Max Isserlin (1879-1941) and the Possibilities for Psychiatry in Imperial and Weimar Germany

Gonzalo Talavera Cabrejos

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This candidate confirms that the work submitted is his own and that appropriate credit has been given for the work of others.

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Abstract

By the first decade of the twentieth century, a new generation of German psychiatrists led by Emil Kraepelin and his circle were committed to a return to the bedside after decades of brain-centred research. Yet, fulfilling such ambitions brought a series of scientific, intellectual, institutional, and socio-political developments that ultimately changed the course of world history. This thesis is about Max Isserlin – a hitherto unstudied Jewish multidisciplinary Kraepelinian psychiatrist – who played an important role in these events. Drawing on a wealth of published and archival sources, the thesis reconstructs the thought and working practices of Isserlin, explaining the intellectual, institutional, and socio-political backgrounds to his activities as well as the role of these in the production of medical disciplines of mind and brain. In doing so, three new points are made. Firstly, it is shown that Isserlin formed integral part of an elite of Munich-based psychiatrists that incorporated experimental psychology and hereditary theories into clinical psychopathology for the first time in history. Secondly, it is explained how Isserlin, through the creation of the Heckscher Clinic and other institutions, and despite his affiliations to the psychiatric elite, managed to strategically incorporate his own, somewhat diverse agenda within that of the latter. Thirdly, it is argued that such strategic manoeuvres allowed Isserlin to produce pioneering therapeutic practices, unique disciplinary arrangements, as well as new diagnostic and prognostic categories, all of which had an impact on either his local, national, or international neuroscientific and social milieus. Finally, it will be contended that an exploration of the figure of Isserlin demonstrates that, in pre-Nazi German psychiatry, it was possible to believe that some people had an ‘inferior mental constitution’ and at the same time bring about therapeutic progress.

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Introduction

I. Prologue: Saving 'Lives Unworthy of Living'

On July 1933, only six months after Hitler became chancellor of Germany, the racial hygienist Ernst Rüdin – ex collaborator of the celebrated psychiatrist Emil Kraepelin and by then one of the most powerful psychiatrists in the country – succeeded in having the first compulsory sterilization law passed, which he dubbed 'the law for the prevention of progeny with hereditary defects'. This law aimed at avoiding the reproduction of people with mental retardation, psychosis, epilepsy, Huntington chorea, hereditary sense-defects, hereditary alcoholism, and physical deformities (Lifton 1986 p. 25). A few years later, on September 1st 1939 – the same day Germany invaded Poland – Hitler signed an executive order that provided total immunity for psychiatrists who considered it necessary to kill their patients. Yet the rationale for the sterilisation and the killing of patients of psychiatric hospitals preceded Hitler and Nazism. It was first officially publicised in 1920 by Alfred Hoche, a psychiatrist, and Karl Binding, an attorney. In a piece entitled 'Permission for the Destruction of Life Unworthy of Life', the authors asked: 'Is there human life which has so far forfeited the character of something entitled to enjoy the protection of the law, that its prolongation represents a perpetual loss of value, both for its bearer and for society as a whole?' By the late 1920s, it had become more of a rhetorical question for Hoche and a loud faction of psychiatrists preoccupied with mental hygiene, social prophylaxis, and nation-building. Many agreed with Hoche on the fact that the mentally defective were at 'an intellectual level which we only encounter way down in the animal kingdom' (quoted in Torrey and Yolken 2010 p. 27). By the time Hitler rose to power, the moral obligation for many doctors had shifted from caring for individuals and their afflictions to protecting the future health of the race. The works of Rüdin, Hoche and other German eugenically-inclined psychiatrists left a mark on Hitler during the 1920s. As a consequence, Hitler proposed a program to exterminate chronic mental patients as soon as he assumed the chancellorship. He argued, in more pragmatic terms, that 'it is right that the worthless lives of such creatures should be ended, and that this would result in certain savings in terms of hospitals, doctors and nursing staff' (quoted in Torrey and Yolken 2010 p. 28).[1]

[1] The overcrowding of asylums and the huge financial weight that these patients had laid on the state over the past three decades played a significant part in the passing of Rüdin's law. Between 1880 and 1930, public asylums in Germany had passed from hosting some 47 000 patients to host more than 300 000. It was estimated in 1932 that mentally ill individuals and children with special needs were costing Germans 150 million Reichsmarks (RM) a year (Proctor 1988).

In October 1939, the directors of all German institutions that hosted psychiatric patients – which at the time implied also people with neurological and developmental disturbances and disabilities – were asked to fill out forms indicating the diagnosis and capacity for useful labour of each of their patients; this without any explanation as to the purpose of this task, though most doctors and asylum superintendents running these places knew quite well what this meant. After a commission of Nazi doctors analysed the forms, they 'euthanised' some 70 000 adult psychiatric patients and an estimate of 5 000 children. The program directed at asylums and clinics was known as *Aktion T–4*. By 1945, and after the execution of more such euthanasia programs ('child-euthanasia' among them, which included large-scale home searches), only 14% of the 1939 German asylum population were alive: some 240 000 psychiatric patients were killed (Proctor 1988 pp. 189ff).[2]

Last year, on September 29th 2019, the widely circulated newspaper *Süddeutsche Zeitung* published a note commemorating 'the 90 years of existence' of the Heckscher Clinic in Munich. 'Upon its foundation in 1929', it reads, the institution 'became the first [form] of child and adolescent psychiatry in Bavaria.' The *Heckscher Klinikum* – as it is officially called today – has now over ten facilities throughout Bavaria, where a variety of therapeutic methods are utilised in order to treat children and teenagers with mental health and developmental difficulties. It is one of the largest institutions of its kind in Germany and despite the passing of time has retained its distinction as a leading research and therapeutic centre. A particularly intriguing passage of the article makes reference to Dr Maria Weber (1894-1978), the head-director of the clinic at the beginning of and throughout the Second World War, when *Aktion T-4* and 'child euthanasia' were implemented. The periodical indicates that Weber

> succeeded, during the following years, in saving the young patients of the Heckscher Clinic from the National Socialists, who were murdering cripples and people with mental disabilities. Weber passed off all the children under her care as 'capable of learning' (*bildungsfähig*), thereby sparing their lives

Former employees of the Heckscher Clinic had made reference to this episode in previous commemorative texts. Renate Jutz (1989) and Agnes Kiermaier (1992) wrote accounts of the institution's history in celebration of its 60th anniversary.[3] As they explained, Weber and many other mostly female doctors and carers – including the Catholic sisters of the Ursberger congregation – furtively transferred a considerable portion of the children of the clinic to different, more secluded,

[2] For detailed accounts of the extent to which professional groups were intellectually involved in the conception and design of these programs, see, for instance, Müller-Hill (1984); Baader and Schultz (1980); Weingart et al (1988).
[3] In (MS/1935: Box 13).

locations in the Bavarian countryside.[4] Moreover, these women risked their lives by keeping several children in the institution. Upon request of Nazi medical officials, Weber and her staff explained that their children were, despite the appearances, not irredeemable victims of genetic predispositions. They argued that, unlike 'the feebleminded', 'the insane', 'constitutionally inferior psychopaths', and 'cripples', the children they hosted and treated in the Heckscher Clinic during the Third Reich did not have hereditary conditions. Weber and her team successfully argued that these children were not a hindrance to the plans of Nazi officials. In fact, they claimed the opposite was the case: these children could learn to adapt to their circumstances and improve. Not only that; they would eventually contribute to the development of the nation by joining the workforce or the military, and by mothering and fathering healthy Aryan children. They only needed immediate intensive therapy, just the kind Weber and her staff had huge and notorious expertise of (see figure 0.1).

Figure 0.1: Picture taken in the late 1940s of a small group of children of the Heckscher Clinic
Sitting on the far right, Maria Weber, and standing, Werner Wagner, her successor at the direction of the institution after 1954. At the far left, one of the senior sisters. Unlike many of the bodily and mentally challenged in Germany, these children were neither sterilised, nor killed.
[MS/1935: Box: 11]

[4] For a few further details about these locations and the logistics involved in the transferring of some children, see Jutz (1989 pp. 153-158).

How the staff of the Heckscher Clinic could succeed in saving the lives of these children has not been really explained in any of these commemorative texts.[5] For, evidently, the reader would ask why the Nazis believed anything that the staff of this particular clinic said, especially considering that they had no affiliation with the Nazi party. Expert officials – among them Rüdin himself – had seen some of the children and, at face value, many of them were not discernible from those who were routinely sent to extermination camps.[6] The answers to this question can be found in the work of Max Isserlin (1879-1941), today a little-known psychiatrist of Jewish descent and central subject of this thesis.

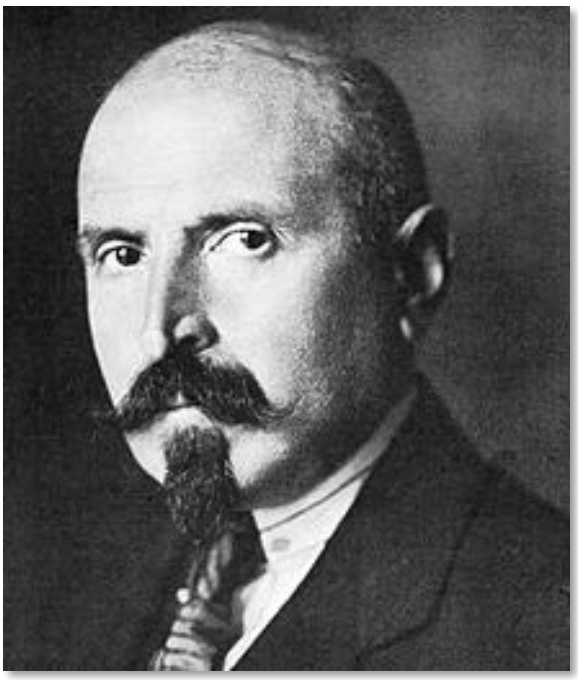

Figure 0.2: Portrait of Max Isserlin

[MS1935/Box 11]

[5] Nor by other staff members who have written about these events, such as former director Joest Martinius (n.d) and current director Franz Joseph Freisleder (n.d). These undated documents are also located in (MS/1935: Box 13).

[6] For example, between November 1940 and May 1945, in only one paediatric department in a Bavarian hospital not far from the Heckscher Clinic 332 children were either starved to death, shot, or killed by lethal injection (Torrey and Yolken 2010 p. 29). Moreover, as Hohendorf (2016) details, exemptions were virtually non-existent.

II. Who was Isserlin? - Isserlin According to Himself

As his curriculum vitae (ca 1938) indicates, Isserlin was born on 1st March 1879 in Königsberg, 'as the son of the diseased merchant Jonas Isserlin and his diseased wife Celine…' (CV p. 1).[7] By the time he had finished his '*Gymnasialbildung*' he had developed a 'great interest in philosophy, as much as in medicine', which made him doubt what to study in university. He enrolled in the Albertus University of his hometown to study medicine after one of his school teachers – 'who himself had been student of the great philosopher Hermann Lotze' – persuaded him that medicine was the way to go because it would give him the opportunity to earn a living while at the same time the chance to reflect on epistemological matters, Isserlin's philosophical area of interest. His teacher's advice quickly proved sound. Throughout his medical studies in Königsberg (1897-1902), Isserlin took part of philosophy lectures and seminars which consolidated his intellectual commitment to Kant and Lotze. Already during the first semester of his studies, physiological questions had also awoken great interest in him, especially through the lessons of Helmholtz's via his teachers. Isserlin wrote about himself:

> He was lucky enough to be allowed to work at the physiological institute of Ludimar Hermann. There he was able to learn about the famous phono-photographic investigations…and even take part of them…Also in this time appeared his piece 'On the Production of Temperature and Heat in Poikilothermal Animals'…(carried out with thermometric and thermoelectrical methods), which won him the prize from the medical faculty of the University of Königsberg, and which also informed I's dissertation. A few philosophical studies were carried out at this time and one was published, which was awarded the Kant-prize of the University of Königsberg (CV p. 1).

Isserlin was acquiring recognition also as an academic at the Albertus University. The published philosophy paper was entitled 'Helmholtz as a Philosopher' (1900) and was an appraisal as well as a Kantian reading of the empiricist and anti-vitalistic philosophy of science of von Helmholtz, highly regarded in Isserlin's faculty. From Kant, Isserlin learnt that scientific knowledge could only be attained by steering clear of metaphysical speculations and by holding to the world of sense experience. From von Helmholtz, Isserlin indorsed his empiricist and positivistic reading of Kant (against the reading of Kant from the proponents of the *Naturphilosophie*) and was persuaded early on that any scientific endeavour he ventured in ought to involve a harmonious relation between theory and practice. One was worthless without the other; knowledge was only such when it could be transformed into action and bring about change; science was only sound when applied to human experience.

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[7] See '*Curriculum vitä* [*sic*]' in (MS/1935: Boxes 3&11). Isserlin's family was poor and he suffered much early in life with the deaths, due to tuberculosis, of two out of five siblings and soon after of his mother and father. Everything indicates that the three remaining siblings had drifted apart by 1900. For a handful of further personal details of what is known about Isserlin's family members, see Jutz (1981), who gathered information from correspondence and conversations with Max's son, Benedikt Isserlin.

Apart from physiology and philosophy, integral to Isserlin's last semester of study were the clinical lectures and demonstrations of the neurologist Ludwig Lichtheim, famous for his brain-diagrams and cerebral localisations. In December 1902, while carrying out his military service and writing his dissertation, Isserlin passed his *Staatsexam* and became thus a licensed physician. Soon after, 'on 12th March 1903 he became Dr. Med.' with a dissertation on animal physiology.[8] Immediately after, he moved to Heidelberg to finish his military service with stances in military hospitals in nearby 'Kolmar and Elsass'. In addition, he began volunteering at the psychiatric university clinic of Kraepelin in what marked the beginning of his psychiatric career. Apart from clinical and psychological work, Isserlin continued to develop further scientific interests. Thus, for instance, he published a paper on sense physiology with epistemological implications, this time in relation to the concept of space and the physiology of hearing. *Eine Lösung des Raumproblems* ('A Solution of the Problem of Space') was 'a critique of V. Cyon's essay with the same title' (CV pp. 1-2). This physiologist had tried to arrange a picture of the workings of the ear labyrinth (*Ohrlaberynth*) in the experience of space, thereby deducing elements about the nature of space and of the possibilities of hearing. Isserlin criticized Cyon by pointing out the latter's unjustifiable metaphysical assumptions (Isserlin 1903 pp. 73-74). With Kant, Isserlin argued against Cyon on the grounds that the study of the body and the mind – as he would defend over and over throughout his career – could never legitimately aspire to go beyond the realm of experience, of objects only as they appear to us (Isserlin 1903 pp. 117-118; CV p. 2).

In 1904 Isserlin continued his psychiatric instruction with a short-term assistantship under the psychiatrist Robert Sommer (1864-1937) at the University of Giessen. If Kraepelin taught him about clinical psychiatry while volunteering in Heidelberg, Sommer taught Isserlin how to conduct psychological experiments. Among them were word-association experiments, on which Isserlin wrote a detailed investigation at the very same time that Carl Jung was writing up his own association studies in Zurich. Due to an extended sick leave brought about by severe pneumonia, Isserlin was prevented from publishing the result of his findings immediately, and, to his regret, Jung's were published first. He married in Königsberg as soon as he recovered, in October 1905. He subsequently relocated back to Heidelberg to continue his internship at the university's neuropsychiatric clinic. The following year Isserlin moved once again to Munich to work at the university psychiatric clinic – were Kraepelin had relocated in 1903 – beginning his collaboration with the emergent Kraepelinian research group, and with responsibilities in the areas of clinical, forensic, and experimental-psychological research (CV p. 2). In addition, Kraepelin assigned Isserlin the task of preventing Freud's ideas from infiltrating the

[8] His dissertation had dealt with the question of under what circumstances 'cold-blooded animals, especially invertebrates, could catch a fever'. Isserlin did research on fish and amphibians; he received turtles, snakes, salamanders, and even a 14 kg alligator from the Königsberger zoo to work at his house. Apparently, some of the fish ended up, after having had their temperature measured, in the cooking pot of his fiancée, who was also his first cousin (Jutz 1981 p. 11).

