kurt GÖDEL (1906-1978). It seems to PECKHAUS and to us that this statement is unfounded. Although GRELLING knew GÖDEL, and wrote the two cited reports about GÖDEL's work, we know of no evidence of their collaboration.]

^{7a} A bibliography of Kurt GRELLING's work was provided in PECKHAUS' essay: *Von NELSON zu REICHENBACH: Kurt GRELLING in Göttingen and Berlin* [Note 13]. On 15 July 1998 PECKHAUS created an Internet version of GRELLING's bibliography, which can be obtained at the following address:

http://www.phil.uni-

erlangen.de/~p1phil/personen/peckhaus/texte/grelling_bibliographie.html

The bibliography is arranged chronologically and the items are numbered by the year and to some extent by type. Although the numbers are not totaled, we counted over 100 essays or reviews by GRELLING on philosophical or mathematical themes. Only about half a dozen were co-authored, his co-authors being Leonard NELSON, Hans REICHENBACH, and Paul OPPENHEIM, but some of these articles have been reprinted; for example, the 1908 paper with NELSON has been reprinted in many collections of essays on NELSON. In addition, GRELLING had short one or two page reports, which are listed separately. Under Rubrik "Philosophie" in der "Rundschau" der *Sozialistischen Monatshefte*, surveys of current happenings for a monthly newsletter or journal of a socialist organization, GRELLING published eight reports in 1911, thirty-one in 1912, twenty-three in 1913, and ten in 1914, for a total of seventy-two reports. Under *Rundbriefe des Internationalen Jugendbundes*, circulating letters or circulars of the International Youth Association or Union, GRELLING published forty-three reports in 1921 and forty-six in 1922, for a total of eighty-nine reports. Thus there were over 160 of these "political" reports.

^{7b} A chart depicting the genealogy of the GRELLING and SIMON families was sent to us by Claude GRELLING, Kurt GRELLING's son. The family tree traces the two families from the late 1600s to the late 1900s.

⁸ The Gesellschaft had a precursor: the *Gesellschaft für positivistische Philosophie*, founded in 1912 by Josef PETZOLD. Its activities were revived when the Ortsgruppe Berlin (hence the name, Berlin Gruppe) was founded in February 1927. In 1931 it was renamed *Gesellschaft für wissenschaftliche Philosophie*, following a suggestion by David HILBERT. The last two words in the name have been replaced by *empirische* or *empirische/wissenschaftliche Philosophie*. We thank Volker PECKHAUS for acquainting us with this history, which is found in: Dieter HOFFMAN, *Zur Geschichte der Berliner "Gesellschaft für empirische/wissenschaftliche Philosophie*," in the volume edited by Lutz DANNEBERG, Andreas KAMLAH and Lothar SCHÄFER [Note 13], which contains much archival material on the Berlin Group and its journal, *Erkenntnis* [Note 14].

⁹ HEMPEL referred us to a book by Martin STRAUSS, *Modern Physics and Its Philosophy: Selected Papers in the Logic, History, and Philosophy of Physics*, Kluwer Academic Publishing, Norwell, MA, 1972. STRAUSS, whose acquaintance with REICHENBACH dated from hearing the latter's inaugural lecture at Berlin University, included a memorial essay on REICHENBACH, based on translation of an earlier essay (1963). STRAUSS described the politics surrounding REICHENBACH's initial appointment in 1926. If he remembered correctly, STRAUSS wrote, Wolfgang KÖHLER was a member of the managing committee of the Berlin Group. "To the REICHENBACH group belonged, besides his students, above all K. GRELLING and W. DUBISLAV" (p. 273). According to STRAUSS, REICHENBACH made arrangements with the University of Istanbul in 1932, even before his abrupt dismissal, in order to escape the "impending hell" by which he meant the HITLER regime (p. 274). STRAUSS pointed to some philosophical and semantic differences between the Vienna Circle and the Berlin Group. In particular, logical positivism was the term applied to the philosophy of the Vienna Circle and was often applied also to the Berlin Group. But REICHENBACH preferred the term logical empiricism.

^{9a} A more recent source on REICHENBACH is the paper by Andreas KAMLAH, *Hans REICHENBACH: Leben, Werk und Wirkung*, in: Rudolf HALLER and Friedrich STADLER (Eds.), Wien-Berlin-Prag: *Der Aufstieg der wissenschaftlichen Philosophie*, Hölder-Pichler-Tempsky, Wien, 1993, pp. 238-283. We found of special interest the detailed account of the objections to REICHENBACH's appointment to Berlin University in 1926.

¹⁰ Kurt LEWIN's habilitation thesis, *Der Begriff der Genese in Physik, Biologie und Entwicklungsgeschichte* (The Concept of Genesis in Physics, Biology and Evolutionary History), 1922, was discussed in meetings of the Berlin Group. It is of interest that the earliest references in English to GRELLING's paper on dependence and to GRELLING's and OP- PENHEIM's paper on functional wholes and to their papers on the new logic, together with their supplementary remarks on the concept of Gestalt, occurred in a volume put out by Kurt LEWIN's research group: Roger BARKER, Tamara DEMBO, and Kurt LEWIN, *Frustration and Regression: An Experiment with Young Children; Studies in Topological and Vector Psychology II*, University of Iowa Press, Iowa City, IA, 1941.

¹¹ LUCHINS and LUCHINS, *Max Wertheimer's Life and Background: Source Materials.* Vols. I and II. Limited preliminary ed., Rensselaer Polytechnic Institute, Troy, NY, 1991-1993. The letter from Olaf HELMER and a description of meetings of the Berlin Group are in Vol. II, pp. 956-959. This volume describes WERTHEIMER's stay in Berlin (1916-1929), in Frankfurt (1929-1933), and in the U.S.A. (1933 until his death in 1943). It was in Berlin that he began discussions with his friend, Albert EINSTEIN, about the thinking that led him to relativity theory. The discussions were described in a chapter in WERTHEIMER's only book, published posthumously in 1945: *Productive Thinking*, Harper, with several subsequent editions edited by his son, Michael WERTHEIMER. In 1922, when he was 42 years old, Max WERTHEIMER was finally elevated from Privatdozent to Ausserordentlicher Professor für Psychologie und Philosophie at Berlin University, or more formally, "Königliche Friedrich-Wilhelms Universität zu Berlin." He was a founder and editor of the journal, *Psychologische Forschung*, and a catalyst (according to Wolfgang METZGER) of the most productive period of research at the Berlin Psychological Institute.

In the late 1920s there were increasing signs of the forthcoming political storm, fights between the right and the left that extended to Berlin University. When the new Reichstag met in 1930, a delegation of brown-shirted Nazis marched, shouting "Germany awake! Jews get out!" They not only smashed windows in Jewish-owned department stores but organized riots at the university. Jewish professors were interrupted, heckled, and not allowed to speak. A Jewish student was killed and the university had to be closed three times because of the riots.