Munich psychiatric scene, by encouraging and backing up Isserlin's critical writings of Freudian doctrines. Isserlin occupied himself with the early writings of Freud and Jung, and concluded that psychoanalysis, while certainly eye-catching, was little more than a 'complex-mythology'. Isserlin's criticisms were not well received by the Freudians, especially by Jung. Isserlin's critique of Freud and his success in applying experimental psychology to psychopathology meant his consolidation as integral part of Kraepelin's research circle, becoming officially 'research assistant' at the Munich psychiatric clinic. In 1910, Isserlin became professor at the Maximilian University with a dissertation on the correlations of pathological mental states and involuntary movements (CV p. 3; Isserlin 1910b).

The First World War abruptly interrupted Isserlin's academic career, which, at that point, had expanded into considerations over youth criminality and antisocial behavior in teenagers (Isserlin and von Gudden 1912). Although he received the title of extraordinary professor in 1915, most of his time would be spent in a military hospital for head-wounded servicemen. The therapeutic work carried out in this neuropsychiatric military station proved quickly successful and was further refined in the institutions he developed in the 1920s. For his work in the mobile hospitals he received numerous awards in Bavaria which served him to have a growing presence in public health matters. Furthermore, during the war Isserlin intensified his research on psychophonetics and the pathological physiology of language by registering changes in pitch, musicality (melody and rhythm), tonality, and texture in both healthy and impaired people through rudimentary electromagnetic sonograms and by theorizing on the results. Isserlin thus began giving sound and movement a significant psychological weight. How physiological events were connected to the psychology of the speaker would remain a core question as the 1920s progressed. He explored these issues through experiments performed with kymographs – devices that give graphical representations of spatial positions over time – tuning forks, acoustic resonators and diffusing screens. Despite his 'ongoing physiological and neurological interests', Isserlin became known, as he claimed, as a 'psychologically oriented psychiatrist, who was opposed to a purely mechanical neurology' as much as to 'metaphysical constructs' of the Freudians and 'wholeness excesses' of the 'iconoclast', holistic neurology of Henry Head, Kurt Goldstein and Pierre Marie (CV pp. 3-5; Isserlin 1929).

Throughout the 1920s, Isserlin transferred his brain-injured patients to new institutions he created in Munich, which culminated with the construction of the Heckscher Clinic – named after its benefactor – in 1925. In these institutions, he and his staff managed to restore self-sufficiency and labour capacity in many people with impairments in writing, counting, naming objects, producing speech, and coordinating movement, among other disabling conditions related to brain damage. Meanwhile, in 1926, Isserlin published a textbook about psychotherapy: *Psychotherapie: ein Lehrbuch für Studierende und Ärzte* ('Psychotherapy: a Textbook for Students and Doctors'), which was very well received by the medical community. Moreover, between the Heckscher Clinic, the psychiatric

university clinic, and the German Research Institution of Psychiatry (*Deutsche Forschungsanstalt für Psychiatrie*) – created in 1917 and also directed by Kraepelin – existed a close and fruitful collaboration. Because of this collaboration, Isserlin remained as one of the closest collaborators of Kraepelin until the latter's death (CV p. 4).[9]

Isserlin's clinic attracted enthusiastic internists, psychologists, linguists, neurologists, physiotherapists, and special education teachers. Key for his success was interdisciplinary work around one objective: rehabilitation (*Restitution*) by integrating special workshops, special needs education (*Heilpädagogik*), mental hygiene and clinical work in unique and efficient ways. In 1929, the American benefactor August Heckscher accepted Isserlin's proposal for a new department for children with mental impairments, which opened its doors in 1929. In 1933, with the rise of Hitler to power and due to his Jewish heritage, the work of Isserlin became rather difficult, especially as head of the clinic and public health agent. Nevertheless, Isserlin kept working in many areas of mind and brain science until 1938 (CV pp. 5-6).

A new amendment to the Citizen Law (*Reichsbürgergesetz*) ended up in the revocation of the medical licenses of all Jewish doctors in 1938 and ended Isserlin's professional career. His friend and colleague at the clinic, Fritz Lotmar, later remembered that Isserlin had 'suffered most from losing all means to complete his life's work: a textbook on aphasia and its therapy' (quoted in Jutz 1981 p. 84). In 1939, just before the outbreak of the Second World War, Isserlin was forced to leave Munich for Sheffield, England. Life in exile as well as a deteriorating health weighed heavy on him, and having not been able to find a job he died of prostatic post-surgical complications only two years later, on February 4th 1941. Once the war came to an end, Isserlin's trajectory and significance became victims of collective amnesia. The Heckscher Clinic, however, lived on.

As a glance at Isserlin's CV attests, Isserlin was a multifaceted professional and his trajectory involved many parallel paths and several turns. He participated in numerous fields related to the mind and brain sciences over three decades; he learnt from, collaborated with and fought against eminent figures of the neuropsychiatric and psychological landscapes of his time; he created a rehabilitation clinic for brain injuries out of his experience during the First World War; he formed part of a large group of Jewish scientists and doctors persecuted by the Nazis and, as we have hinted at already, he was responsible for the sparing of some of the lives understood by the latter to be 'unworthy of living'. Yet one might still wonder whether this suffices in order to make of his work and professional trajectory the thread of an historical account on the possibilities of German psychiatry in the early twentieth century. Before I explain why and how it does, I turn briefly to the previously unstudied

[9] See also Löwenstein (1925) and Peters (2002b).

sources that have made a reconstruction of Isserlin's trajectory possible in the first place.

III. The Isserlin-Papers (MS/1935)

In the late 1990s, Max Isserlin's son, Benedikt Isserlin (1916-2005) – who was head of the semitic department at the University of Leeds – was convinced by his friend and Emeritus Professor of History and Philosophy of Science, Geoffrey Cantor, to donate to the Special Collections of the Brotherton Library of their university a series of materials that once belonged to his father and that he had kept in storage in his house.[10] The materials comprised published and unpublished books and articles, correspondence, manuscripts, patient histories, psychological tests and clinical reports, administrative and financial documents, and a few photographies. In a personal communication, Cantor explained to me that having heard from his friend and colleague about the nature of some of the materials, he thought that 'they could be of interest for historians of science'. This thesis is a confirmation of Cantor's hunch.

At the start of my research in 2016, the archivists of the Special Collections located eleven boxes cointaining the materials donated. By the end of my studies, they had managed to locate a few more. The 'Isserlin-papers' (MS/1935) comprise now eighteen boxes. There are indications of the fact that the content of the original boxes was augmented by Isserlin's relatives between the latter's death in 1941 and the 1990s, since we can find a few texts and some correspondence which dates fall within this period. Nevertheless, most materials indeed belonged to the German psychiatrist; they comprise at least part of what Isserlin took with him when he left Munich for Sheffield in 1939.

As to date, there is no evidence of any other archival sources that could shed light on Isserlin's personal and professional trajectory. Both the Heckscher Trust and the Rockefeller Foundation (organisations that funded Isserlin's work during the 1920s and 30s) have adviced that there is nothing available at their archives. Moreover, the Munich-based neurologist Hendrik Voss – with whom I had the pleasure to talk in person in 2017 – has confirmed that the rumour that the University of Würzburg possessed materials related to Isserlin is untrue. Furthermore, my visit to the archives of the Ludwig Maximilian University of Munich as well as to the archives of the Borough of Oberbayern corroborated what Voss had explained to me prior to my visit: the documentation available had been either already accounted for by Voss himself (2015) in his paper on Isserlin's colleague Eugen von Malaisé and by Renate Jutz (1981; 1989) in her biographical accounts of the Heckscher Clinic. Thus, if Isserlin was a figure with which a historian of the mind and brain sciences should be acquainted – as this thesis will uphold –

[10] According to Isserlin's grandson, historian Paul Weindling might have had an involvement too.

these boxes have a unique significance. In order to know who was Max Isserlin and to what extent his scientific and medical work reveals hithehrto unknown features of important developments in German psychiatry during the Imperial, Weimar, and Nazi periods, the boxes now preserved in the Special Collections of the Brotherton Library are of vital importance.

Unfortunately, the content of the original boxes that made (MS/1935) as I encountered them had not gone through any type of ordering, classification or systematisation. Their contents were a mixture of single sheets, articles, letters, empty envelopes, manuscripts, bills, a few pictures here and there and empty folders. Only some patient histories were placed in folders and some manuscripts in plastic bags. As a consequence, I systematised the content of the boxes in a way that could serve not only the purposes of this dissertation but also the work of future researchers.[11] The boxes now look as follows:

MS 1935 – Box 1 (previously MS 1935/1/1)

Comprises published work of some of Isserlin's collaborators in the Heckscher Clinic; among them, several papers of Marcellina Gräfin von Kuenburg and Fritz Lotmar. There are also some other publications from physiologists and neurologists (mainly on language pathology) which date from 1918 to the early 1930s.

MS 1935 – Box 2 (previously MS 1935/1/2)

Contains some trade magazines and empty folders. There is an 'Atlas' with images from Wundt's psychological studies.

MS 1935 – Box 3 (previously MS 1935/1/3)

Includes all the correspondence (available in the Collections) between Isserlin, Daniel O'Brien and 'Herr Letort', directors of the European Office of the Rockefeller Foundation in Paris (1933-1939). There are a considerable amount of drafts for this communications in manuscript form. The box also contains one clinical-psychological case study of an aphasic patient from the early 1920s.

MS 1935 – Box 4 (previously MS 1935/1/4)

Contains 1930s correspondence on administrative and financial issues concerning the Heckscher Clinic. Among these, some correspondence between Isserlin and Minkowski, Mayer-Gross, and Grillo. There are also financial documents and statements of the clinic's bank account (*Tagesauszüge*).

MS 1935 – Box 5 (previously MS 1935/1/5)

Contains some published articles of Isserlin's studies on agrammatism (late 1920s). It also includes publications on aphasia from his colleagues at the Heckscher Clinic in the 1930s, in particular from Erich Feuchtwanger and Gräfin von Kueneburg. It can also be found a manuscript draft for what would later be published as *Über das Verhältnis von Willkur und Automatie*, including a handful of phonological experimental reports.

[11] Nevertheless, the regulations and protocols of the archivists of the Collections only allowed a limited redistribution and ordering of the materials; no introduction of folders, labels, or enumeration was permitted.

MS 1935 – Box 6 (previously MS 1935/1/6)

Contains a photo album from brain injured soldiers and officers from the First World War, all patients of Isserlin. This album was given to Isserlin as a present for his 50th birthday. There could also be found some of Isserlin's personal files (*Personalakte*) from the time he worked in military hospitals (*Reservelazarette*), dating 1915-1917.

MS 1935 – Box 7 (previously MS 1935/1/7)

It contains files of aphasic patients and a handful of psychological reports with children and adults (1920s). It also includes several copies of Isserlin's lists of publications from 1900 to 1936 as well as copies of his Curriculum Vitae.

MS 1935 – Box 8 (previously MS 1935/1/8)

It contains more case studies and files of patients and some phonetic analysis conducted on them. There is also a file called 'Baby tests' as well as other rather obscure tests in French and English with unidentifiable authorship; all these in manuscript form.

MS 1935 – Box 9 (previously MS 1935/1/9)

Here we have all of Isserlin's publications in these Collections. From his critiques on psychoanalysis, through his brain-injury pamphlets, to his aphasia monographies. Isserlin's magnus opus, *Die Pathologische Physiologie der Sprache* (parts I-IV) can be found here in different copies and also in manuscript form, with notes and corrections.

MS 1935 – Box 10 (previously MS 1935/1/10 and BOX 3 of 5)

It contains books on psychology and physiology from 1902 to 1939 from other authors.

MS 1935 – Box 11 (previously MS 1935/1/11 and "3&4")

It contains some personal and family correspondence (1933-1938), mostly between Isserlin and his daughter Beate. There are also some notations from aphasic patients and transcriptions from administration documents from the 1920s. Many copies of Isserlin's full bibliography and CVs are also to be found here again. Finally, one can find here a handful of pictures of the children of the clinic and the nuns who took care of them.

MS 1935 – Box 12 (previously not labelled)

It contains several dozens of articles from other authors (1900-1940), now arranged in alphabetical order. They cover all of Isserlin's medical and scientific interests.

MS 1935 – Box 13 (previously not labelled)

It contains books, documents and secondary literature on Isserlin and the Heckscher Clinic from the 1980s and 1990s (Jutz, Hippius, Kermeier, Martinius).

MS 1935 – Box 14 (previously MS 1935/2/1)

It contains volumes I-IV of Marie Bonaparte's "Cinq Cahiers".

MS 1935 – Box 15 (previously MS 1935/2/2)

It contains offprints from other authors (1900-1940).

MS 1935 – Box 16 (previously MS 1935/2/3)

It contains offprints and books from other authors (1903-1939).

MS 1935 – Box 17 (previously MS 1935/2/5)

It contains books from other authors going back to the 1870s.

MS 1935 – Box 18 (previously MS 1935/2/4)

It contains "The Yearbook of Psychoanalysis" (1945-1949), volumes I-IV and VI.

With the exception of boxes 2, 14, 17 and 18, all boxes have informed chapters 2 through 7 of the thesis (as well as the Introduction and Conclusions). The ways and degree in which they have done so have varied. For instance, whereas the patient files and Isserlin's texts on brain injury welfare (as well as those of his colleagues) provide evidence for the arguments of chapter 4, Isserlin's correspondence and published material not only provide the historical evidence but are the main sources that offered the storyline of chapter 7. Moreover, chapter 5 has benefitted greatly from a combination of the secondary sources contained in the archives and Isserlin's texts, the Heckscher Clinic's documents, and correspondence. Chapters 2, 3 and 6 have been possible through the correlation of historical accounts of German psychiatry (in a way, negatively, since the work of Isserlin was rarely acknowledged, and his name, if at all mentioned, is done so in passing) and published and unpublished articles and books of Isserlin (mostly contained in the archives).

IV. More than a Tragic Figure of the Nazi Period

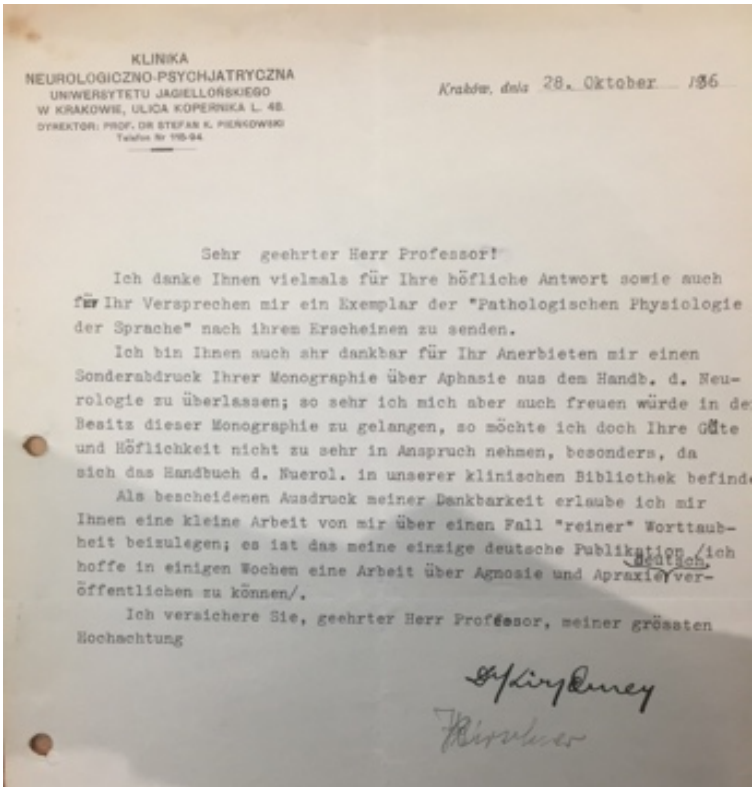
During the 1920s, the prognostic category 'capable of learning' was officially accepted by the Bavarian medical community to refer to people with certain mental impairments. It was this validation that allowed Weber and her staff to succeed in protecting many of the children under their care during the Third Reich. Although Weber contributed to the practical application of the distinction between *bildungsfähig* and *bildungsunfähig* (capable and uncapable of learning), the categorical differentiation had been fought for during the First World War and effectively established in the interwar period by Isserlin, founder and first director of the Heckscher Clinic, who has been called by some 'father' and 'founder of child psychiatry' in Bavaria (Martinius 2000; Peters 2002b).[12]

[12] Just on March last year, a street in Munich was renamed *Isserlinstrasse*. It had had the name of a physician who collaborated with the Nazi eugenic programs, Anton Edler von Braunmühl, and changing it was a good symbolic gesture. Yet the people in charge of the ceremony, including the current director of the Heckscher

Having escaped from Nazi persecution, Isserlin left Maria Weber in charge of the clinic, and behind, a huge body of diagnostic and prognostic tools, therapeutic technologies and research methods which had made the Heckscher Clinic one of the most innovative German institutions for the study and treatment of brain damage and associated mental impairments. By the time Isserlin left the clinic, his staff possessed a solid national and international reputation. Therefore, whilst the women of the Heckscher Clinic did save many chronically ill children, it must be recognised how Isserlin's influential achievements in the classification and treatment of children with developmental impairments allowed the staff to have a chance in the first place. To put it differently: when Weber wrote down 'capable of learning' in the forms, she was alluding to a prognostic category that was considered immediately reliable thanks to the medical authority of Isserlin in Germany – despite the forced exile – and beyond.

Astonishingly, Isserlin rose to international fame precisely during the early years of the Nazi regime, which imposed on him and the Heckscher Clinic considerable restrictions. Partially thanks to the hitherto unstudied archival material available, it is possible to determine just how much Isserlin represented in the medical and scientific circles in the late 1930s throughout Europe and America. He was respected even by Nazi doctors. Amongst the archives (MS/1935: Box 8), for instance, there are countless letters from colleagues from all over Europe and the U.S.: from doctors at the John Hopkins university in Baltimore (the leading medical research and teaching institution in America at the time) to directors of small clinics in Lithuania and Hungary, anxiously asking Isserlin for copies of his latest publications, or flattering him for his 'fine bit of work'; furthermore, we can note he had been highly regarded for his 'work on aphasias and the best tradition and development of the Kraepelin group' (see figures 0.2-0.4).

Klinikum seem not to have yet fully grasped the historical value of the doctor behind the name. See https://www.gemeinde-haar.de/aktuelles/05_03_2019_feierliche_umbenennung_max_isserlin_strasse.



KLINIKA
NEUROLOGICZNO-PSYCHJATRYCZNA
UNIWERSYTETU JAGIELLOŃSKIEGO
W KRAKOWIE, ULICA KOPERNIKA L. 48.
DYREKTOR: PROF. DR STEFAN K. PIENKOWSKI
Telefon Nr 115-94

Kraków, dnia 28. Oktober 1936

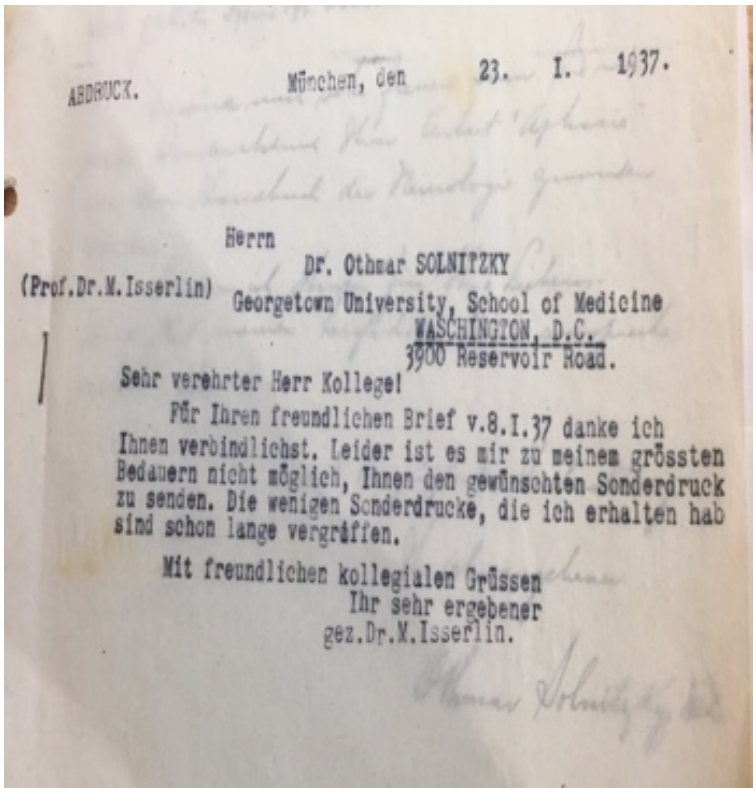
Sehr geehrter Herr Professor!

Ich danke Ihnen vielmals für Ihre höfliche Antwort sowie auch für Ihr Versprechen mir ein Exemplar der "Pathologischen Physiologie der Sprache" nach ihrem Erscheinen zu senden.

Ich bin Ihnen auch sehr dankbar für Ihr Anerbieten mir einen Sonderabdruck Ihrer Monographie über Aphasie aus dem Handb. d. Neurologie zu überlassen; so sehr ich mich aber auch freuen würde in de Besitz dieser Monographie zu gelangen, so möchte ich doch Ihre Güte und Höflichkeit nicht zu sehr in Anspruch nehmen, besonders, da sich das Handbuch d. Nuerol. in unserer klinischen Bibliothek befind

Als bescheidenen Ausdruck meiner Dankbarkeit erlaube ich mir Ihnen eine kleine Arbeit von mir über einen Fall "reiner" Worttaubheit beizulegen; es ist das meine einzige deutsche Publikation /ich hoffe in einigen Wochen eine Arbeit über Agnosie und Apraxie veröffentlichen zu können/.

Ich versichere Sie, geehrter Herr Professor, meiner grössten Hochachtung



ABDRUCK. München, den 23. I. 1937.

Herrn
Dr. Othmar SOLNITZKY
(Prof.Dr.M.Isserlin) Georgetown University, School of Medicine
WASHINGTON, D.C.
3900 Reservoir Road.

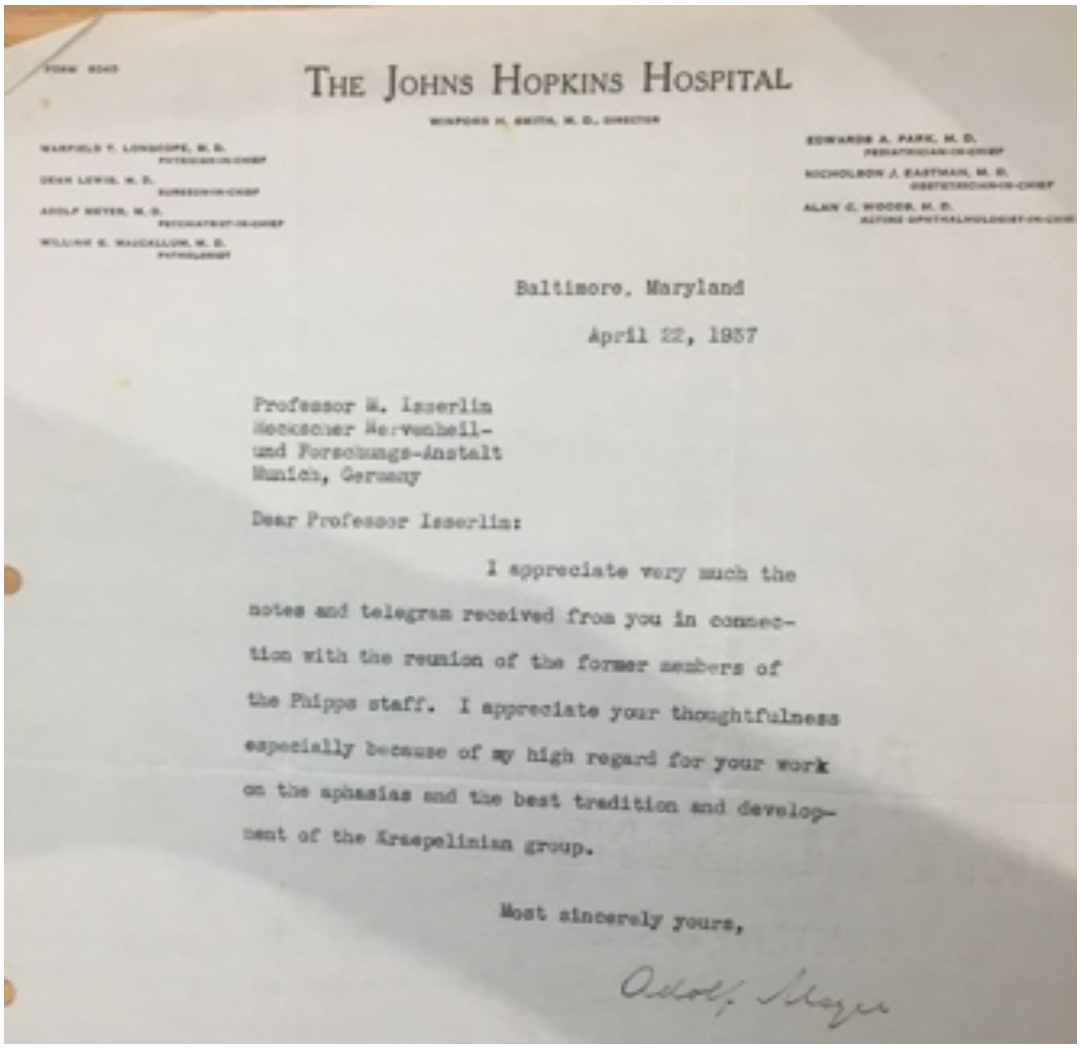
Sehr verehrter Herr Kollege!

Für Ihren freundlichen Brief v.8.I.37 danke ich Ihnen verbindlichst. Leider ist es mir zu meinem grössten Bedauern nicht möglich, Ihnen den gewünschten Sonderdruck zu senden. Die wenigen Sonderdrucke, die ich erhalten hab sind schon lange vergriffen.

Mit freundlichen kollegialen Grüssen
Ihr sehr ergebener
gez.Dr.M.Isserlin.

Figure 0.3: A Polish neuropsychiatrist's soliciting the Munich doctor to secure him a copy of the soon to appear fourth and last part of the *Pathological Physiology of Language*; Figure 0.4: Isserlin apologising to a doctor in D.C. for not having any more copies of his recent publications
[MS1935/Box 3]

There can also be found several certified copies of chief editors of major neuropsychiatric journals highlighting the value of Isserlin's clinical, theoretical and therapeutic work around aphasia. For instance, there were very positive reviews from the Nazi eugenicist Eugen Fischer from the journal *Nervenarzt* and from Rudolph Thiele – a renowned neurologist and specialist on encephalitis lethargica – from the journal *Fortschritte der Neurologie, Psychiatrie und ihrer Grenzgebiete*. In addition, we can find dozens of applications for positions at his clinic from all over Europe. Furthermore, we can also observe that Isserlin was being invited as a speaker by leading teaching and research institutions in the emergent fields of child psychiatry and phonetics in Europe and America (see figure 0.5 and 0.6)



THE JOHNS HOPKINS HOSPITAL

Baltimore, Maryland

April 22, 1937

Professor M. Isserlin
Deutscher Nervenheil-
und Forschungs-Anstalt
Munich, Germany

Dear Professor Isserlin:

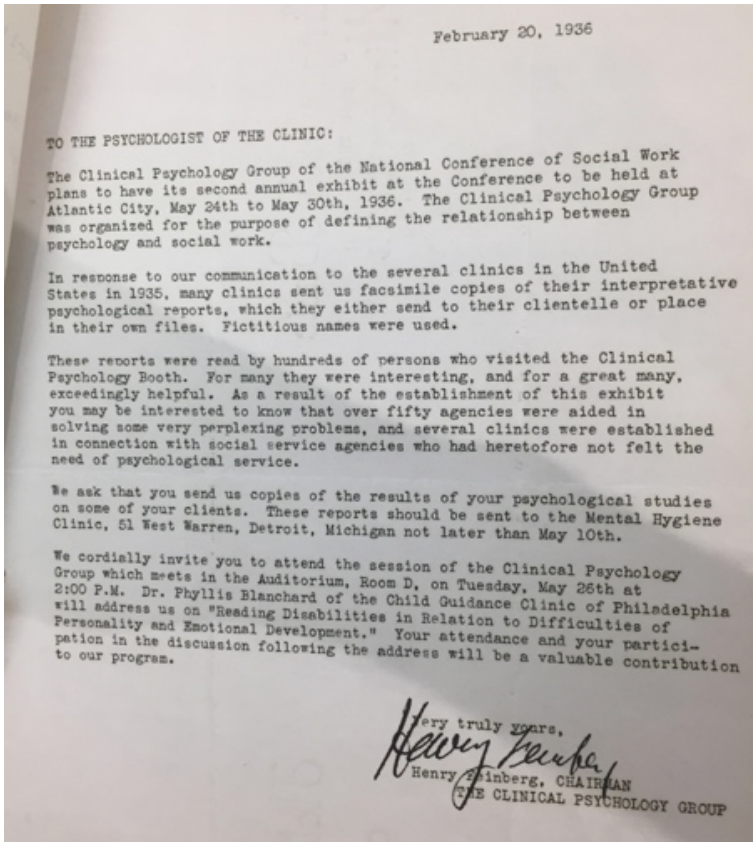
I appreciate very much the notes and telegram received from you in connection with the reunion of the former members of the Phipps staff. I appreciate your thoughtfulness especially because of my high regard for your work on the aphasias and the best tradition and development of the Kraepelinian group.

Most sincerely yours,

Adolf Meyer

Figure 0.5: A friendly note from the psychiatrist in chief at the John Hopkins, Adolf Meyer
[MS/1935: Box 3]

Nevertheless, the contribution of Isserlin's work to the mind and brain sciences begun decades earlier – in 1903 to be more precise, the year he started volunteering at the university psychiatric clinic directed by Kraepelin in Heidelberg, and only ended with his 'aphasia, or linguistic period' of the 1930s. Indeed, prior to becoming a tragic Jewish clinic director and aphasia expert, Isserlin had already attained distinction not only as a formidable and experienced clinician and a reputed multidisciplinary scientist, but had also become an agent of social change as part of a powerful elite of academic neuropsychiatrists.



February 20, 1936

TO THE PSYCHOLOGIST OF THE CLINIC:

The Clinical Psychology Group of the National Conference of Social Work plans to have its second annual exhibit at the Conference to be held at Atlantic City, May 24th to May 30th, 1936. The Clinical Psychology Group was organized for the purpose of defining the relationship between psychology and social work.

In response to our communication to the several clinics in the United States in 1935, many clinics sent us facsimile copies of their interpretative psychological reports, which they either send to their clientelle or place in their own files. Fictitious names were used.

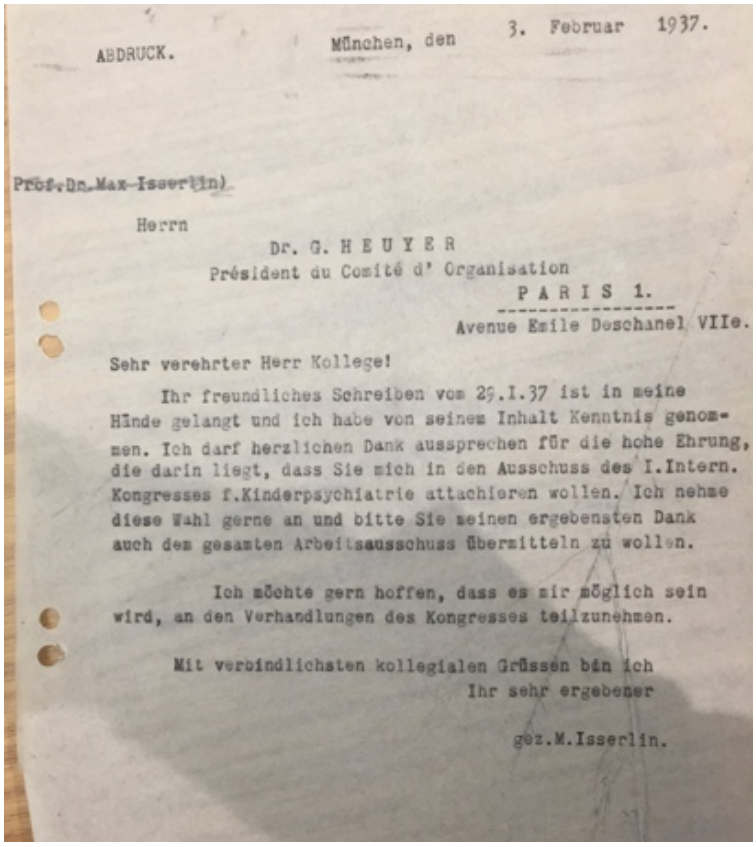
These reports were read by hundreds of persons who visited the Clinical Psychology Booth. For many they were interesting, and for a great many, exceedingly helpful. As a result of the establishment of this exhibit you may be interested to know that over fifty agencies were aided in solving some very perplexing problems, and several clinics were established in connection with social service agencies who had heretofore not felt the need of psychological service.