At age 49, WERTHEIMER (the oldest of the three founders of Gestalt theory) was the last to become Ordentlicher Professor. The call came from the University of Frankfurt, the so-called "Jewish" university, because much of the money to establish it had come from Jewish donors. At first things were fairly calm at the university. But WERTHEIMER had no illusions that there was to be a long respite. He did not share views held by many that HITLER's ideas were too stupid or too wild to be accepted for long, that the plans to rid Germany of Jews would never be carried out, and that HITLER and the Nazis would soon be "put in their place." WERTHEIMER believed that HITLER intended to actualize what he had written in *Mein Kampf.* The first time he heard HITLER's speech on the radio, he immediately left Germany with his family for Marienbed, Czechoslovakia, and from there emigrated to the U.S.A.

The volume includes discussions in WERTHEIMER's classes at the New School for Social Research of the social psychology of what had happened and was happening in Germany. Seminar members, some of them refugees, gave explanations of why HITLER and the Nazis came into power and predictions of how long they would retain the power. Discussions of National Socialism in WERTHEIMER's seminars are also described in our 1968 books: *Revisiting WERTHEIMER's Seminars*, Bucknell University Press, Lewisburg, Pennsylvania, especially Volume II, *Problems in Social Psychology*, Chapters 40 and 41.

^{11a} Uuno SAARNIO, Zur heterologischen Paradoxie, *Theoria*, *3*, 1937, pp. 38-56.

^{11b.} GRELLING's attachment to his homeland and his reluctance to emigrate, despite increasing restrictions, were also shown by other academics, as described in accounts of their lives under National Socialism or Fascism. Such sentiments were evident in a diary kept during the Nazi era by Victor KLEMPERER, a professor of Romance languages in Dresden, who had converted from Judaism in his youth. Its recent publication proved to be a best seller in Germany and was translated into English, with four reviews in the *New York Times* [Notes 21, 21a-21c]. Aldo NEPPI MODONA, an Italian Jewish historian who had been a loyal Fascist, would not leave his beloved Fatherland, and found it difficult to believe that MUSSO-LINI would so quickly adopt Germany's anti-semitic measures. A recent book was based on diaries kept during World War II by Aldo and his son and on interviews with other family members [Note 21d].

Both KLEMPERER and NEPPI MODONA survived, but the German Jewish psychologist Otto SELZ was not so fortunate [Notes 22, 22a-22j]. SELZ found it difficult to believe that as a good German citizen he would be persecuted. His hesitation to leave Germany eventually resulted in his being sent to Auschwitz, where, like GRELLING, he perished.

^{11c.} A letter to Uuno SAARNIO from HEMPEL, dated 21 October 1946, Flushing, NY, linked the State Department and GRELLING's fate. PECKHAUS quoted from the letter in his e-mail to us of 15 July 1998:

"Für GRELLING hatte sich seinerzeit OPPENHEIM ganz besonders bemüht, und Eva [HEMPEL's first wife] hat ihm seinerzeit bei seinen Bemühungen technisch sehr geholfen. Das Ergebnis war das Angebot einer Professur auf mindestens zwei Jahre an der hiesigen New School for Social Research. Und dann hat das State Department, trotz unserer Beschwörungen, die Sache so verzögert, dass GRELLING und seine Frau schliesslich in Südfrankreich von der Gestapo verhaftet wurden; sie sollen nach dem Osten geschickt worden sein, und wir haben keine Hoffnung, dass die Armen noch am Leben sind. Es ist ein entsetzlicher Gedanke."

^{11d.} The Internet, under the *Internet Encyclopedia of Philosophy*, or the *International Encyclopedia of Unified Science*, provides verbal sketches of the leading members of the Vienna Circle and of the Berlin Group. The sketch of GRELLING refers to an interview given by HEMPEL:

HEMPEL remembers that OPPENHEIM made every effort to allow GRELLING to immigrate in USA [sic] but - according to HEMPEL - immigration officials were concerned about GRELLING's alleged propensity towards Communism; so there was a delay that was fatal to GRELLING, who was captured in France and killed in a Polish concentration camp. The episode is reported in HEMPEL, 'Autobiografia intellettuale' in *Oltre il positivismo logico*, Armando: Rome, 1988. [This essay is the text of an interview HEMPEL gave to Richard NOLAND in 1982, published for the first time, in Italian translation, in 1988].

The sketch concluded that GRELLING was also interested in the analysis of scientific explanation and in the Gestalt approach. We wonder whether the word Socialism should replace the word Communism.

A recent e-mail message from Claude GRELLING described a television program that referred to the State Department during the Holocaust period:w

"Yesterday evening (Monday, 12 April 1999) I happened to watch a 90 minute program on our local Public Television station. It was shown as part of the PBS 'American Experience' series, and entitled 'America and the Holocaust: Deceit and Indifference.' I wonder if you and your husband saw it.

On the chance that you did not catch it, here's a brief description:

As the title states, the program concerned American reactions to the Holocaust while it was happening. It establishes clearly that parts of the US government - particularly the State Department - were aware of the mass murders of Jews by the Nazis as early as the late 1930s, and all during the war, including the starting up of extermination camps like Auschwitz [-Birkenau] beginning in 1940-41. U.S. immigration policy during the late 30s and early 40s at State was under the direction of Breckenridge LONG, who apparently did everything in his power to stop the immigration of Jews from Europe, and to suppress public knowledge of the Holocaust here. Shown were confidential State Department letters and telegrams to U.S. consulates in Europe - Zurich, Madrid, Lisbon, etc. - forbidding, among other things, the forwarding of information about the Holocaust that the consulates received from victims and relatives to friends and relatives in the U.S.

The obtaining of U.S. entry visas was deliberately made as difficult as possible. I am inclined to believe that it was this policy, rather than any "evidence," which caused the State Department officials under Breckenridge LONG to suggest that my father was suspected of being a Communist.

As a narrative device for the program, the filmmakers used the true story of Kurt KLEIN, who came to America in 1936 or '37, followed by his sister and brother. All three tried for years to arrange for the immigration of their parents, Ludwig and Alice KLEIN, but they encountered the impossible hurdles erected by LONG and his staff. In an ironic near-parallel to my parents, the senior KLEINS ended up being interned by the Vichy French in their camps in the south, including Gurs. It sounds as if the KLEINS may have been there at the same time as my father. After numerous instances of near success - all the other visas (French exit, Portuguese, Spanish), boat tickets in hand, space guaranteed - each time the final ok fell through. In the end, Kurt KLEIN (who later served with the U.S. army in Europe, including the final push into Germany) was notified that his parents' entry visa into the U.S. had finally been approved. Unfortunately, as he discovered after the war, his mother and father were

shipped to Auschwitz on August 19, 1942, some three weeks before the approval of their U.S. visa.