We ask that you send us copies of the results of your psychological studies on some of your clients. These reports should be sent to the Mental Hygiene Clinic, 51 West Warren, Detroit, Michigan not later than May 10th.

We cordially invite you to attend the session of the Clinical Psychology Group which meets in the Auditorium, Room D, on Tuesday, May 26th at 2:00 P.M. Dr. Phyllis Blanchard of the Child Guidance Clinic of Philadelphia will address us on "Reading Disabilities in Relation to Difficulties of Personality and Emotional Development." Your attendance and your participation in the discussion following the address will be a valuable contribution to our program.

Very truly yours,

Henry Feinberg, CHAIRMAN
THE CLINICAL PSYCHOLOGY GROUP



ABDRUCK. München, den 3. Februar 1937.

Prof.Dr.Max Isserlin)

Herrn
Dr. G. H E U Y E R
Président du Comité d' Organisation
P A R I S 1.
Avenue Emile Deschanel VIIe.

Sehr verehrter Herr Kollege!

Ihr freundliches Schreiben vom 29.I.37 ist in meine Hände gelangt und ich habe von seinem Inhalt Kenntnis genommen. Ich darf herzlichen Dank aussprechen für die hohe Ehrung, die darin liegt, dass Sie mich in den Ausschuss des I.Intern. Kongresses f.Kinderpsychiatrie attachieren wollen. Ich nehme diese Wahl gerne an und bitte Sie meinen ergebensten Dank auch dem gesamten Arbeitsausschuss übermitteln zu wollen.

Ich möchte gern hoffen, dass es mir möglich sein wird, an den Verhandlungen des Kongresses teilzunehmen.

Mit verbindlichsten kollegialen Grüssen bin ich
Ihr sehr ergebener

gez.M.Isserlin.

Figure 0.6: In 1936, the Mental Hygiene Clinic directed by The Clinical Psychology Group based in Philadelphia recognised Isserlin's expertise in interdisciplinary approaches to children psychopathology and special needs education by inviting him to a congress; Figure 0.7: Isserlin accepting an invitation to participate in the much anticipated 1937 first ever International Congress of Child Psychiatry taking place in Paris

[MS/1935 Box: 3]

It must be noted again, first of all, that Isserlin created the Heckscher Clinic in 1925, not in 1929 as the *Süddeutsche Zeitung* and Kiermaier (1992) have indicated, and that the original patients of the clinic were brain injured veterans form the First World War, not children.[13] In fact, Isserlin was actually called no less than 'medical guardian and father of the brain injured' already in 1929 by the brain injured German veterans (see figure 0.7).

[13] Not coincidentally, Isserlin's grandson, Raphael Isserlin, who did not meet his grandfather and with whom I had the pleasure to talk, has an image of his grandfather as, above all, a children psychiatrist.

Figure 0.8: Front page of the photo album given to Isserlin as a present on his 50th birthday by the Munich division of the German union of war veterans

[MS/1935: Box 7]

Moreover, although it was not rare at the time that some psychiatrists called themselves neurologists, Isserlin was not one of them. He was an academic psychiatrist – as this thesis will underscore, it could be a very different thing – even though, as we have begun to see, he ventured in many other at the time related enterprises. To explain just what the work of an academic and scientific psychiatrist could comprise in Munich in the period 1900-1930s – for instance, whether it changed with regard to the nineteenth-century image of the materialist cerebral pathologist (*Hirnpathologe*) – will be one of the tasks of this study. For now, we can say that for Isserlin being an academic psychiatrist involved being a well-trained experimental physiologist excelling at incorporating Wundt's experimental methods of measuring mental functions into the study of psychopathology and psychophonetics. It also meant being an authority in mental hygiene, as well as a highly regarded extraordinary professor at the Maximilian University of Munich, especially for his lectures on how to combine hypnosis, medication, education, persuasion and occupational therapy to treat some psychiatric conditions. Furthermore, alongside the progressive establishment of professional niches in all these directions, Isserlin became integral in Kraepelin's ambitious and multidisciplinary research program of clinical psychiatry. As this thesis will

evidence, this affiliation with the Munich psychiatric establishment, among other things, made him one of the most outspoken and articulate critics of psychoanalysis and holistic neurology in Germany during the early twentieth century. For almost twenty years, Isserlin led a sui generis 'welfare and nerve clinic' and collaborated with the institutions led by his mentor Kraepelin. All of these institutions were at the forefront of clinical practice and scientific research with regard to classification of mental diseases, experimental science, histopathology, serology forensics, preventive medicine and social psychiatry, hereditary and anthropological studies, and more. Nevertheless, these collaboration and collective enterprises at the local, national and international levels made Munich not only a hub for research in scientific psychiatry but also a leading European centre for a variety of eugenic research interests. Isserlin's understanding of how the brain and mind ought to be studied and treated interacted in a substantial manner with the major hygienic, eugenic and biopolitical movements and organisations of pre-Nazi Germany. As this thesis explains, Isserlin's public health expertise, especially in 'mental hygiene', influenced and was influenced by the directions that the psychiatric profession took vis-à-vis eugenics from the turn of the twentieth century until well entered the Nazi-period.

V. A Paradoxical Figure of German Psychiatry?

Some of the facets of Isserlin's trajectory have been alluded to by the above mentioned ex-staff members of the Heckscher Clinic and more recently by a few other authors. However, all these accounts provide historians of psychiatry and medicine with little as to the scope of Isserlin's scientific, institutional and social impact a century ago. Some accounts are anecdotical and with only a passing mentioning of the different stages of Isserlin's trajectory. In fact, most are less comprehensive than the six pages of his Curriculum Vitae. Some are uncritical, historiographically naïve, and context-insensitive (Jutz 1981,1989; Kiermaier 1992; Martinius n.d..; 2000; 2011; Peters 2002a; 2002b), others just encyclopaedic with regard to a syndrome he occupied himself with at some point (De Bleser 1987; Tesak and Code 2008; Levelt 2012). Finally, like these, more recent descriptions have been also provided by medical professionals exclusively interested in the history of their fields of specialisation, such as the account of Hendrik Voss (2015), a Munich-based neurologist, and the professor of special education (*Sonderpädagogik/Schulpädagogik*) Dagmar Hänsel (2014). The words of the British social historian of psychiatry Andrew Scull (1991 p. 239) serve well to describe the spirit in which most accounts available of Isserlin's work and professional life have been so far written: they have 'created versions of the past that serve (in ways generally obscured from their authors) to legitimate [their] profession's present-day activities'.

Therefore, as today, and despite the interest shown by these authors, we have neither a full-length and methodical history of Isserlin's professional and scientific trajectory, nor a notion of his place in the history of German psychiatry. Therefore, this thesis will provide, firstly, a detailed, cohesive, and comprehensive investigation of Isserlin's professional life, by asking what kind of psychiatrist and scientist was he, what did he think and do about mental illness and mental disabilities, and how did he establish such a variety of professional niches. The motivation is not to undermine previous accounts – although some revisions will be in order – but to build on them by also exploring some of their descriptions and findings in closer detail.[14] Secondly, and in contrast to previous accounts, this thesis aims at explaining why Isserlin's work was of signal importance at different stages of his professional life. This will be achieved by inserting each stage in particular contexts – either at their scientific, local, institutional, or socio-political; or through some combination of these. Consequently, some previously unconnected dots in the broader history of the mind and brain sciences in Germany will come to the forefront, which in turn will both enhance and challenge some of our historical understandings of the making of institutions, medical disciplines, professions, and diagnostic categories in early twentieth century German neuropsychiatry. There is indeed much to learn from an informed and context-sensitive account of Isserlin's thought, science, and professional path.

As we will see, Isserlin will emerge as a somewhat paradoxical figure. Throughout the period 1904-1926, he made considerable contributions to the clinical identification of 'disease entities' as well as to individually-tailored therapeutics for neurotics and the restitution of the self-sufficiency of brain injured veterans and challenged children. In spite of this, Isserlin also contributed to and perpetuated the idea of the existence of 'inferior people' (*Minderwertige*), who not only passed their abnormal traits to their offspring, but who could also be 'infectious' (*infektiös*) when left unchecked among healthy people. Indeed, Isserlin was a close colleague of Rüdin, Hoche, and other supporters of euthanasia and sterilisation for over two decades, and was himself a true believer of the benefits as well as of the urgency of prophylactic measures in psychiatry. No author has exposed this rather extraordinary state of affairs: Isserlin, a Jewish psychiatrist persecuted by the Nazis in the 1930s, had formed an integral part – throughout the last decade of the Wilhelmine period and throughout the entire Weimar period – of an elite of German psychiatrists commanded by Emil Kraepelin who manufactured certain conceptual, disciplinary and institutional tools that ultimately endangered the lives of those very same people Isserlin and his staff protected during the Third Reich.

As this thesis shows, Isserlin's paradoxical figure reflects the paradoxical forces at work in the theory and practice of the mind and brain sciences of his time. In order to succeed in his profession(s), Isserlin

[14] The archival information collected by Peters (2002a) with regard to Freud's and his circles' correspondence (see chapter 3), by Voss on First World War neurology (2015) and by Jutz (1981;1989) on the Heckscher Clinic have been of great help.

had to navigate his neuroscientific and bio-politic environments by carefully accommodating at first glance seemingly irreconcilable attitudes, epistemologies, and practices. This thesis will explain how Isserlin managed to settle conflicting scientific and ideological stances and how that tells us new things about the history of mind and brain. Thus, we will see, for example, that Isserlin reconciled, on the one hand, little-evidenced theories regarding moral degeneration, inborn inferiority, therapeutic nihilism, political conservatism, *völkisch* culture, nationalism and social prophylaxis, as well as the classic theories of localisation of function in the cerebral cortex; and on the other, practices based on therapeutic optimism, humanitarianism, social consciousness and care, technocratic progressivism, attention to the psychical and emotional individuality and the whole personality of patients, as well as a sincere commitment to the nineteenth-century challenge of making psychiatry, once and for all, an empirical medical science.[15] Yet as this thesis will reveal, these and other tensions make of Isserlin not only an interesting historical figure in his own right, but make of his thought and work (both achievements and failures) a remarkable opportunity for reconstructing a period of the history of German scientific psychiatry which has not yet been sufficiently studied on its own, namely, 1890-1938. We know that German psychiatry shaped German history, and this in turn shaped the world. What we do not know yet is that Isserlin was at the heart of the major developments of psychiatry in pre-Nazi Germany and this is why a reconstruction of this forgotten figure is needed.

An historically informed account of Isserlin's life and work ought to describe in what ways Isserlin had an impact on his broader social and intellectual environments and in what ways such environments shaped in turn his agency and the institutions he operated in. Thus, although this thesis asks what did Isserlin think and do, what were his achievements and what his failures, it also asks the following questions: what made some of Isserlin's arguments and practices count as psychiatric knowledge? In what ways did Isserlin's work become socially and institutionally productive? How did Isserlin negotiate with other actors those arguments and practices which did not quite fit with the established cultural logic of the psychiatric establishments? How much medical science was behind these arguments, practices and negotiations? How did Isserlin accommodate his plans with different private and public interests? What new things can we know about broader intellectual debates, socio-political developments and disciplinary arrangements in the making of the mind and brain sciences by paying attention to Isserlin's theories, practices and professional agendas?

Isserlin was a figure difficult to pigeonhole in a professional category; he was a psychiatrist, an experimental psychologist, a physiologist, a language researcher, an education reformer, a welfare official, a clinic director, an ideologue, a philosopher. Studying Isserlin's work implies conceptual

[15] This especially after the rise of anti-psychiatry mobilisations in the 1890s, which exposed the uselessness of advances in neuroanatomy when it came to patient care and the poor state of mental asylums.

analysis as much as socio-political considerations. His story cannot sit comfortably in any predetermined historical genre, nor any genre in itself is satisfactory for a history of psychiatry which follows his thread from begin to end. Accordingly, the thesis cannot do without a hybrid style: intellectual biography, institutional history, social history, historiographical revisionism; all these approaches take turns in the narrative form of this thesis and within each of its chapters.

Furthermore, historical accounts of German psychiatry tend to focus either on nineteenth century developments and psychiatrists, or on Kraepelin's classifications of the psychoses, or on prominent psychoanalysts and neurologists, or on threads of pre-Nazi psychiatry that led to the way psychiatry was practiced under Nazism (or on why they did not).[16] Although this thesis is highly indebted to many of these important perspectives, it does not try to imitate nor to examine any of their methods. However, there are a few important analytical frameworks and conceptual threads which have shaped some of the questions I address and directions I take in this thesis. Therefore, in the following section I proceed to discuss a few of them as a way of contextualising and problematising the questions, main arguments, and significance of this investigation around Max Isserlin. However, due to the fact that the reconstruction of Isserlin's path have lead to punctual historiographical revisions, a more profound historiographical discussion will be carried out in the chapters. In the final section of this Introduction, a brief outline of the chapters is provided.

VI. Isserlin and *a* History of German Neuropsychiatry

Kraepelin, institutions and therapy

Historians have paid in recent decades more attention to different aspects of Emil Kraepelin's work.[17] However, it has not been sufficiently underscored, firstly, the fact that Kraepelin did not work alone; and secondly, that he and the academic elite he lead between the turn of the twentieth century and 1926 did not start research from scratch, but that they incorporated some readily available theories and practices coming from Germany and elsewhere in Europe. By paying close attention to Isserlin's work,

[16] See for example: Schrenck (1973); Dörner (1995); Marx (1970); Engstrom and Roelcke (2003); Guenther (2014; 2015); Engstrom (see fn. 20); Weindling (2017); Blasius (1994); Roelcke et al (2010); Hanrath (2002); Berrios and Hauser (1988); Hoff (1994); Sammet (2000); Schmiedbach (1996). The work of Paul Lerner (2000; 2003) is one of the notable exceptions.
[17] See for example, Engstrom (fn. 21), Decker (2004), Roelcke (2018), Caponi (2010), Hoff (2008; 2015), Jablensky (2007), Shepherd (1995), among others.

this thesis discusses three ongoing problematics around the figure of Kraepelin and his circle. Firstly, it asks to what extent did late-nineteenth century Wundtian psychology play a part in the development of German academic psychiatry after 1900. Secondly, it tries to find out how much truth is there in the ways in which the reception of Freud by German academic psychiatrists has been accounted for. Moreover, it asks to what extent that reception tells us something new about Kraepelin and his followers. Indeed, the histories of Wundtian psychology, Kraepelinian psychiatry and Freudian analysis seemed to be more intermingled than previously recognised (see chapters 2-3). Finally, given that Kraepelin, Alzheimer, Rüdin, Ploetz, and many other members of the Kraepelinian elite believed, like Isserlin, that many mental disturbances were inherited and that biological degeneracy made people not just abnormal, but inferior (albeit with nuances and differences in their ideas, see chapters 4-6), this thesis asks: how did Isserlin articulate all these elements of Kraepelinian psychiatry over time? And how could a therapeutic enthusiast could have been an eugenicist and colleague of the psychiatrists behind *T-4 and* the euthanasia of children*?*

On the other hand, a story where Isserlin has the leading role and Krepelin the supporting, and where therapeutic optimism is an element to account for, does not quite touch on the history of German asylums – which existed in an ever larger scale in rural and secluded areas – but on their urban counterparts: the university clinic, the hospital wards for neurology, ambulatory prophylactic centres, clinics for nerves, and welfare institutions. In contrast to what might be expected of histories of *alienist psychiatry* in Europe, for the history of German *scientific psychiatry* of Isserlin's time, events related to big, outside-of-town mental asylums and their custodial and active methods of treatment are of subordinate importance. In fact, as we will see, for most of the urban institutional settings, rapid turnover was a precondition for their primary tasks: research, diagnostics, and prevention; not care.[18] Yet as this thesis will argue there were notable exceptions to the lack of therapeutic interest which reigned in the urban psychiatric establishment led by Kraepelin: not asylums, but Isserlin's military hospital during the First World War, later the welfare clinic he managed and finally the Heckscher Clinic (*Heckscher Nervenheil- und Forschungsantalt*), together represented some of the few psychiatric institutions of the time where therapeutic optimism was not only relatively high, but where therapeutics legitimised the very psychiatric practices and identities produced within.

[18] The traditional, nineteenth-century asylum, failures notwithstanding, was therapeutic by definition.

Eugenics and the medicalisation of social problems

A further overlapping perspective embedded in this thesis is provided by the broader narrative of the medicalisation of social problems and the development of eugenics in the German speaking world.[19] These broader developments took off in the latter half of the nineteenth century in a systematic form as a response to an increasingly alienating modern world of rapid industrialisation, cosmopolitan life, wider social and political inequalities and costly wars; but also because of people and new scientific ideas.

In the last decade of the nineteenth century, ideas on eugenics and biology from abroad were belatedly assimilated in a more comprehensive and attentive way in the German biological, anthropological, and medical university faculties. With the end of the First World War, and as a consequence of the defeat, social values were forced into re-examination and alternatives gained significant ground, thus destabilising cultural and professional identities. Many medical scientists, biologists and social reformers, having been trained on continental styles of thinking centred around degeneration and Social Darwinism, became medical officials and eugenicists in charge of the welfare system of the Weimar Republic, thus allowing eugenics to shape values according to which healthy, moral and civilised people ought to behave. They took partial hold of education, ideas about sexuality, and the judicial and penitentiary systems, and intruded in much of what previously had been more personal and family affairs in Imperial Germany . These links become relevant for the present study: the history of German medicalisation of social problems, public health and eugenics, is inextricably linked to the history of urban psychiatry in the timeframe covered in this thesis.

Among the 'social ills' – the common general perception was that of a diseased social organism – that medical officials and medical reformists were most worried about were: the rise in cases of mental illnesses, retardation, delinquency, alcoholism, prostitution, venereal disease, tuberculosis, decline in the birth rate, rise in antisocial behaviour, psychopathy, learning disabilities, disabled veterans, and millions of neglected children, single mothers, and unemployed young men. The epidemiological connotation of these problems was heavily prompted by the rising medically-influenced public perception (especially among the educated middle-classes) of a mass 'degeneracy' and 'weakening' of the biological and cultural fabric as well as by the concomitant perception that medical-biological knowledge could root out and exterminate the causes of mental and physical degeneracy, 'and transform daily life into a hygienic utopia of large, prosperous and patriotic families of sound "eugenic quality"' (Weindling 1991 p.10).

[19] See for example Weingart (1988); Weindling (1991), Roelcke (1997; 2018), Dörner (1981).

The significance of public health expertise as a means towards professional power and social control for psychiatrists (and other groups) at the turn of the nineteenth century only intensified in the aftermath of the First World War, and thus informed – though did nott necessarily determine, as this thesis will show – the activities of the psychiatric elite during the Second World War.[20] Isserlin managed to create institutions and professional niches that furthered his research and practical interests because he associated his clinical and therapeutic expertise with public welfare, eugenic principles, and private organisations in singularly strategic ways. Much of what Isserlin and other psychiatrists of his generation accomplished professionally depended on them showing to other actors, such as municipal officials, ministries, philanthropic organisations, as well as to his colleagues and to the educated middle class, that this work solved one or more of these social ills.

By covering Isserlin's ideas, practices and professional trajectory, we will be able to provide further detail to Weindling's argument that, during the period 1870-1945 eugenicists succeeded in arguing 'that doctors should treat patients in the interest of society and future generations' and that, as a consequence, 'the sense of responsibility of the doctor to sick individuals weakened as awareness dawned of the economic costs of poverty and disease' (Weindling 1991 p. 2). However, we will also see with Isserlin that in neuropsychiatry, it was in fact possible, in the very same time-frame, to reconcile eugenic values, awareness of national and racial decline, epidemiological understandings of disease, and even a conscious manufacturing of processes of socialisation (Weindling 1991 pp. 5ff) with therapeutic enthusiasm and unbiased commitment to empirical research.

The psychiatric clinic: producing scientific knowledge and institutional power

For the purposes of this study, some of the attention to psychiatry (and neurology) lacking in Weindling's type of inquiry can be to some extent alleviated with the works of the social historian Eric J. Engstrom and his collaborators[21] and a few other historians.[22] Engstrom has written extensively about the history of German psychiatry around the figure of Kraepelin and the way he organised and

[20] On the issue of continuities and discontinuities between the public health systems of Weimar and Nazi Germany see for example, Peukert (1987), Weindling (1997), McElligott (2009) and Hong (2009).
[21] See Engstrom (2003; 2007; 2008; 2009; 2011; 2015; 2016); Engstrom and Weber (2005; 2007); Engstrom et al (2016), Engstrom and Crozier (2018); Engstrom and Kendler (2015; 2017; 2018).
[22] Just to name a few useful sources: Decker (2004); Berrios and Hauser (1988); Shorter (1997; 2005); Hoff (2015); Hoff and Hippius (2001); Jablensky (2007); Hagner (1999; 2000); Hildebrandt (1993); Hirschmüller and Whitrow (1999); Marx (1970;1972); Caponi (2010); Guenther (2015); Eghigian (2015); Lerner (2000; 2003).

'disciplined' his university psychiatric clinics. Although Engstrom misses altogether Isserlin and his collaborators at the Heckscher Clinic, the institutional narrative – in particular the way in which he frames some questions regarding power, discipline and knowledge – he developed around his investigations of psychiatric university clinics has proven a helpful departing point for answering the questions asked about Isserlin. Engstrom explains that

> University clinics were conceived and constructed as elite institutions where state-of-the-art medical technologies were applied toward a solution of the persistent and troublesome social "problem" of insanity (*Irrenproblem*). They were modelled institutions that were built by the state with the intent of solving a socio-medical problem and in the hope of projecting an image of psychiatry as a scientific, research oriented, and medical discipline (Engstrom 2003 p. 2).

According to Engstrom, these clinics directed by (neuro)psychiatrists – which operated within the institutional structure of universities that worked as general teaching hospitals – were the means by which the likes of Kraepelin, Karl Wernicke, Robert Sommer, Alois Alzheimer, and many other more or less known figures of German psychiatry established an autonomous identity for the profession; or as Engstrom put it, the means by which they 'captured the core professional tasks' that alienists and rural asylums had previously monopolized. Moreover, he explains how some of these institutions 'facilitated a very different way of perceiving madness'. On the other hand, he claims that 'as late as the mid-1870s, academic clinics – conceived as institutions of learning and scientific research – did not exist' (Engstrom 2003 p. 3). This is important because Isserlin entered the psychopathological scene around 1900, contributing to the legitimacy of the still fledgling university psychiatric clinics, to their development and subsequent transformations. If the urban psychiatric setting was the place were academic (or scientific) psychiatry flourished, Isserlin's innovative work in that setting makes him a new significant figure in the broader narratives Engstrom had laid forward. As we will see in the first chapters, the story of Isserlin is also the story of the first generation of psychiatrists that learnt their skills and formed their identities not in rural asylums or at psychiatric wards in departments for internal medicine, but in more autonomous urban settings, which presented many contrasts to traditional institutions, and produced different kinds of knowledge about mental illness as well as new forms of productive disciplinary regimentations of the social.

However, since Engstrom has focused mostly on the clinics of the nineteenth century and on Kraepelin's institutions in the twentieth (on university psychiatric clinics in Dorpat, Heidelberg, and on the German Research Institute of Psychiatry, among others) many institutional settings of twentieth century German psychiatry have not been given yet enough attention by historians of German psychiatry. According to Engstrom, these academic clinics presented diverse organizational structures until 1914, which included 'largely independent institutions…or separate wards within urban hospital complexes…[or] wings in

provincial asylums' (Engstrom 2003 p. 4). As we will see, the story of Isserlin started soon after the story of the psychiatric clinic did. Nevertheless, Isserlin's story did not end in 1914, but almost three decades later, and thus, this thesis helps track the evolution of the urban settings as loci of professional legitimacy and status during those decades (chapters 3-7). Furthermore, Engstrom and others only indicate but do not describe the fact that, as early as 1900, the university psychiatric clinics had laboratories and instrumentation for psychological experiments of the very same kind Wilhelm Wundt had been using in Leipzig for studies in 'normal' psychology. Together with his mentors Sommer and Kraepelin, Isserlin made contributions to the better-known classifications precisely through experimentation in psychiatric and nerve clinics.

Another convenient way of framing some of the institutional analysis carried out throughout this thesis is represented appropriately in Engstrom's view of German university psychiatric clinics as centres of 'disciplinary regimentation'. As he explains – inspired by Foucault[23] –, these clinics acted as devices for the social control of marginal types of people, for the categorization and legitimation of unwanted behaviours, and for the prescription of social values. Moreover, through such regimentation not only patients were given new identities but new professional identities were forged at the same time. In other words, categories, theories and practices interacted 'cyclically' with and reflected on the doctors' and staff's self-understandings, thus ultimately shaping future categories, theories and practices.[24] Moreover, an examination of the disciplinary activities Isserlin and his collaborators were engaged in also replicates efforts at describing many of the 'the moral ambiguities and contingencies' that plagued the ideas and practices of the urban psychiatrists of early twentieth-century Germany (Engstrom 2003 pp. 6ff).

Cerebral localisation, aphasia, and the contradictions of neuroscience

The dominant discourse in the neurosciences suggests that success depends on what technologies available (including fMRI, PET, computer simulators, single cell recordings, and other modern investigative techniques) can do for the mapping of the 100 billion neurons contained in a human brain.

[23] An important portion of the secondary sources informing this thesis have been inspired by the renewed interest in Foucauldian genealogical methods and analytical concepts such as 'bio-power', 'governmentality' and *dispositif* in the last two decades. Despite the possibility that a few of the descriptions provided in this study give for deploying some of those methods and concepts, such efforts would fall outside the scope of this thesis.
[24] Such cyclical and interactive features, as presented in chapters 4-6, can be observed in the light of Ian Hacking's reflections on the looping effect of human kinds (also with a Foucauldian background) and on the making up of people through interactive medical/psychiatric categories and discourse (Hacking 1995; 2002; see also Davidson 2002). Instead of perversion, homosexuality, or MPD, we will see how categories such as psychopathic inferiority, brain injury, war neurosis, and other diagnoses and prognoses integrated in Isserlin's discourse and practice could be at times contemplated along those lines.

Large public investment has made the neurosciences 'big science'. Yet the neuroscientific discourse works within a seemingly inescapable conceptual ambiguity as to how to approach its object of study. On the one hand, the general ambition is – as it has been since Gall's phrenology[25] – to account for the *location* (however broadly and re-defined) of mental functions and phenomena, such as empathy, artistic talent, and depressive mood, in the anatomical structure of the brain. At the same time, however, the 'big science' projects work with the assumption that mental functions take place necessarily along neural *circuits*; that there is actually no 1:1 mapping to be sought but rather, as Katja Guenther (2015 p. 3) explains, a 'multiscale description of the topological and spatial layout of connectional anatomy'. One cannot help to wonder how billions of individual neurons can be identified, examined, and mapped out in terms of their individual function, while at the same time also be comprehended in terms of complex and multidimensional arrangements that go across different regions, hemispheres, and systems of the brain.[26]

Guenther tracks the tensions of the billion-dollar neuro-enterprise of today to the nineteenth and early twentieth centuries. While, as she argues, in the nineteenth century such contradictions could be observed in the theories and practices of Meynert and Wernicke, in the twentieth they can be found in those of Freud and Otfried Foerster. This thesis will show that similar tensions regarding brain research could be also found in Isserlin's neuroscientific work and milieu. Moreover, Guenther explains that Freud and Foerster reacted to what they perceived were the limitations and constraints of the doctrine of fixed neural sites responsible for functions in order to establish a professional niche: psychoanalysis and neurology respectively (Guenther 2015 p. 5). As a consequence of establishing Freud's and Foerster's 'common neuropsychiatric heritage', she argues that genealogies of neurosciences can show how inseparable the histories of the disciplines of mind and brain can be (Guenther 2015 pp. 6ff). As this thesis will show, Isserlin played a crucial role in the consolidation of efficient disciplinary arrangements as much as he did in preventing *neurology and psychoanalysis*, at least in Munich, from establishing themselves as legitimate professional avenues in the neuro-enterprise.

Furthermore, in *Lost Words* (2000), Stephen Jacyna immerses the history of aphasiology[27] in Europe in the period 1825-1926 within a broad genealogical project to document the history of disciplinary formations in the psy-sciences. He argues that the emergence of aphasia and the aphasic as objects of study in nineteenth-century Europe was 'central to the generation of an intellectual autonomy for neurology' (Jacyna 2000 p. 1). His statement is useful inasmuch as it helps understand Isserlin's opposite impact in clinical neurology's aspirations towards institutional and academic autonomy (see

[25] For example, see Uttal (2001) for how much of phrenology can be observed in present day neuroscience.
[26] See Vidal (2017); Casper and Gavrus (2017); Talavera (2019) for further details on this problematic.
[27] I use the term loosely to refer to all scientific and medical endeavour centred around a language disturbance caused by brain damage.

chapters 5 and 7). In Munich, as in many other places in the German speaking territory, the aphasia specialisation that unfolded in the period 1900-1938 did not legitimate, nor generate an identity for neurology, but *for psychiatry*. Nevertheless, like Jacyna shows, it will become evident with the work of Isserlin that the aphasic – the new young war veterans who survived brain trauma in the First World War but presented language impairment of sorts – was the outcome of extra-scientific disciplinary processes as much as of medical science.

Furthermore, Jacyna explains that

> [t]he existence of a bodily mechanism for the execution of linguistic performances had, of course, been recognised before. What changed in the nineteenth century was that such structures as the tongue and larynx were revealed as strictly secondary, surface organs. The primary organs of language resided in the uncharted territory of the brain…The aphasiological project was a self-conscious response to this novel problematic (Jacyna 2000 p. 11).

As the aphasiology of Isserlin will reveal (see chapters 4, 5 and specially 7), by the 1930s the limitations and contradictions of the paradigm of cerebral localisation also allowed the precise opposite intellectual attitude to the one Jacyna describes. Isserlin combined the exploration of the uncharted territory of the brain with new insights into the experimental value of 'the voicing states' of aphasics; Isserlin attempted a (re)integration of *the psyche, larynx and the tongue,* in the aphasiological discourse.

VII. Outline and Final Remarks

From an account of Isserlin's trajectory in late Imperial, Weimar, and Nazi Germany, we will observe that the story moves from brain research to Kraepelinian clinical and biopolitical psychiatry, and back; from a nuanced rationale for eugenic ideas that allowed certain progress in therapeutics, to the Nazi rationale for mass extermination; from arguments on psychology against Freud and in favour of Wundt, to arguments on language against Goldstein and in favour of Hughlings Jackson. This new biographical study, by revisiting some well-known historical events and individuals, reveals just how many different debates about significant scientific and social matters were taking place almost in parallel within the psychiatric profession, thus underscoring the fact that German psychiatry in Pre-Nazi Germany was far more complex and productive than is commonly thought.

One aspect will not come up much in this thesis, namely, Isserlin's Jewish cultural heritage, and this for a simple reason: he did not have one. Isserlin was an assimilated Jew; he thought of himself and acted always as a German at the service of his *Vaterland* and acted accordingly, even well entered into the Nazi period. His Jewishness only became an issue for him when it became an issue for the Nazis,

as the last chapter and the Conclusions will evidence. In fact, categorizing him as a Jewish doctor would perpetuate prejudice against Jewish doctors. As Mitchell Ash explicated at the 2018 Selig Brodetsky Memorial Lecture at the University of Leeds, there was nothing that could be defined as a Jewish way of practicing medical science in pre-Nazi Germany and Austria, and arguing otherwise would be anachronistic.

This thesis is mainly thought for people interested in the history of psychiatry and the neurosciences. For them, this thesis provides a new overview of conceptual, disciplinary and social developments in Germany during the period 1880-1939 in a unique thematic configuration. It covers events that shaped several neuro-psy-disciplines of the time, some now dead, others still alive. Through seven thematically self-contained and at the same time chronologically-structured chapters inspired by different types of primary sources found in the Isserlin-papers (MS/1935) – such as patient files, administrative documents, published articles and books, and correspondence – this study offers also some corrections to the ways in which important events related to German neuropsychiatry and psychology have been presented. Furthermore, for people interested in child psychiatry, PTSD, neuroticism, psychotherapeutic methods, mental and social hygiene, speech disturbances, among some other current issues related to mind and brain, this work offers new studies with scientific and technical input.