Unfortunately, I did not have the presence of mind to tape the entire program. I did capture the last hour or so. At the end of the program, there was a reference to additional information at a web site at www.pbs.org. Also, a tape of the entire program is available for \$19.95 by calling 1-800-255-9424. I don't know if you have enough time to obtain and view this video-tape, but if you do, it may help with some additional background."

^{11e.} That GRELLING received an offer of an appointment for two years is consistent with the practice of the New School in hiring German refugees for its University in Exile. The practice was mentioned in the letter of 15 March 1934 sent to Albert EINSTEIN by Director Alvin JOHNSON, with a copy sent to Max WERTHEIMER, from which we cite:

"My dear Professor EINSTEIN:

At the time when we were launching the project of a University in Exile, you were one of the first to come to our assistance with your generous endorsement of the undertaking. I am sure that you have observed with sympathy the successful effort of our group of German scholars to organize themselves into an effective teaching body.

But it is not sufficient that provision has been made for the exile scholars for a brief period of time. It is a painful fact which must nevertheless be faced that the Hitlerite propaganda is making serious progress in our institutions of learning, and an important part of this propaganda is the insinuation that the German professors now acting as visiting professors in America are not really wanted; that nobody is making any effort to continue them in their positions after the two year period. Hitler's *Völkischer Beobachter* declares that the institutions outside of Germany are already tiring of their guests; that German Jewish scholars will in the end find that there is no real place for them abroad.

The answer to this propaganda is obviously to establish such a permanent place. For our own part we mean to work toward the permanent establishment of the University in Exile, as a monument to our faith in liberal culture. We propose to form a committee, which shall prepare the ground for a concerted effort, when the time is ripe, toward the endowment of the University in Exile. We believe that in so doing we shall also bring home to the various universities their moral obligation to provide permanently for exiled visiting professors.

For this we need your help. We wish to organize a dinner here at the School with you as guest of honor. It is not intended to solicit support or contributions, but to emphasize the moral necessity of establishing solidly the position of these German professors. The desire to meet you and to hear you speak even a few words, in German or English as you choose, would enable us to assemble the eighty or one hundred persons who later would make the enterprise a success.

I know how many demands America makes upon your time, and I should apologize for troubling you with this appeal, if I did not know that you more than anyone else take to heart the situation of your former colleagues, cast out into a world of uncertainties, and realize as few can the necessity of creating for them the security of which they have so unjustly been deprived." [Note 11: LUCHINS and LUCHINS, Vol. II, 1991-1993, after p. 1218; italics added.]

^{11f.} An account of anti-Semitism in France under the Vichy Regime is given in the book by Renée POZNANSKI, *Être Juif en France pendant la Seconde Guerre Mondiale*, Hachette, Paris, 1996. We were alerted to this work by a reference to it in a recent book on the life and work of the illustrious French Jewish mathematician, Jacques HADAMARD (1865-1963), by Vladimir MA•YA and Tatyana SHAPOSHNIKOVA: *Jacques HADAMARD*, *A Universal Mathematicia*n, American Mathematical Society, Providence, RI, London Mathematical Society, 1998.

¹² Otto NEURATH (1882-1945), Austrian philosopher and sociologist, was recognized for his work in economic and social planning and in visual education by means of an international language of simplified pictures ("isotopes"). He was acknowledged as a leader of the Vienna Circle. NEURATH fled to Holland to escape the Nazis. In Holland, he tried to develop an institution of visual education along the lines of the Social and Economic Museum of Vienna, which he had established in 1924, and which used "pictorial statistics" to exhibit statistical information on social and economic change to the workers of Vienna. But his hopes were dashed when the German Army invaded Holland on the same day that it invaded Belgium. "When the Germans occupied Holland, NEURATH fled to England - by boat, penniless, without belongings - was quarantined on the Isle of Man while the British Authorities ensured that he was not a closet Nazi and then settled in Oxford" (p. 23, in Robert J. LEO-NARD, Ethics and the Excluded Middle: Karl MENGER and Social Science in Interwar Vienna, Isis, 89((1), 1998, pp. 1-26). This recent report on Karl MENGER (1902-1985), a mathematician who belonged to the Vienna Circle, also offered sketches of Otto NEURATH and of his brother-in-law, Hans HAHN (1879-1934), both active in the Vienna Circle. A firsthand account of NEURATH's struggles was provided by his essay, Personal Life and Class Struggle, in Robert S. COHEN and Marie NEURATH (Eds.). Empiricism and Sociology (Vienna Circle Collection, I), Reidel, Dordrecht, 1975. Other essays by NEURATH are contained in this volume as well as in his Philosophical Papers, 1913-1946, with the same editors and publisher (Vienna Circle Collection, 16), 1983.

^{12a} A book, *Logical Positivism*, A. J. AYER (Ed.), The Free Press, New York, 1959, provides a history of the logical positivist movement by the editor, who had joined the Vienna Circle in 1933. It also offers a collection of writings by logical positivists as well as a few pieces by those closest to them or even outside the range. The most selections came from Moritz SCHLICK whom AYER regarded as the founder of the Vienna Circle.

Born in Berlin in 1882, SCHLICK was a philosopher and physicist whose doctoral degree in physics at the University of Vienna was under the direction of Max PLANCK. Between 1911 and 1917 he taught at the University of Rostock and wrote about the philosophy of relativity theory. With the help of Philipp FRANK, Hans HAHN, and Otto NEURATH, he was invited in 1922 to the University of Vienna, to hold the chair of the theory of inductive science. SCHLICK organized a discussion group whose members called it the Vienna Circle. He was Visiting Professor at Stanford University in 1929 and again in 1932. Thus he was "the herald of the philosophy of logical positivism" in the U.S.A. The manifesto of the Vienna Circle, written in 1929 by HAHN, NEURATH, and CARNAP, was dedicated to SCHLICK. The first article published in the new journal *Erkenntnis* was SCHLICK's "Die Wende der Philosophie." On 22 June 1936, he was murdered at the University of Vienna by a student who was a Nazi sympathizer.

^{12b} A highly recommended work on the history of the Vienna Circle: Friedrich STAD-LER, *Studien zum Wiener Kreis, Urspung, Entwicklung und Wirkung des Logischen Empirismus im Kontext*, Suhrkamp, Frankfurt, 1977 (1034 pp.).