As the questions asked and the arguments presented in this investigation began with archival work related to Isserlin, in the first instance this is a biography of a figure not written about. Yet, as I have noted, it is more than that, because there is, on the one hand, a limitation of materials (Isserlin has been forgotten by historians of medicine at least partly due to the paucity of sources), and on the other, because in order to understand the man one needs to understand the contexts and debates to which he belonged, as well as the intellectual and social developments in which he was involved over different periods of time. Thus, ultimately, this is an intellectual, social, and institutional history where Isserlin is the central actor and whose thread we follow from begin to end.

Chapter One, 'The Background of Isserlin's Psychiatric Milieu (1860-1896)' is a critical survey of some historical milestones in the history of German psychiatry in the second half of the nineteenth century, prearranging the conceptual and practical constraints within which Isserlin navigated his professional, scientific and biopolitical milieus. One thread is particularly followed, namely, the incessant struggle for scientific and medical legitimation in which urban psychiatrists were involved. Along that line, the chapter establishes events, problems, and developments that took place whilst Isserlin was a school boy and later a medical student in Königsberg and how this determined his professional possibilities as well as his scientific attitude. In particular, I describe how Isserlin's soon-to-be teachers reshaped clinical psychiatry in Imperial Germany.

Chapter Two, 'Kraepelinian Psychiatry and Isserlin's Early Experiments (1890-1910)' seeks to highlight the significance that Wundt's theory of the mind and experimental approaches had in the clinical psychiatry of Kraepelin, Sommer and Isserlin around the turn of the twentieth century. What a clinician could not identify properly at the bedside, they thought, might be identifiable through the measurement of induced psychological events in a controlled setting. The young Isserlin helped introduce the very first methodical psychological experiments in psychiatry. By looking specifically at Isserlin's word-association we can exemplify some of his early contributions to the field of psychopathology in general and to Kraepelin's program in particular. Moreover, it will be indicated what particular tensions emerged when considering the empirical and factual outlook of both Kraepelin's and Isserlin's experimental and clinical psychiatry and the bio-politic elements also shaping their professional agendas.

Chapter Three, 'Isserlin, Jung and Freud (1900-1910)' builds on one particular scientific and professional implication of the Kraepelinian program discussed in the first two chapters, namely, the rejection of Freudian doctrines in the first decade of the twentieth century. While the Kraepelinians saw themselves working towards a re-integration of the living mind into clinical psychiatry after decades of brain-centred research, they also saw Freud in parallel developing what they perceived to be a pseudoscientific and anti-naturalistic approach to mental illness. In this chapter will be shown the significance of Isserlin's work in the debates by proxies between Kraepelin and Freud. A subordinate aim of this chapter is historiographical: it will be argued that the reception of Freud by German psychiatrists was more nuanced than previously thought and had motives we do not know much about.

Chapter Four, 'Isserlin's Military Hospital (1915-1920)' explores Isserlin's creation of the particular diagnosis 'brain-injury' (*Hirnverletzung*), and also explains why he differentiated his brain-injured patients from other types of war victims, challenging the focus that historians have adopted while dealing with German military psychiatry of the period. I substantiate and exemplify the new diagnosis 'brain-injury' by looking at Isserlin's (and others') publications of the time and at different files of brain-injured soldiers who were in continuous treatment and evaluation by Isserlin. Furthermore, I show how Isserlin's distinction between brain-injury and war neurosis – and arguably between brain and mind – helped him take advantage of the professional freedoms given by the new socialist and increasingly authoritarian public health institutions of the 1920s.

Chapter Five, 'Isserlin and the Creation of the Heckscher Clinic (1921-1929)' continues following the trajectory of his clinical work around brain injuries in the 1920s and constitutes a new history of the creation of the Heckscher Clinic. In particular – and by using archival materials as well as by building on (and challenging) previous accounts of the inception of the clinic – it is described how a welfare

rehab centre, a (children's) psychiatric clinic, and a centre for brain research came to being with a unique mission and make-up, and how, under the management of Isserlin, it evolved and adapted to its convoluted scientific, social, and political environments. At the same time, the story adds important details of the debates over the autonomy of clinical neurology in early twentieth century Germany. It will become clear that in the inter-war years professional development for psychiatrists like Isserlin involved seizing opportunities amidst uncertainty as to the objects and boundaries of medical disciplines of mind, brain and nerves.

Chapter Six, 'Isserlin and the Construction of "Inferior People" in Germany (1900-1930)' turns away from the Heckscher Clinic and looks into Isserlin's disciplinary work and publications on the 'psychopathic inferior' and other 'social ills' of the 1920s and on the ways that psychiatry was meant to deal with them. It will be seen how, throughout the period 1900-1930, Isserlin and his colleagues enhanced and refined the social problems posed by 'inferior people' in many different ways. However, this chapter seeks to explain how and why, in contrast to many of his colleagues, Isserlin designed ways in which eugenic principles could be combined with pedagogical and psychotherapeutic methods.

Chapter Seven, 'Isserlin, the Rockefeller Foundation, and Aphasia (1930-1939)' turns attention back to brain research in the last years of Isserlin as director at the Heckscher Clinic (1933-1938). It will be shown how Isserlin, after elaborating on experimental and therapeutic results, tried to put order and find eclectic stances within major disputes regarding speech disturbances, something that made him a respected figure in the field. Moreover, it will become evident that the aphasiological enterprise as conceived by him in the 1930s adapted to new psychological insights into language without renouncing old physiological paradigms. At the same time, by using archival sources, it will be shown to what extent the agendas of financing bodies determined Isserlin's turn to aphasiological research and away from therapeutics as well as from an alienating, authoritarian, and repressive psychiatric establishment.

In concluding this thesis, some questions as to the circumstances of Isserlin's exile are surveyed and reflected upon, and the significance of his trajectory for the history of German psychiatry is reconsidered in the light of the findings presented along the seven chapters.

Chapter 1. The Background of Isserlin's Psychiatric Milieu (1860-1896)

German Psychiatry from Griesinger's Urban Asylum to Kraepelin's Psychiatric Clinic

I. Introduction: a Science of Madness

In his *History of Medical Psychology* (1941), the historian and psychoanalyst Gregory Zilboorg distinguished sharply between twentieth-century German psychiatry – with its renewed attention to the psyche given by psychoanalysts like himself – and the materialistic and brain-centred tradition of German neuropsychiatry of the previous century. Accordingly, he wrote:

> The history of German psychiatry of the 19th century is the history of psychiatric somatization…in the middle of the century German psychiatry asserted the supremacy of the brain over any other structure and proceeded systematically to produce a psychiatry without a psychology (Zilboorg 1941 p. 434).

This is by no means an isolated perception of the history of German psychiatry. It is commonly thought that, in contrast to France and Britain, medical psychology and patient-based science were absent features of German psychiatric research until Freud appeared in the scene.[28] This picture is inaccurate, however, and paying attention to the broad backdrop as well as to the more specific medical ethos in which Max Isserlin was inserted as a young psychiatry trainee helps illustrate this fact.

First of all, psychology and somatisation were not mutually exclusive for most German psychiatrists in the second half of the nineteenth century. Secondly, if by somatisation we mean the idea that mental disease was taken to be a disease of *the brain alone*, then somatisation in mainstream psychiatry never went half a decade without being noticeably disputed. In fact, what the history of nineteenth-century German psychiatry presents, more than the story of the triumph of somatisation – that is, of German neuropsychiatrists managing to supersede the study of the subjective psyche with that of the material brain – is rather a story, from roughly the 1840s until the 1900s, based around an incessant struggle for

[28] See for example Alexander and Selesnick (1966) and Shorter (1997).

scientific and medical legitimation on the part of professionals committed to account for the connection of the brain with the psyche. The biggest problem for these professionals, ultimately unsolved, was how to study the brain together with mind *scientifically*; either in parallel or interacting. Thus, instead of a psychiatric history of somatisation, I see a psychiatric history of seeking scientific and medical legitimation. If some psychiatrists in the 1870s and 1880s thought that scientific psychiatry could be practiced *only* by cutting up brain layers and looking into them for structural abnormalities, or by connecting electrodes in certain regions of severed brains of dogs to study their response – if in short, psychiatry was for some practiced as 'cerebral pathology' – others, like Karl Kahlbaum and later Emil Kraepelin, believed that although there was in principle no problem with these practices as such, the central, most urgent scientific activity in psychiatry was to be carried out at the bedside of patients. In particular, the task should be the sorting out of different essential forms of mental illness by observing and registering their symptomatic course in time. This, not the study of brains, they believed would make psychiatry a science.

More recent historical accounts continue to underplay these important events in psychiatry taking place at fin de siècle in the German mind and brain sciences.[29] We are inclined to believe from them that, since Freud was not especially influential in Weimar Germany, the somatisation paradigm ran until the Nazis fully turned the medical sciences into extermination tools. In other words, we are led to assume that there was pretty much a continuous development from start to end in the so-called 'biological psychiatry' practiced in what it was pretty much 'a German century' (Shorter 1997). But evidently, there was much more to this. The image of the history of German psychiatry with Griesinger, Meynert, Wernicke, and Kraepelin as big protagonists of a cumulative, transitional and linear story of biologisation and somatisation (only perturbed by Freud and the Nazis) would be a gross simplification. It is not the aim of this chapter to provide a revisionist history of German psychiatry in its entirety, but rather to lay the historical foundations for a proper discussion of Isserlin's professional work, which started in 1903. In addition, it will be shown that psychology was very much present in psychiatry by the end of the nineteenth century and it had nothing to do with Freud.

By the 1880s Germany rapidly became a great military power and a leading nation in every domain of material and intellectual activity. The leading role taken by German psychiatry was prompted by the importance attached to the natural sciences and their prospective contribution to the 'liberal', though autocratic state of Bismarck, which relied on a mechanistic and atomistic view of society and geopolitics (Weindling 1991; Harrington 1996). It is undeniable that medicine thrived in these settings and psychiatry was a major beneficiary of this, in many ways, until the end of the nineteenth century.

[29] See for example Harrington (1996; 2019), Shorter (1997), Decker (2004), Schmiedebach (2011). For important exceptions, see for instance (fn 20 in Introduction) and Schmiedebach and Priebe (2004).

Kraepelin himself was to sketch this evolution in his book *A Hundred Years of Psychiatry*. By 1911, Kraepelin calculated, approximately 500 institutions for the mentally ill had been constructed, and all German medical schools could boast university departments of psychiatry (Kraepelin 1911/1962 pp. 107ff). This process started in the 1860s with Griesinger's reforms. 'We are', Kraepelin commented, 'in this respect superior to all other nations of the world' (Kraepelin 1911/1962 p. 112). Yet there was still substantial disagreement and uncertainty at the core of the profession throughout this time, with little consensus as to how to make of psychiatry a scientific and modern discipline. In fact, in late-nineteenth century Germany, actual progress in psychiatry remained scarce. Around 1900, the Germans had the same kind of problems with regards to nosology, treatment, administration, overcrowding, instruction, and disciplinary formation as did the French and the British at the time.

Indeed, Isserlin and other German psychiatric clinic directors in the 1910s and 1920s became scientists and clinicians around the turn of the century, and it is crucial to realise that this was a time characterised less by innovation and ingenuity than by quarrels over the medical foundations and the methods of psychiatry. The ideas and practices were mostly follow-ups or reactions to something said or done in the period 1860-1890. As I will show, by 1900 old ideas were being reshaped, consolidated, enhanced, disciplined, inscribed, and professionalised.[30] Thus, in this chapter, I prearrange the conceptual and material constrains within which Isserlin navigated his professional, scientific and biopolitical milieus in the first three decades of the new century. Among the topics I touch upon are, for instance: the differences between asylums in the countryside and those in the city as well as the situation regarding treatment and restraint, hospital mobilisation, overcrowding, and policies of transfer; the state of nosology and aetiology; theories of mind, brain, and disease; and clinical methods and technologies of diagnosis. In other words, I seek to establish what events, problems, and developments that took place when Isserlin was a schoolboy and later a medical student in Königsberg later framed his professional milieu. I will show that, in the late nineteenth century, it was Isserlin's future mentors, namely Kraepelin and Robert Sommer[31] who begun to comprehend that excesses of the materialistic methodology of somaticist psychiatry had downplayed the clinical study and observation of the actual psychopathological processes in psychiatric university clinics. Powerful neuropsychiatrists in the 1860s and 70s, such as Theodor Meynert and Paul Fleichsig, were first and foremost cerebral pathologists; they had been trying to localise structural abnormalities in post mortem brains and to model correlations between them and psychological symptoms. Having seen little result in this program, but without fully dismissing it, Isserlin's mentors – both independently and in collaboration – attempted a re-focus of

[30] Apart from the soon to be famous classification system of Kraepelin – as the next chapter will show – there were two exceptions, two real novelties in German psychiatry in the period between fin the siècle and the early years of the new century: the introduction of the psychological experiment and of the theory of degeneration into mainstream psychiatry.

[31] Sommer was an authority in experimental psychology, forensic psychiatry, eugenics, and asylum reform in the period 1890-1920 and we still know very little about his work.

psychiatric research, from the dissecting rooms to the bedside; from dead brains and diagrams, to the painstaking recording of extended observation of disease entities in their course of action. The scientific and medical emphasis was shifted from aetiology to nosology, prognostics, and diagnostics. And yet, these psychiatrists did not abandon the biological standpoint, nor did they think less of the significance of the brain for mental illness. As will become evident in subsequent chapters, the developments around the quest for a proper scientific ethos of psychiatry in the second half of the nineteenth century were decisive for Isserlin's training as a clinical and scientific psychiatrist as well as for his future career.

Unlike the following chapters in this thesis, which are centred around close study of Isserlin's work and papers, this chapter makes use mostly of secondary sources, so as to explore the intellectual and institutional background to his career. In doing this, I have made use of the detailed accounts and descriptions from historians including German Berrios, Otto Marx, Paul Hoff, Eric Engstrom, Katja Guenther, among other specialists in the history of nineteenth-century German neuropsychiatry. The chapter is organised as follows: in Section I, I provide a brief account of the state of German psychiatry by the mid-nineteenth century. I focus my attention in outlining Wilhelm Griesinger's creation of the urban asylum (shortly after the 'university psychiatric clinic'), as well as the significance of his theory of insanity and the clinical disciplines of bedside research he advocated for. All these matters are crucial for the developments of psychiatry in the first decades of the twentieth century. However, as we will see, Griesinger, who died prematurely in 1868, was only a transitional figure. Thus, I proceed to delineate, in Section II, some basic tenets of the consequences of his dictum 'mental disease is brain disease'. In particular, I point to the reasons as to why the first generation of academic psychiatrists, although inspired by Griesinger, preferred the pathological laboratory over the bedside and thus left what we can call the 'pathology in action' unattended. In section III, I describe how Isserlin's soon-to-be teachers, namely Kraepelin and Sommer, took different paths in the late 1880s and 1890s, thus implementing regimes of observation and technologies of inscription for reliable diagnosis, prognosis, and classification of mental diseases.

II. Griesinger's Somatisation of Insanity and the Emergence of the Psychiatric Clinic in the Mid-Nineteenth Century

A medical model for madness

The landscape of German psychiatry at the start of the nineteenth century was dominated by two diametrically opposed views when it came to the question of the origins of insanity. There were, on the one hand, the Mentalists (*Psychiker*), for whom madness was a condition that an individual had brought

upon themselves by their sinful or decadent ways of living, or by their intemperance. This castigatory approach was at the core of German 'Romantic psychiatry', as exemplified in the works of J.C. Heinroth (1773–1843) and K. W. Ideler (1795–1860). For the Somaticists (*Somatiker*), the mind-body relation was very different. They argued that the soul was an immaterial, immortal, and divine entity, and as such, could not present the imperfection brought about by illness, nor could it be studied by the mortal intellect of scientists. Accordingly, what presented clinically as symptoms of madness was nothing else than an obscure, yet to be identified consequence of a bodily disturbance. Although for the Somaticists the brain could be involved in the causation of the malady, it did not need be; the brain played only a secondary role vis-à-vis physiological mechanisms involving the vegetative nervous system, the kidneys, lungs, and heart, and even the skin in the causation of insanity. Behind this materialist, non-brain centred approach were M. Jacobi (1775–1858) and C.F. Nasse (1778–1851) (Hirschmüller and Whitrow 1999 p. 399; Hoff and Hippius 2001 p. 888). It was by taking a new, well-defined, and at the time rather controversial position in this debate during the 1840s and 1850s that Wilhelm Griesinger began rapidly to consolidate as an influential figure in the alienist scene of mid-nineteenth century Germany.[32]

For Griesinger, psychiatry needed to become a medical science, and, as such, it was required to erect a body of knowledge on the basis of the observation of patients with psychiatric symptoms instead of on old books and metaphysical speculation. Accordingly, both Somaticists and Mentalists were wrong. The foundations of psychiatry itself required re-thinking them; like the rest of medicine, perhaps, psychiatry could do without an connection to mysticism, occultism, and vitalism. By the 1840s, Griesinger was evidently not alone in this sentiment. However, he predicated and articulated in very persuasive ways throughout the middle decades of the century the path that psychiatry needed to follow for reform, starting with this task: whatever was being attempted in the study of bodily diseases must also be applied to the study of madness. With this prerogative, the path for a series of transformations in the work around mental illness begun to be drawn while the debate between the Mentalists and the Somaticists lost significance.

Griesinger called for a new approach to the psyche. He explained that

> [t]here is no longer any need to explain that psychology can be understood as a natural science based on observation. The main basis of such a science, however, is the mechanism of brain actions, which even the most abstract spiritualism must recognize. In that context the idea of the unity of soul and body, so often proclaimed in psychiatry but so seldom consistently adhered to, can finally be treated seriously. That is the direction in which we must now concentrate our forces (quoted in Hirschmüller and Whitrow 1999 p. 399)

[32] For detailed accounts of Griesinger's work and his rejection of romanticism in psychiatry, see Marx (1970; 1972).

Psychology, as an empirical science of the mind, and psychiatry as an empirical psychopathology, were only viable in a neuropathological key. However, it is crucial to note that Griesinger's was not a dyed-in-the-wool metaphysical, or, borrowing a definition from Patricia Churchland (1989 pp. 395-397), an 'eliminative' materialistic, position. What he advocated for was, rather, a position we can describe as 'methodological materialism' insofar as the 'observation' of the 'mechanisms of brain action' was meant to indicate the way for any empirical research on the mechanisms of the mind and thus, on the aetiology of the psychoses (Hoff and Hippius 2001). In other words, he did not downright negate the existence of the realm of the psychic running parallel to neurobiological processes; he only argued that, from an epistemological standpoint, the scientific investigation of psychological events were meant to start with neurobiological mechanics. Nor did he reject the value of an experienced alienist's gaze and bedside research. In short, Griesinger, did not subscribe to a 1:1 identity of mind and brain. However, he ascertained the fact that, if psychologists and alienists wanted to study the mind *scientifically*, they were methodologically compelled to start looking for answers first in the anatomical substrate of the mind. Thus, working like any other specialty within the ethos of an 'evidence-based science', the medical psychologist was required to abstain from any type of speculation, dogma, or philosophical system, and instead should perceive and treat the mad for what they really were: sick. This was no small thing: Griesinger was not only promoting a new concept of insanity and new medical foundations for psychiatry, but also a new notion of the insane. They were not cursed, nor were they being punished by God.[33]

In 1845, Griesinger published his influential *Pathology and Therapy of Mental Diseases*, a book that laid out his programme for a reform of traditional alienist psychiatry, and suggested how to bring it closer to medicine and science. Central to the reform was a neo-somatic understanding of insanity as a disturbance of 'the mental reflex of the brain'. Drawing on the findings of cutting edge contemporary works in physiology[34] and on his clinical observations, Griesinger promoted the extrapolation of the mechanisms of the spinal reflex – that is, of the involuntary physiological action of the nervous system in response to external sensory stimuli – to the study of higher mental functions (Guenther 2015 p. 30). Indeed, Griesinger theorised that just as 'centripetal sensory input' into the central nervous system produced motor activity in the periphery of the body, the brain produced mental representations (*Vorstellungen*) as a reaction to different stimuli (internal and external), thus enabling human drive, emotion, judgement, imagination and so on. Moreover, he inferred that, over time, the aggregate of representations accumulated and the eventual patterns of cerebral reactions to mental events would

[33] As Hoff and Hippius (2001 p. 887) put it, Griesinger's psychiatry was, 'according to its self-understanding, as much a predominately "biological" research programme as it was an applied medical anthropology'.
[34] Notable was the contribution of Virchow's cellular pathology ('all pathology is cellular pathology'), which was developed in parallel to Griesinger's theories by mid-century. See Schultz (2008) for details.

determine the 'psychological tone' of a person (roughly, what we call now personality). Correspondingly, mental illness was conceptualised by Griesinger as the breakdown of this mental reflex of the brain. Thus, for instance, when the capacity for stimulation and response of the mental reflex became torpid or was slowed down, a state of melancholia arose; by contrast, with overstimulation and excessive activity, manic states arose. The introduction of the physiological reflex in medicine had some resonance among young alienists (Engstrom 2003 pp. 58-59). However, its significance for internists interested in the nervous system and the brain was much greater.

In the 1860s, Griesinger went a step further in the promotion of the medical viewpoint for psychiatry. Heavily influenced by the clinical outlook of his mentor in Winnenthal, Albrecht von Zeller (1804–1877), Griesinger postulated the existence of a 'unitary psychosis' (*Einheitspsychose*), that is, the notion that mental illnesses were just different manifestations of a single morbid underlying process. There was general consensus among alienists that the course of this unitary process gave rise to different psychopathological phenomena but all were lawfully determined by a regular sequence of stages of development and Griesinger subscribed to this (Berrios 1994). Accordingly, melancholia, mania, dementia, and other types of insanity were ultimately moments, or branches, of the same natural root disease. Thus it was commonly believed that in the beginning, an emotional disturbance emerged in a person; if the condition of the individual did not improve, it would eventually lead to madness and delusions; then, progressively, a severe and irreversible cognitive deficit would set on, what we know understand as dementia. As we will see, the idea of a unitary psychosis produced by the breakdown of the mental reflex of the brain had significant practical consequences in German psychiatry in the second half of the nineteenth century that lasted until the 1930s, noticeably with regard to aphasia research (see Chapter 7). For the purposes of this chapter, the most significant consequence of the mental reflex was that it served Griesinger's rationale for the implementation of the 'urban asylum' – soon after also 'university neuro-psychiatric clinic' (*Psychiatrische- und Nervenklinik*) – around the German speaking world, arguably one of the single most important developments in the history of modern psychiatry.

The birth of the urban asylum

Griesinger was also a dedicated clinician. In fact, he argued from experience that the diligent observation of the unfolding of the symptoms of mental illness at the bedside was vital, especially in acute psychotic states. The problem was, however, that such observation was not being systematically standardised by a medical ethos but instead still guided by the subjective vision of asylum

administrators. He insisted on the necessity of replacing the control of patients that traditional, early nineteenth century asylum alienists had by

> the purely medical comprehension of the mental illnesses, but harmonising it with the understanding of the morbid mental appearances…so that asylum administrators can stop calling themselves mad doctors…so that the deep sounding, fantastic pompousness, which at present still influences psychiatry, is wiped by sober, clear medical observation (quoted in Hoff and Hippius 2001 p. 888)

Griesinger's plan was the reformulation in new medico-administrative principles what by mid-century had unquestionably become a clearly decadent system of public mental asylums. The traditional asylums had been originally inspired by the romantic and humanitarian efforts of early nineteenth-century reformers around the concept of moral treatment. However, like elsewhere in Western Europe, public asylums became quickly something more sinister. In the 1840s, they had endured a rapid increase in inmate population, and by the late 1850s they were evidently no more than custodial barracks fulfilling purposes of incarceration. However, as Griesinger had argued, if a mentally insane person was to be considered ill, and not possessed, or punished by God, a custodial and penitentiary treatment made no sense at all – never mind the inhumane conditions in which the mentally insane were treated there.[35]

Traditional asylums had been constructed throughout the first half of the nineteenth century, always in rural and isolated areas. This was considered the central therapeutic measure in the alienist rationale: remove the patients with acute symptoms straightaway from their every-day (increasingly metropolitan) environment and place them in a more peaceful environment. Evidently, the least suited adjectives to describe the mid-nineteenth century European asylums were peaceful or therapeutic, regardless of the motivations of the alienists in charge of them. They ended up hosting hundreds or even thousands of patients with chronic illnesses and sustaining costly and unimaginative forms of management.[36] Nevertheless, German asylums had failed not only in making the patients better, but also in generating psychiatric knowledge. Alienists directing overcrowded asylums had created neither a scientific aetiology, nor reliable, objective criteria for the classification, diagnosis, and prognosis of the types of insanity. This was due to the fact, Griesinger argued, that the alienist had tended to classify symptoms based on the criterion of curability and non-curability, a purely intuitive and subjective yardstick. This

[35] Griesinger's advocacy for non-restraint was extremely influential. Supported by the likes of Karl Kahlbaum (1828-1899), he argued that mechanical restraint, such as strait jackets, were completely counterproductive. On the one hand, they led to neglect and thus, inflicted a harsher psychological injury in the patient than that which put them there. On the other hand, they distorted the natural manifestations of insanity, not allowing the alienist the observation of the natural course of disease (*natürliche Krankheitseinheit*), and thus, only led to the production of 'pseudo-facts'. In addition, the pervasive modern rhetoric of freedom, humanity and justice opposed to backward attitudes towards insanity, such as the use of coercion and their prison-like physical historical proximity to prisons. See Marx (1970; 1972); Schrenk (1973); Hirschmüller and Whitrow (1999) for further details.

[36] For more details on asylums in early nineteenth-century Europe, see for example Jetter (1981), Marx (1991) Shorter (1997), Blasius (1994), Scull (1981; 1982; 1993).

was an unreliable demarcation tool because in the huge majority of cases alienists had no real basis for any prognostics. Hence, more efficient criteria of demarcation were required if any asylum reform was to take place. According to Griesinger, the theory of the unitary psychosis and the mental reflex were central in this regard. There were to be rural and urban asylums; two very different institutions for two different phases of a unitary disease process. Roughly, early stages and acute symptoms constituted one type of insanity and belonged to the urban asylum. Chronic phases, in contrast, made up another form of illness, and belonged in the countryside. The yardstick for a scientific classification of forms of insanity was meant to be given, from the start, by different types of institutional settings.[37]

The average rural asylum, Griesinger maintained, should host between 400 and 600 patients of both sexes. Its most important therapeutic function was fighting off idleness, which he took to be chronicity's biggest ally. The activities of the rural asylums were to revolve around agriculture and farm labour. These practices were appropriate for sustaining fitness and as a means of subsistence.[38] Ideally, these patients would eventually form self-sustained agricultural colonies. Some non-violent insane, mostly females, were meant to live with families in alienist-supervised community care. In addition, restraint was to be only exceptionally used. All these features made of the rural asylum under Griesinger's model quite different from traditional ones. The new form of urban asylum, on the other hand, should be placed 'in the vicinity of a small town, where the necessary provisions may be had, and intercourse conveniently maintained with the inhabitants. It is needful to have asylums also in proximity to large cities'. On this last imperative, he wrote,

> [t]he proximity to the large city offers the appreciable advantage of allowing the patient frequent intercourse with their family, which nevertheless has to be controlled by the physician. The improved but not yet recovered patient may enjoy his family's and his friends' nearness as one of the essential means of his mental wellbeing, of becoming calm and regaining his inner strength, of returning to his former pursuits (quoted in Rössler et al 1994 p. 820).

Griesinger's urban asylum was a means to maintain the patient always socialised, present in the real world. The urban asylum's ultimate task was the observation of acute patients with transitory symptoms, preferably in their earlier course of disease, when the clinical pictures were more instructive and revealing. The chronic patient was of no interest for the scientific psychiatrists working in the intensive observations wards (*Wachabteilungen*)[39] of the urban asylums. In fact, once chronicity set on, patients were meant to be sent to community or custodial care outside of

[37] Many of these issues will re-emerge in the context of Isserlin's clinic in the 1920s (see chapters 4-5).
[38] Those who were not able to work were meant to be send to nursing homes, which nevertheless should encourage recreational practices and activities.
[39] Originally implemented in France as 'survaillance continue'. Next to the wards were lecture halls, a completely new feature for a psychiatric institution.

town (Engstrom 2003 p. 56).[40] Moreover, and in contrast to the alienist in charge of the rural and the traditional asylums, the medical psychiatrist was not supposed to live in the urban institutions. However, the patients needed to remain in constant observation and surveillance by well-trained staff. In addition, admission here was meant to be quick and bureaucracy kept to a minimum, so that psychiatrists were able to contemplate a large number of disease processes at their earliest possible stages (Rössler et al 1994 p. 820).

Griesinger's institutional plans were implemented – although in different ways – in many regions of the German speaking world, and many urban asylums were constructed, mostly as part of new university-run and teaching hospitals. The rural asylums and the urban asylums became very different institutions, which ultimately relied not on curability criteria, but on terms of duration of stay: while in the former, the probabilities of long stays were high, in the latter they were designed to be short; quick and efficient turnover of patients with acute symptoms became paramount. Furthermore, Griesinger and his followers were making sure that these 'academic' institutions were disassociated from the settings of alienist madhouses in the mind collective. In short, the urban asylum – soon to be psychiatric clinic[41] – was thought as a new kind of elite institution situated in the vicinities of hospitals and universities, within reach of internists, physiologists, neurologists, families and friends, and thus, outside the spheres of influence of traditional alienists and asylum superintendents (Hoff 2015; Engstrom 2003).

The German states began constructing asylums more systematically in the cities in the 1880s. By the turn of the century, there were some 40 asylums which had been influenced by Griesinger's reform proposals throughout the German empire (Rössler et al 1994 p. 821). Nevertheless, it quickly became evident that the operation of many of these institutions were not as clinically centred as Griesinger himself had envisioned. On the one hand, the urban asylums constructed between Griesinger's sudden death in 1868 and the late 1880s became mostly stationary wards of university clinics which fulfilled largely administrative functions of referral of mentally ill patients to the larger, still overcrowded institutions located in the countryside. On the other hand, the observation wards lost significance vis-à-vis laboratories for brain pathology research and lecture theatres for demonstrations. Due to their (semi-) integration with the academic and medical world, the directors of the urban asylums of the late nineteenth century managed to dedicate themselves, in some cases almost exclusively, to the pathological anatomy of, and to physiological experimentation on, brains (including those of animals). Psychiatry began to be, research-wise, represented and taught by cerebral pathologists. As a consequence, the empirical study of the psychology and course of illness of its transitory patients – something on which Griesinger *also* laid great emphasis in the quest for medical legitimation of the

[40] It was also important not to provide the rural asylums with acute cases, because this would create a psychological burden on the chronic patients there.
[41] And later on, by the turn of the twentieth century, also 'nerve clinic' (*Nervenklinik*).

discipline – was delegated to ward assistants. Nevertheless, as we will see, this deviation from the path towards medical legitimation laid out by Griesinger never went unchallenged, and was quickly dethroned by more psychologically inclined directors of psychiatric clinics.

III. Dead Brains, Dead Ends: the Stagnation of Psychiatry as Neuropathology in the Late Nineteenth Century and the Return to the Bedside

Localising and modelling the mind on the nerves

The relocation from the countryside to the city effected by the new generation of neuropsychiatrists inspired by Griesinger's dictum, had negative consequences for orthodox alienists. If madness was brain disease, that is, if the 'the mental reflex of the brain' was responsible for insanity, as the new academic psychiatrists were enthusiastically advertising, alienist practice was running the risk of becoming irrelevant and even of being reduced to complete quackery. However, by the late 1860s, traditional alienists had by no means disappeared. In fact, some alienists themselves had designed and implemented quite sophisticated therapeutic-disciplinary regimes.[42] Achieving efficient mobilisation of staff, patients, and resources was by no means an easy task, and thus, to be an alienist required considerable administrative skills. For instance, most of them were certain that the environment made crucial impact on the mental wellbeing of their patients and, therefore, they spent a tremendous amount of energy in ensuring optimal institutional settings. Thus, despite the fact that there were a considerable number of mental asylums by mid-nineteenth century which were poorly run and where no therapeutic planning or imaginative rehabilitation regimes were implemented, most German orthodox alienists saw themselves as practicing an empirical or experiential 'alienist science' even by the end of the nineteenth century (Guenther 2015 p. 33; Engstrom 2003 pp. 88-89). No wonder, then, Griesinger's theory and program were considered so provocative. Orthodox alienists felt that their experiential science was being dishonoured when Griesinger and his followers described the institutions they ran as 'convalescent homes' and their practice as nothing more than 'custodial management' (Hirschmüller and Whitrow 1999 p. 401). Moreover, the brain was already part of the jurisdiction of neuropsychiatrists originally trained as internists in general hospitals, and hence, alienists were becoming increasingly

[42] A description of nineteenth century rural asylums (*Irrenhäuser*) would fall out outside the scope of this thesis. For and overview and details see for example Schrenk (1973), Jetter (1981), Marx (1991), Blasius (1994).

intellectually isolated as the second half of the nineteenth century came to an end. Meanwhile, since the quick admission in the urban asylum ended almost always in a referral to a rural institution, alienists were receiving more patients than ever. Critically overburdened with administrative tasks, alienists had no time to compete for the title of scientific psychiatrist against the urban academic and physician, who had time and resources not only to elaborate abstract theories and diagrams of mental disturbances from their pathological findings, but also to teach future psychiatrists (Marx 1970 p. 355).