¹³ Contemporary reports on GRELLING, REICHENBACH, the Berlin Group, and logical empiricism include:

Volker PECKHAUS, Kurt GRELLING und der Logische Empirismus, in Rudolf HAL-LER und Friedrich STADLER (Eds.), Wien-Berlin-Prag, Der Aufstieg der wissenschaftlichen Philosophie, Holder-Pichler-Tempsky, Wien, 1993, pp. 362-385; Veröffentlichungen des Instituts Wiener Kreis, 2.

Volker PECKHAUS, Von NELSON zu Reichenbach: Kurt GRELLING in Göttingen und Berlin, in Lutz DANNEBERG, Andreas KAMLAH und Lothar SCHÄFER (Eds.), Hans Reichenbach und die Berliner Gruppe, F. Vieweg, Braunschweig-Wiesbaden, 1994, pp. 53-86; it includes a bibliography of GRELLING's writings, pp. 74-86.

In the just-cited volume: Mitchell G. ASH, *Gestalttheorie und Logischer Empirismus*, pp. 87-100.

^{13a} Constance REID (1970) described the devastating effects that HITLER's edicts had on the Mathematical Institute in Göttingen:

"In the Reichstag elections in the year of HILBERT's seventieth birthday [1932], the National Socialist Party made great gains. The following January, President von HINDEN-BURG appointed Adolf HITLER the chancellor of Germany. Almost immediately came the first measure designed to break that ,satanical power' which had 'grasped in its hands all key positions of scientific and intellectual as well as political and economic life.' The universities were ordered to remove from their employment almost every full-blooded Jew who held any sort of teaching position." (p. 203)

To whom did the ultimatum apply in the Mathematical Institute? To many, because HIL-BERT had not allowed bias - either of race, religion, nationality or gender - to influence his decisions. At Göttingen, HILBERT's major teacher had been the Jew Adolf HURWITZ (1859-1919). HILBERT had succeeded in obtaining a professorship at Göttingen for the brilliant Jew and friend from his youth, Hermann MINKOWSKI (1864-1909). It applied to Richard COURANT (1888 - 1972), Director of the Institute, who had replaced Felix KLEIN (1849-1925). Edmund LANDAU (1877-1938), who had come to Göttingen after the untimely death of MINKOWSKI, was Jewish. So was Emmy NOETHER (1882-1935), the first woman to be appointed a Privatdozent in Göttingen; HILBERT's argument against gender bias was that Göttingen was a university and not a bathhouse. The ultimatum would have applied to the Jewess Olga TAUSSKY (later TODD, 1906-1995) who had helped edit HIL-BERT's work on number theory, but COURANT had already warned her in 1932 that she would be safer if she left, in view of the political situation; she returned to Vienna where, however, before long the Nazis were in power. It applied to Paul BERNAYS (1888-1977) who had been HILBERT's assistant and collaborator for almost sixteen years, since 1917.

In the Physics Institute, both Max BORN (1882-1972) and James FRANCK (1882-1964) were Jews. Since he had won a Nobel Prize, FRANCK was permitted to stay on (but chose to leave with his fellow Jews). BORN, who had not yet won his Nobel Prize, was required to leave.

Appeals were made, signed by distinguished scholars, in efforts to keep the faculty members. COURANT had been wounded in the war, fighting with the German Army. NO-ETHER made a pittance in salary and yet led one of the most active research groups in Germany. These appeals were of no avail. LANDAU was permitted to stay, because he had been appointed professor during the Empire (in 1909), but when he tried to teach a calculus course to freshmen, upper classmen stormed his classes, refusing to allow young people to be subjected to the "evil" Jewish influence.

Otto NEUGEBAUER [1899 - 1990], then an assistant professor, was placed at the head of the Mathematical Institute. He held the famous chair for exactly one day, refusing in a stormy session in the Rector's office to sign the required loyalty declaration. The position of the head of the Mathematical Institute passed to Hermann WEYL [1885-1955]. Although his wife was part Jewish, he was one of those who thought that something might yet be salvaged. But nothing could be changed.

In America, [WEYL's] many friends worried about him and wrote long letters, advising, urging, begging that he leave Germany before it was too late. Abraham FLEXNER [1866-1959] offered him a position at the Institute for Advanced Study. Finally EINSTEIN [1879-1955], who had already been at the newly created Institute for several years, prevailed upon the younger man to come and join him there.

In Göttingen, HILBERT was left almost alone. He kept BERNAYS on as his assistant at his own expense. *The Foundations of Mathematics*, which he and BERNAYS had written in collaboration, was almost ready for publication [David HILBERT und Paul BERNAYS, *Grundlagen der Mathematik*, Julius Springer, Berlin, Vol. I, 1934, Vol. II, 1939].

With BERNAYS' help he saw Arnold SCHMIDT [1902-1967] and Kurt SCHÜTTE [1909 - 1998] through the doctorate. SCHÜTTE [who passed away on 18 August 1998] was the last of 69 mathematicians (40 of them during the years from 1900 to 1914) to receive their degrees from HILBERT. [Only a few weeks later, because of increasing difficulties for Jews, BERNAYS left for Zurich.]

Sitting next to the Nazis' newly appointed minister of education [RUST] at a banquet, [HILBERT] was asked, "And how is mathematics in Göttingen now that it has been freed of the Jewish influence?" "Mathematics in Göttingen?" HILBERT replied. "There is really none any more." (Ibid., p. 205)

^{13b} A detailed account of the expulsion of Germany's mathematicians with "Jewish origins" and their subsequent fate was given by Max PINL and Lux FURTMÜLLER, *Mathematicians under Hitler*, Leo Baeck Year Book XVIII, Leo BAECK Institute, Secker & Warburg, London, 1973, pp. 129-182. This essay, written by FURTMÜLLER, is based largely on a multiple-part report by PINL on mathematicians who suffered persecution under HITLER. It omits the bibliographies and most of the mathematical details in the longer report. A general introduction is followed by brief biographies of 127 mathematicians, who were victimized or fell foul of the regime" (p. 129). Of these mathematicians, 101 were Jewish or of Jewish descent; the others were "'Aryan' mathematicians who for reasons of circumstances, conviction or character were incompatible with the Nazi regime" (Ibid.).

^{13c} The estimated numbers of Jews who were killed refers to civilians and does not include Jews who died in battle fighting in the Allied Armed Forces. According to the best information "six million Jews were slaughtered by the Germans and their satellites," U.S. Attorney General Tom C. Clark wrote in his letter of 10 December 1945 to the Yiddish Scientific Institute - YIVO. The letter is cited (p. 5) in a book written by Max WEINREICH, HIT-LER's Professors: The Part of Scholarship in Germany's Crimes Against the Jewish People, YIVO, New York, 1946. The book is an English translation of a report in Yiddish that appeared in Yivo-Bleter, Journal of YIVO, Vol. XXVI, Issues 1 and 2. The book described the survey, concluded on 15 March 1946, of the participation of German scholarship in Germany's crimes against the Jewish people since 1933. It provided detailed accounts of how German academics, including university professors and academy members, "provided the ideas and techniques which led to and justified this unparalleled slaughter" (p. 6). [The] present report, based upon a good many thousands of books, pamphlets, periodicals and documents provides ample evidence that there was participation of German scholarship in every single phase of the crime. The ideas underlying the ultimate "action" were developed in advance with the necessary philosophical and literary trimmings, with historical reasoning, with maps and charts providing for the details with well-known German thoroughness. Many fields of learning, different ones at different times according to the shrewdly appraised needs of Nazi policies, were drawn into the work for more than a decade: physical anthropology and biology, all branches of the social sciences and the humanities - until the engineers moved in to build the gas chambers and crematories. (WEINREICH, 1946, pp. 6-7)

¹⁴ The story of *Erkenntnis* was told well by Rainer HEGSELMAN and Georg SIEG-WART, *Zur Geschichte der "Erkenntnis," Erkenntnis, 35,* 1991, pp. 461-471. The journal *Erkenntnis* was the journal of both the Berlin Group and the Vienna Circle, but was dominated by the latter. It was renamed when the Felix Meiner publishing house had to stop the publication of this "Jewish journal." Previously, REICHENBACH was forced by the pub-

lisher to leave the editorial team because of his socialist background and his "Jewish origins" (he had inherited "Jewish blood" from his father). Thus Volume 7 of *Erkenntnis* (1937/1938) was edited by Rudolf CARNAP alone. Volume 8 (1939/1940) was published as the *Journal of Unified Science* by the Dutch publishing house, Van Stockun & Zoon, in Den Haag [The Hague], Netherlands. One motive for renaming *Erkenntnis* was the fact that MEINER still had the copyright; another was the thought that the German name was not appropriate when it was no longer exclusively a German journal. Only one volume was published in the Netherlands, where Otto NEURATH had emigrated. During the war there were negotiations in the U.S.A. to continue the journal. In the 1970s its name was changed back to *Erkenntnis*. In 1974, on retiring from Princeton, HEMPEL became its co-editor.

¹⁵ Kristallnacht and the reaction to it on the part of Jews in the United States were described in a lecture by Alfred GOTTSCHALK on the fiftieth anniversary of that event. It was published as "The German Pogrom of November 1938 and the Reaction of American Jewry," Leo BAECK Memorial Lecture 32, Leo BAECK Institute, New York, 1988. Rabbi BAECK, in whose honor the Institute was named, was "the last representative figure of German Jewry in Germany during the Nazi period" (p. 1). He viewed Kristallnacht as "the final, unalterable end of German-Jewish existence" (p. 3).

GOTTSCHALK was an eight-year old German-Jewish child who lived through that terrible November 9th and 10th. He recalled the blackest of nights, howling at the door, the noise of windows shattering, shouting, and then a deadly quiet, when desperate fear set in. His grandfather took him by the hand and they rushed to their little synagogue to find it had been ravaged. In a nearby brook they found pieces of parchment from the sacred Torah, together with torn pages of prayer books. His grandfather waded into the brook and handed the scraps to the boy. These scraps and bits of parchment and prayer book symbolized the fragmentation, which marked the response to Kristallnacht by our own American Jewish community. Disunity, shock and suffering were the immediate consequences of this night and day The major American Jewish organizations would counsel caution in their response and limit that response to interfaith worship services publicly and frantic efforts to move an apparently immovable American president and government privately. (p. 4)

The official response of the United States to Kristallnacht was silence for too long a time. Silence was also the response of other nations. There was a ,,conspiracy of silence'' (p. 22).

The sin of silence in the face of oppression is the profound lesson of Kristallnacht[N]o country protested formally to Germany over its treatment of Jews. [Rabbi] BAECK said that Nichts ist so schlimm wie das Schweigen – "Nothing is so terrible, so horrendous as silence" (p. 23).

It could be said that Kristallnacht paled in comparison with what happened later to the Jews of Europe. A tragic example is what happened in Poland. Beginning in September 1939, the Jews of Poland were subjected to unbelievable humiliation, torture, and murder. The gruesome details were described in a booklet, *The Destruction of Polish Jewry*, published in 1940 by the American Federation of Polish Jews, 225 West 34th Street, New York, NY:

"This is a story of travail and disaster that exceeds everything and anything human eyes have beheld in generations; everything and anything human ears have ever heard.

Three and a half million Jews have been broken and scattered like the fragments of a clay vessel in the space of some eighteen days. A devastating, black tornado swooped down and uprooted the centuries old, sturdy forest of Polish Jewry. Men created in God's image cast off all human likeness and wherever their feet trod, Jewish blood flowed in crimson torrents. Old and young were subjected to the most diabolical tortures, accompanied by infernally sadistic cynicism. Not dictated by military expediency but solely because of their chieftain's and commander's will to slay and destroy everything and everyone of Jewish origin." (p. 3)

Citing precise dates and numbers, the booklet told of the horrors that befell the Jews of Poland in city after city: of Jews whose beards were plucked out together with the skin; who were forced to pick up dung with their hands, put it in their hats, and then wear the hats; who were flogged until they lay in pools of their blood; who were lined up and executed; who were forced to dig graves and were buried alive in them; who were put in cattle cars and shipped to concentration camps. The next-to-the last page reported:

The Nazi officers themselves tell in the "Schlesische Zeitung" that in their search for concealed weapons in Radom they arrested three thousand six hundred Jews. The Jews were dragged out of cellars, garrets and rooms and sent to concentration camps. (p. 17)

The last page, dated 27 September 1940, offered thanks to America for the shelter it had provided for the Jewish people, "under the glorious flag of liberty and equality for all," urged that the tragic calamity that had befallen the Jews of Poland not be forgotten, and hoped that the Jewish New Year, Rosh Hashana, "will usher in better days for the Jews of Europe and for all other oppressed and unfortunate peoples" (p. 18). But we know that the Nazi death march through Europe continued and that HITLER and his allies would not be content until there was "the final solution to the Jewish problem."

^{15a} One of the plans discussed by NEURATH and GRELLING centered on the latter going to France to serve as an external correspondent for the former's Institute in The Hague, the Mundaneum Institute. They considered the possibility of GRELLING concentrating on the work of Louis COUTURAT. Born on 17 January 1868 near Paris, and educated in mathematics and philosophy at the École Normale Supérieure, COUTURAT became a professor at the University of Toulouse and the Collège de France. He wrote *L'infini mathématique* (1896). He dealt with Leibniz' unpublished works in *La logique de Leibniz*, which brought him in contact with Bertrand RUSSELL. In 1905, COUTURAT published *L'algèbre de la logique*. There was talk of GRELLING updating this book to prepare an introductory logic text.

COUTURAT was killed in an accident on 3 August 1914 when his car was hit by a car carrying orders for mobilization of the French Army on the day that World War I broke out. Ironically, he was well known as a pacifist.

PECKHAUS noted that the Mundaneum Institute was intended to serve as an institutional editor of the journal *Erkenntnis* and as a center to support displaced scholars. The grand plan

for the Institute was destroyed when the Nazis invaded the Netherlands on the same day that they invaded Belgium [Note 12].

¹⁶ An obituary of Paul OPPENHEIM appeared in the *New York Times*, 24 June 1977, Section D, p. 13. Some items in the obituary were used in our account. Other items were not used (e.g., that OPPENHEIM held a high post in the German diamond industry) because they could not be verified.

Felix OPPENHEIM sent us a report on his father that appeared in: Jürgen MITTEL-STRASS (Ed.), (1985), *Enzyklopädie der Philosophie und Wissenschaftstheorie*, Vol. II, Mannheim-Wien-Zürich, pp. 1083-1084. The report noted that OPPENHEIM's orientation was influenced by Hans REICHENBACH's empirical philosophy and by logical empiricism. Included in the report were a bibliography, as well as a description of the themes of some of his publications, to which Notes 16a and 16b are indebted.

^{16a} Paul OPPENHEIM's 1926 book described various divisions of scientific subject matter and their research methods and laws, and suggested a "natural order" based, for example, on the level of concreteness/abstraction. His 1928 book in the area of thought [cognitive processes] dealt with static and dynamic laws of the development or creation of scientific concepts. The 1936 book that he co-authored with Carl G. HEMPEL, on the logical concept of "type" in light of the "new logic," concerned the theory of classificatory and comparative concepts; illustrations were taken from psychology and from personality typology (e.g., the work of E. KRETSCHMER). A 1935/1936 article, written with HEMPEL in French, stressed the importance of the "type" concept. Gestalt concepts were explicated in light of the new logic in papers co-authored by OPPENHEIM with GRELLING (e.g., 1937/1938, 1938/1939) and with RESCHER (1955/1956).

After 1939, when the OPPENHEIMS came to the U.S.A., all of his publications were in English. Noteworthy for its influence was the 1948 work written with HEMPEL on scientific explanation as verification. These authors acknowledged that some of the ideas on emergence and related concepts were suggested by, and developed in a discussion by correspondence with, "our common friend, Kurt GRELLING, who, together with his wife became victims of the Nazi terror" (1953, p. 319n). Two papers in 1945 discussed the "degree of confirmation," one paper co-authored with HEMPEL and another with HELMER. Related reports were co-authored with KEMENY on "degree of factual support" (1952) and on "systematic powers" (1955).

The themes of his 1928 book were revisited by OPPENHEIM in his writings on a natural order of scientific disciplines (1959) and on dimensions of knowledge (1957/1968). A paper written with PUTNAM (1968) advanced the unity of science as a working hypothesis.

A 1966 paper with BRODY discussed the tensions in psychology between behaviorism and phenomenology. There were also papers investigating theories of biology and physics, e.g., quantum theory, such as the paper with BRODY (1969) applying BOHR's principle of complementarity to the mind-body problem, and the work with LINDENBERG (1974, 1978), the latter published posthumously, on a generalization of complementarity. Thus, OPPEN-HEIM contributed to scholarly exposition for over half a century.

^{16b} From various sources we compiled the following, which we hope is a complete bibliography of Paul OPPENHEIM's publications:

(1926). Die natürliche Ordnung der Wissenschaften: Grundgesetze der vergleichenden Wissenschaftslehre. Jena: Gustav Fischer.

(1928). Die Denkfläche. Statische und dynamische Grundgesetze der wissenschaftlichen Begriffsbildung. Berlin: *Kant - St.* Erg. Heft 62.

(1936, with C.G. HEMPEL). Der Typusbegriff im Lichte der neuen Logik. Wissenschaftstheoretische Untersuchungen zur Konstitutionsforschung und Psychologie. Leiden: A.W. Sijthoff's Utgeresmi.

(1935/1936, with C.G. HEMPEL). L'importance logique de la notion de type. Act. Congrès int. philos. scientifique. Paris: Sorbonne, II, pp. 41-49.

(1937/1938, with K. GRELLING). Der Gestaltbegriff im Lichte der neuen Logik. *Erk-enntnis*, 7, pp. 211-225; Supplementary Remarks on the Concept of Gestalt, pp. 357-359.

(1938/1939; 1988; 1999; with K. GRELLING). Analysis of the concept of "Gestalt" as "functional whole." Accepted for publication in *Erkenntnis* 1938/1939; in Barry SMITH (Ed.), *Foundations of Gestalt Theory*, München-Wien: Philosophia Resource Library, 1988; *Gestalt Theory*, 21(1), 1999, pp. 49-54.

(1945, with C.G. HEMPEL). A Definition of "Degree of Confirmation." *Philosophy of Science*, *12*, pp. 98-115.

(1945, with O. HELMER). A Syntactical Definition of Probability and of Degree of Confirmation. *Journal of Symbolic Logic, 10*, pp. 25-60.

(1948, with C.G. HEMPEL). Studies in the Logic of Explanation. *Philosophy of Science*, 15, pp. 135-175. Reprinted in: Herbert FEIGL and May BRODBECK (Eds.), *Readings in the Philosophy of Science*, New York: Appleton-Century-Crofts, 1953, pp. 319-352. Also reprinted in: C.G. HEMPEL, *Aspects of Scientific Explanation and Other Essays in the Philosophy of Science*, New York-London, 1965. pp. 245-290.

(1952, with J.G. KEMENY). Degree of Factual Support. *Philosophy of Science*, 19, pp. 307-324.

(1955, with J.G. KEMENY). Systematic Powers. Philosophy of Science, 22, pp. 27-33.

(1955/1956, with N. RESCHER). Logical Analysis of Gestalt Concepts. *British Journal of Philosophy of Science*, 6, pp.89-106.

(1957). Dimensions of Knowledge. Review of International Philosophy, 40, pp. 151-191.

(1959). A Natural Order of Scientific Disciplines. *Review of International Philosophy*, 49, pp. 354-360.

(1961, with H. BEDAU). Complementarity in Quantum Mechanics: A Logical Analysis. *Synthese*, *13*, pp. 201-232.

(1966, with N. BRODY). Tensions in Psychology between the Methods of Behaviorism and Phenomenology. *Psychology Review*, 73, pp. 295-305.

(1968). Dimensions of Knowledge. In: Miriam STIMMLER (Ed.). *The Reach of the Mind. Essays in Memory of Kurt GOLDSTEIN*. New York: Springer, pp. 251-268.

(1968, with H. PUTNAM). Unity of Science as a Working Hypothesis. In: H. Feigl, M. Scriven and G. Maxwell (Eds.), *Concepts, Theories, and the Mind-Body Problem*. Reprinted in: *Minnesota Studies in the Philosophy of Science II*, 1972, pp. 3-36.

(1969, with N. BRODY). Application of Bohr's Principle of Complementarity to the Mind-Body Problem. *Journal of Philosophy*, 66, pp. 97-113.

(1974, with S. LINDENBERG). Generalization of Complementarity. *Synthese*, 28, pp. 117-139.

(1978, with S. LINDENBERG). The Bargain Principle. Synthese, 37, pp. 387-412.

¹⁷ Mrs. OPPENHEIM was a gracious hostess during our interview in their home in Princeton. Her comments were very informative. After Paul OPPENHEIM mentioned that his wife had been a student in WERTHEIMER's course in Frankfurt, she remarked:

"WERTHEIMER was a friend of the family ... I attended his lectures as a friend. The lectures were not open to the public but friends could attend them."

[This was probably the same basis on which GRELLING had attended REICHEN-BACH's lectures in Berlin]. She added that when WERTHEIMER came to their home for lunch or dinner there were always other people present with whom they talked about the many things that interested them. She went on to say that she was strongly influenced by WERTHEIMER's lectures and by his holistic approach.

She recalled that she had also attended a seminar at the Frankfurt Psychological Institute taught by Max WERTHEIMER, Max HORKHEIMER, Kurt RIEZLER, Paul TILLICH, and other scholars. She recalled that the "great hall" was filled to capacity, with even the steps covered by listeners.

Contrasting their styles, she said that TILLICH gave a clearer, better organized lecture but WERTHEIMER was always very interesting. The former tended to stay more or less in one place, whereas WERTHEIMER seemed quite agitated and walked up and down the large stairway, stopping to talk to students, and then resumed pacing up and down the stairs.

Mrs. OPPENHEIM's comments can be found in our 1991-1993 work [Note 11], Vol. II, pp. 1094-1095.

¹⁸ A tribute to Carl Gustav [Peter] HEMPEL is the obituary written by Paul BENACER-RAF and Richard JEFFREY of Princeton University in a recent issue of *Proceedings of the American Philosophical Association* (7: 4-71:6, 1997, pp. 147-149). Brought to our attention by Felix OPPENHEIM, it has been very helpful for information about the lives of OPPEN-HEIM, HEMPEL and REICHENBACH. The authors refer to HEMPEL as a "central figure in the development of logical empiricism" (p. 147).

^{18a} Another obituary of HEMPEL appeared in the New York Times, 23 November 1997, Section 1, p. 44, Column 1, written by Ford BURKHART. It described HEMPEL as "the last surviving member of the Vienna Circle, a group of philosophers who...advocated what they called 'logical positivism,' which argued that whatever could not be verified by experience was meaningless."

¹⁹ It is noteworthy that AMÉRY became a professional writer, specializing in the story of the camps, Auschwitz, and the Holocaust, based in part on his own experiences. His best-known work on Auschwitz has been translated into Italian, French, and English. His publications, some of which continue to be reissued, included the following:

Jenseits von Schuld und Sühne: Bewältigungsversuche eines Überwältigten, 1988, 3rd ed. Stuttgart: Klett-Cotta, 1997.

Intellettuale a Auschwitz. Torino, Italy: Bollati Boringhieri. Italian translation of *Jenseits* von Schuld und Sühne, 1987.

At the Mind's Limits: Contemplations by a Survivor on Auschwitz and its Realities, Bloomington: Indiana University Press, 1980; reissued 1998. English translation of *Jenseits von Schuld und Sühne*.

Par-Delà Le Crime et Le Châtiment: Essai pour Surmonter L'Insurmontable. Artes, France: Actes Sud, 1995. French translation of *Jenseits von Schuld und Sühne*.

Unmeisterliche Wanderjahre: Aufsätze. Stuttgart: Klett-Cotta, 1971; reissued München: Deutsches Taschenbuch Verlag, 1989, 128 pp.

Örtlichkeiten. Stuttgart: Klett-Cotta, 1980, 143 pp. (Originally given as radio broadcasts.)

Hand an sich legen: Diskurs über den Freitod. Stuttgart: Klett-Cotta, 1976; reissued 9th ed., 1993, 15 pp.

Heimat: auf der Suche nach der verlorenen Identität. Jüdisches Museum der Stadt Wien: C. Brandstatter, 1995.

Selbstmordverhütung: Anmaßung oder Verpflichtung, 2nd ed. Düsseldorf: Parerga, 1994.

^{19a} From PECKHAUS' translation (p. 19)⁵:

"The barrack in Camp Gurs in which two men were discussing philosophy was not heated. The words, anyway signs of sounds without special blood-heat, froze on the lips. Nevertheless the discussion did not pass away; it concerned the joint writing of a work on neopositivistic philosophy. The professor had a call to a university at New York, and he wished to present there a rounded, small, as easy to understand as possible book as an inaugural donation. ... By the way, there is no reason not to mention the name of the professor: his name was Georg GRELLING; he belonged to the second to third cast of neopositivistic philosophers, rarely quoted nowadays."

Claude GRELLING can understand the mistake in his father's given name, particularly after three decades; the men may have referred to each other in the camps as Herr GRELLING and Herr AMÉRY. GRELLING's 1941 note sent from Camp Gurs to BERNAYS mentions that he discussed philosophical and mathematical problems with two younger friends, a very capable mathematician and a writer interested in philosophy. PECKHAUS concluded that AMERY's text "gives an authentic and moving picture" of Kurt GRELLING's tragic end (p. 19)⁵.

²⁰ We have found no other references to Pastor DUMAS, who was mentioned in Hans FRAENKEL's letter as attempting to save the GRELLINGS. We would appreciate information about the courageous Pastor DUMAS.

^{20a} The pastor from Aix, Pastor MANEN (whose efforts to help GRELLING were mentioned in W. TRAUMANN's letters) described the camps and the deportations:

Anonymous (Henri MANEN), Ich habe es gesehen ... Erster Bericht von dem Deportations-Tagen in Gurs. Aus dem Tagebuch eines französischen Geistlichen. *Aufbau, New York, 8*, No. 51, 18 December 1942, pp. 1, 4.

Henri MANEN, Les Déportations, in: Henri Cadier (Ed.), Le Calvaire d'Israël et la solidarité chrétienne. Geneva, 1945, pp. 85-116.

Anonymous (Henri MANEN), Aus dem Tagebuch eines protestantischen Geistlichen in Frankreich 1942, in: Kurt Richard GROSSMAN (Ed.), Emigration: Geschichte der Hitler-Flüchtlinge 1933-1945. Frankfurt A.M., 1969, pp. 364-365.

Henri MANEN, Au fond de l'abîme, in Les camps en Provence: Exil, Internement, Déportation, 1933-1944. Aix-en-Provence, 1984, pp. 206-218.

PECKHAUS provided these references, noting that GRELLING was referred to in at least the 1945 and 1984 reports.

²¹ KLEMPERER was born in 1881 in Landsberg an der Warthe, now Gorzow Wielkopolski in Poland, the son of a rabbi who moved with his family to Berlin. As a young man, KLEMPERER married a non-Jew and converted to Protestanism. His almost day-to-day diary covering the Nazi years 1933 to 1945 was published in 1995 - 1996 in two volumes in Germany by a Berlin publisher, Aufbau-Verlag. Translation into English by Martin CHALMERS of the first volume, was published as: *I Will Bear Witness. A Diary of the Nazi Years 1933-1941*, Random House, New York, 1998. The second volume of KLEMPERER's diary was also translated into English by Martin CHALMERS, and was published in 1999-2000 as: *I Will Bear Witness: A Diary of the Nazi Years, 1942-1945*. ^{21a} The author of the 1997 book based on the diaries kept during World War II by NEPPI MODONA and by his young son is their distant relative, Kate COHEN, who entitled the book: *The NEPPI MODONA Diaries: Reading Jewish Survival Through My Italian Family*. University Press of New England, Hanover, New Hampshire, published the book. Its author now resides in Albany, NY, where she reviewed the book in a session one of us (EHL) attended.

22 Otto SELZ: His Contribution to Psychology, Mouton Publishers, The Hague, The Netherlands, 1981. Unless otherwise indicated, the chapters and pages in subsequent notes refer to this book, which focuses primarily on SELZ's life and his contributions to cognitive psychology. Why did this book about a German psychologist come to be prepared by Dutch editors? SELZ found refuge during the last years of his life in Amsterdam. From his childhood, Nico H. FRIJDA remembered SELZ as a nervous but friendly refugee; as a graduate student at the University of Amsterdam, Adriaan DE GROOT attended some of Professor SELZ's seminars and benefited from his advice in studying the thinking of chess experts (p. xi). These studies, which used SELZ's methods and constructs, are summarized by DE GROTT in "Thought and Choice in Chess," Chapter 7, pp. 192-255, and presented in more detail in his book, Thought and Choice in Chess, Mouton, The Hague, 1965 (2nd ed., 1978); translated from Het Denken van den Schaker, Noord-Hollandsche Uitgevers Maatschappij, Amsterdam, 1946. FRIJDA's work on information representation in memory was influenced by SELZ. The major motive for the volume "is the editors' conviction that Otto SELZ's contribution to psychology is of considerable contemporary interest" (p. viii). The preface concludes with the remark: "Both of us, finally, still are distressed by the manner in which this intelligence was destroyed, along with six million others" (p. xi).

^{22a} "The psychologist Otto SELZ: His life and Destiny," Chapter 1, pp. 1-12. Earlier Hans-Bernard SEEBOHM published his dissertation on SELZ: *Otto SELZ. Ein Beitrag zur Geschichte der Psychologie*, Ph.D. dissertation, University of Heidelberg, 1970.

^{22b} Über die Gesetze des geordneten Denkverlaufs. Eine experimentelle Untersuchung. Erster Teil, Spemann, Stuttgart, 1913. Zweiter Teil, Zur Psychologie des produktiven Denkens und des Irrtums. Eine experimentelle Untersuchung, F. Cohen, Bonn, 1922. Excerpts from both works, translated into English, are presented in "Excerpts from On the Laws of Ordered Thinking and On the Psychology of Productive Thinking and of Error by Otto SELZ,", Chapter 4, pp. 76-146, with an introduction to the excerpts by FRIJDA.

²²c Die Gesetze der produktiven und reproduktiven Geistestätigkeit: Kurzgefasste Darstellung, F. Cohen, Bonn, 1924. Condensations from the German, with side-by-side English translations, are presented in "The Laws of Cognitive Activity, Productive and Reproductive: A Condensed Version" Chapter 3, pp. 20-75. ^{22d} From "In Memoriam Otto SELZ" by Günther REINERT, Chapter 2, pp. 13-19. The words were spoken by REINERT upon the occasion of the posthumous award in 1971 by the *Deutsche Gesellschaft für Psychologie* (which SELZ had joined in 1913 and to which he reluctantly submitted his resignation in 1933) of its highest honor, the Wilhelm WUNDT Plakette. The award was in recognition of SELZ's relation with the University of Amsterdam, the Plakette to be placed in its Psychological Laboratory (p. xi).

^{22e} Thinking: An Introduction to its Experimental Psychology, Metheun, London, Wiley, New York, 1951, especially Chapter V, "The Work of SELZ," pp. 132-149.

^{22f} The uneven tenor of the recognition of SELZ's contributions is documented in a report we are preparing on his work and its relation to Gestalt, information-processing, and cognitive psychology. The relationships are also discussed, with different themes, by David J. MURRAY (see Note 22j). Sources for our paper include discussions of SELZ's work in the New School, in which WERTHEIMER participated, as described in our publications: *WERTHEIMER's Seminars Revisited: Problem Solving and Thinking*, Vols, I, II, and III, Student-Faculty Association, SUNY-Albany, Albany, NY, 1970.

^{22g} Zur Psychologie des produktiven Denkens, Julius Springer, Berlin, 1935. Translated by Lynne S. Lees, On Problem-Solving, *Psychological Monographs, 58*, No. 5 (*Whole* No. 270), 1945.

Karl DUNCKER had been an assistant to WERTHEIMER and to KÖHLER in Germany. Shortly after DUNCKER emigrated to the U.S. to work with KÖHLER at Swarthmore College, he visited the New School, where WERTHEIMER introduced him to the senior author. We remember WERTHEIMER's anguish when he learned of DUNCKER's suicide. He expressed regret that KÖHLER had not sent DUNCKER to him, since in the past he had been able to help when his brilliant assistant was depressed.

^{22h} Bemerkungen zur Denk-Psychologie, *Psychologische Forschung*, 9, pp. 163-183,

1927. Principles of Gestalt Psychology, Routledge & Kegan Paul, London, 1935.

²²ⁱ "Otto SELZ and Information-Processing Psychology," Chapter 5, pp. 147-163, in the volume edited by FRIJDA and DE GROOT, 1981.

^{22j} David J. MURRAY, Gestalt Psychology and the Cognitive Revolution, Harvester Wheatsheaf, London-New York, 1995.