Nevertheless, the relative fall of alienist and rural psychiatry in Germany – especially in terms of jurisprudence over patients – was not the outcome of Griesinger's work alone. The disciplinary power of the theory of the mental reflex and of neurobiological empirical research was from the start boosted by a series of scientific and technological innovations in medicine taking place as early as the 1810s. The experimental physiologists Francois Magendie and Charles Bell discovered, independently, the anatomical differences of sensory and motor functions of the spinal cord. Bell showed that the posterior spinal root nerves contained only sensory fibres, while Magendie showed that the anterior spinal root nerves contained only motor fibres. These discoveries fortified the theory of the reflex mechanisms as the basis for a theory of mind and (or as) brain. The theory for mid-century neurophysiologists was then, roughly, that sensory nerves first forwarded what they received through the sense organs to the brain so that then the motor nerves would carry impulses forward from the brain to glands and muscles. It was then inferred that this physiological mechanism involving sensory and motor nerves of the spinal cord could be found also in the brain (Young 1970 pp. 74ff). The early neurophysiological discoveries of Bell and Magendie were enhanced through the experimental physiologies of Theodor Fechner, Johnannes Müller and Hermann Von Helmholtz, and by the cellular pathology of Virchow, among other developments from the 1840s onward.[43] The mechanistic ideas and naturalistic philosophy accompanying these developments seemed to have substantiated Griesinger's psychiatric model based on sense-reflex physiology: as it was the case for the nervous system, centripetal input and peripheral output were the central physiological mechanics of the psyche. This was treated as scientific fact in psychiatric university clinics (Hagner 2000 pp. 256-258; Engstrom 2003 pp. 60; 89-90).[44] The gulf between alienist (psychiatric care) and academic psychiatry (scientific research) became greater once the first generation of psychiatric clinic directors combined the reflex theory with *a lesion model*, as I will briefly indicate. If Griesinger had denigrated the reputation of alienists, those who took his theories and the findings of his contemporaries further during the 1870s and 80s ended up striking alienism an

[43] For a detailed account of these developments see Hagner (2000 pp. 247ff).

[44] Johannes Müller, who in his 'Kantian' *Handbuch der Physiologie des Menschen* (1837-1840), put an end to the traditional emanation theory of perception by which sound and visual images were transported through the nerves from sensory receptors to the brain, a totally passive and incomplete picture of neurotransmission. Thanks to the use of the Bell-Magendie law by Müller, the irritability or contractibility of the central nervous system as opposed to the 'external', physical objects, started to be understood as being responsible for sensations and motions. The psychological doctrine of association gained physiological status due to its fusion with this law. See Young (1970) for more details.

even harsher blow (Hirschmüller and Whitrow 1999 p. 401; Engstrom 2003 pp. 80-81; Guenther 2015 pp. 46ff).[45]

By the 1870s, urban German psychiatrists, eager to secure professional status within the academic and medical communities, saw themselves compelled to switch their interests and vocations from the bedside to the pathological laboratory. This was accompanied by a rapid propagation of materialistic and speculative theories about the innerworkings of the cerebral cortex. As Engstrom puts it (2003 p. 94), the modern psychiatrist was meant to train not only as a pathological anatomist and as a physiologically inclined internist, but also as 'a diligent researcher'. Clinical and psychological expertise became secondary or, in cases, irrelevant. Urban psychiatrists insisted that the mind and the body ran parallel ontological courses. They argued that the functions of the mind were the very same functions carried out by nerve cells populating discrete cortical and peripheral nerve structures. In contrast to Griesinger's stance, this was not just methodological materialism. Rather, they advocated for a sort of eliminative materialism, whereby the recognition of the organicity of mental illness implied a de facto dismissal of psychological and subjective phenomena as legitimate objects of study. The subjective experiences of the mentally ill started to matter less than the objective and potentially observable structures of their cerebral cortexes, spines or ganglia. Accordingly, while the wards of the university psychiatric clinics became, more than anything, potential sources for subsequent microscopic analysis of histological specimens, bedside activity was replaced by post-mortem brain dissections and microscopic examinations as the central psychiatric practice.[46]

The discipline of observation which, as indicated earlier, Griesinger advocated for, was rapidly replaced by that of the examination table: a neuropsychiatrist's expertise was demonstrated in swift autopsies, in the use of sophisticated instruments and techniques for opening up craniums, dissecting brains, applying electrodes, and in a compliance to a strict discipline of microscopic observation (Engstrom 2003 p. 89). As Engstrom argues, the economy and conventions of laboratory work and instrument usage significantly framed the understanding of mental illness. Moreover, urban psychiatrists' move closer to neuropathology was also strategic; their aim consisted in getting for the urban asylum jurisprudence over nervous or neurological patients as well (Engstrom 2003 p. 103).

[45] These were irreconcilable standpoints. As Dörner (1981 Ch.4.2), indicates, alienists perceived the urban asylum – with its patient demonstrations in front of students – as a degrading threat to the well-to-do patients, who were often mixed in with the lower classes in the urban asylum. Previously, the upper-middle class insane were taken care by the family or in private institutions, while only the poor were sent to the countryside. That had been the situation for a reason: a multiclass system of care was for alienists highly untherapeutic (See also Marx 1970 p. 541).

[46] The vivisection of and experimentation with animals was as common a practice as that carried out on human corpses.

Griesinger's work of the 1850s and 1860s was thus the catalyst for a new generation of younger, contemporary neuropsychiatrists. Among these were Theodor Meynert, Karl Wernicke, Paul Flechsig, Gustav Hitzig, and Carl Westphal (who took the chair of neuropsychiatry in Berlin after Griesinger's death)[47]. Having pursued mostly academic interests, none of them had any involvement whatsoever in asylum culture; they had spent little time at the bedside with the patients of the institutions they had worked at. Instead, they spent most of their time in the labs. Their ultimate aim became to find methods whereby they could establish the anatomical structure of the brain and map its physiological attributes. Crucial in this endeavour was the progressive application of the functional division between sensory and motor nerves mentioned earlier to successively higher parts of the central nervous system, and ultimately to the cortex, in the hope that a uniform explanatory principle for both physiology and psychology would be empirically confirmed.

The German neuroanatomist Theodor Meynert dedicated huge efforts to this task. Becoming the chair for psychiatry at the University of Vienna in 1873, Meynert built his career in the 1860s in dissecting rooms. He drew upon the connective principle of the physiological reflex as given Bell-Magendie law, which interpreted the brain as the innerworkings of sensory and motor parts. Meynert differed from his predecessors, in that he found resources not in physiology textbooks but rather in the work of association psychologists. According to the latter, two sensations, or 'sensory images', might be associated if they occurred, for instance, simultaneously in consciousness. Meynert tried to explain these psychological processes in physiological language (Marx 1970 pp. 365ff; Guenther 2015 pp. 15ff). For the connection of subcortical parts with the cortex, he hypothesized 'projection fibres' whereas for the connectivity of parts within the cortex itself he talked about 'association fibres' (Eggert 1977 pp. 22-23). According to Meynert, sound and visual images were stored and combined with motor memory images, also stored in the nerves, by means of association and projection fibres. Meynert was thereby endorsing the idea that the physiology of nerve fibres were the very processes meant to be studied by psychiatrists. Association systems were conceived as the physical substrate of mental functions, and disruptions of it as the causes of mental disturbances (Marx 1970 p. 368; Tesak and Code 2008 pp. 68-69). As Katja Guenther (2015 p. 21) explains, all this became possible because Meynert and other pathological anatomists reforming psychiatry were not constrained, different to other medical disciplines, by any set path towards the somatisation and medicalisation of their objects.[48]

[47] For more on these figures, see Marx (1970; 1972), Young (1970), Lanczik and Keil (1991), Breidbach (1997) Hagner (1999; 2000), Guenther (2015).
[48] By 1865, Meynert became also influential as a technician for his methods on how to separate the stem from the cerebral hemispheres, how to remove the meninges, and how to cut slices of grey matter in order to obtain the right surfaces (Guenther 2015 p. 21).

Around this time, Paul Broca (1824-1880) managed to persuade his French colleagues of the existence of a 'faculty of articulated language' on the basis of certain clinico-anatomical evidence of speech impairment, or 'motor aphasia' (deficit in speech production). In other words, Broca had discovered, neuropsychiatrists thought, the seat of speech production in the cortex: to be precise, in the third convolution of the left frontal lobe. This anatomical allocation of speech production initiated the paradigm of localisation of function.[49] In addition, the pioneering experimental work of Gustav Fritsch and Eduard Hitzig in the 1870s demonstrated that the cerebral cortex did play a key role in sensory-motor functions, something that was assumed but not proven at the time of Broca' discovery. On analogy with the interworking of spinal ('subcortical') structures, if the cortex had then motor centres, as the electric experiments on dogs carried by Fritsch and Hitzig suggested, then it was assumed it also had sensory ones (Hagner 1999 pp. 185ff). In short, there was some evidence for the theory of cortical localisation of sensory and motor functions. Later on, in his 1874 monograph, *Der Aphasische Symptomencomplex*, Carl Wernicke discovered another cortical centre, which, upon lesion, produced 'sensory aphasia' (deficit in speech comprehension). There, he followed Meynert and the recent experimental developments and explained the psyche as 'a sensory-motor system of cells and fibres operating according to reflex laws' (Harrington 1996 p. 256). However, Wernicke argued that Broca's idea of localizing faculties for speech and other mental functions in neat, circumscribed cortex centres was wrongheaded. Instead, what should be somehow localised, Wernicke explained, were 'memory images' of past motor and sensory experience. These represented, he believed, the ultimate units of all mental activity. These 'mental atoms' combined with each other in accordance with Meynert's fibres. Thus, on the one hand, the location of Broca's and Wernicke's areas confirmed the principles of localisationism, that is, of the doctrine of cortical function centres. However – and this was again an irredeemable tension of the so-called 'lesion model' of mental disturbance – these areas were described by Wernicke not just as centres but as parts of reflex systems and dynamic circuits, along which damage occurred. Strict anatomical localisation of function-damage was at odds with this latter view.

The diagrams that Wernicke and other late nineteenth century neuropsychiatrists theorised with were meant to allow predictions of well-defined syndromes through *disruptions* (lesions). Accordingly, the task of the clinical neuropsychiatrist was *only* to find examples (single cases) which would confirm the theoretical functional architecture already designed and mapped out by them. As Levelt indicates (2012 p. 75), for those followers of Wernicke who worked within the paradigm of 'classical localisation' in neuropsychiatry, it was always the theoretical functional architecture that dictated, by deduction, the empirical and clinical procedures.

[49] For details on Meynert's, Broca's, Hitzig's, Fritsch's and Wernicke's findings and their significance for the paradigm of localisation, see for example Breidbach (1997 pp. 125ff) and Hagner (2000 pp. 229ff).

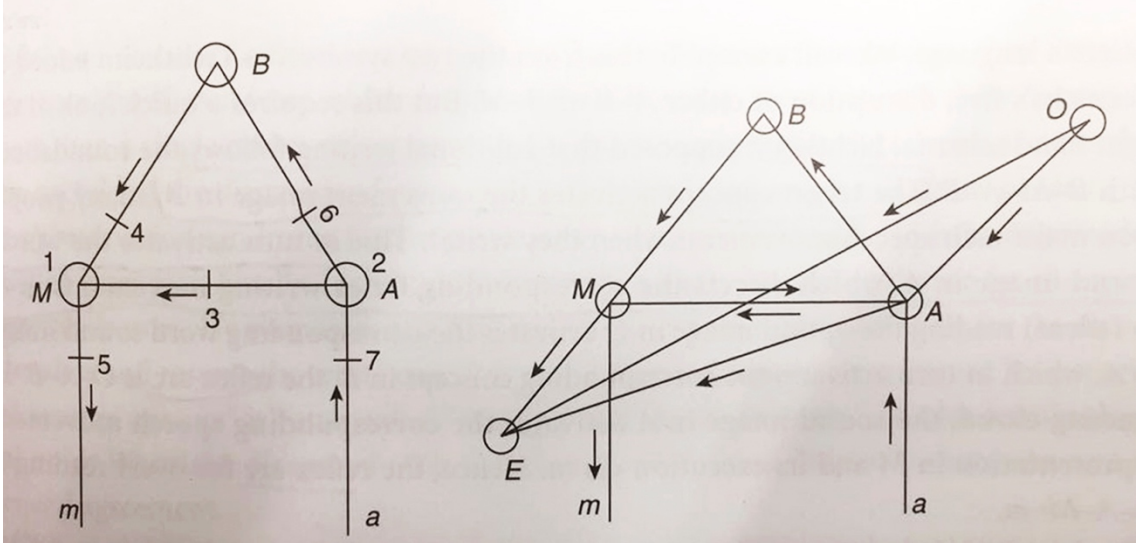


Figure 1.1: Mechanics of word-memory image association (Wernicke-Lichtheim model).

The left diagram, 'Lichtheim's house', represents the functional architecture of spoken language. *A* is the centre of auditory word images, *M* the centre of motor images. The reflex arc runs from auditory impressions *a* via *A* and *M* to *m*, the motor impulses for the speech organs. *B* is the centre of concepts, which is connected to both *A* and *M*. The right schema adds the functional reading/writing system. *O* is the optical representation centre for letters and letter combinations. *E* is the centre from which the organs of writing are innervated. [Levelt 2012 p. 75]

As we can observe, the neuropsychiatry that followed Griesinger's dictum had become by the mid 1880s increasingly detached from evidence-based research, not to mention from real psychological explanations of mental phenomena. Neurological and psychiatric disorders were explained both by 'movements', 'activations', or 'targeting', of sensory and motor memory images. In fact, Wernicke's theory of sensory aphasia was erected on the basis of the clinical study of one single patient! As Guenther (2015 p. 44) indicates, Wernicke's characterisations of nervous disorders on lesion models and diagrams were ultimately 'thought experiments' based on the extrapolation of the physiological reflex into the domain of the mental, not on actual successful correlations. Moreover, the tensions mentioned earlier, namely, those produced by the opposed tendencies of, on the one hand, the dynamism of the reflex arc, and on the other, the idea of discrete, static nerve structures as responsible of mental functions, on the other, were ultimately insuperable. Nevertheless, the emphasis of neuropathology and experimental physiology within the nineteenth century quest for the somatisation and medicalisation of insanity had been in constant attack from many fronts. On the one hand, there were the complaints of the intellectually isolated and increasingly overburdened alienists. On the other, there were psychiatrists from within, like Karl Kahlbaum, who, already by the 1860s, fervently condemned the disregard for systematic and disciplined observation of the psychological states, symptoms, and courses of illness of the patients in the new psychiatric clinics of Meynert, Wernicke and the like.

Kahlbaum, the young Kraepelin, and an alternative to 'brain mythologies'

The ultimate goal of neuropsychiatrists had become the establishment of correlations between, on the one hand, anatomical and physiological abnormalities found in the pathological laboratory, and on the other, psychopathological signs and symptoms that the patient exhibited at some point before dying. This was understood as the clinico-anatomic (or 'cross-sectional') method, also in accordance with the lesion model of disease. The re-orientation of the psychiatric profession in the last third of the nineteenth century towards medical science through these methodologies had insuperable difficulties. Firstly, dead brains did not permit the clinician to observe the pathology *in action*. Secondly, a somatic approach to mental illness necessarily invoked methodical conjectures from elaborated, purely theoretical models. Accordingly, the correlation of actual symptoms of mental illness and post-mortem anatomical findings would always involve a leap of faith. Thirdly, it became clear that the encouraging localisations of Broca and Wernicke would not be matched again; certainly not for the psychoses. In addition, there was a very limited application of what neuropathologists did in the laboratory to the actual treatment of patients, who, for all practical purposes, were still confined in asylums and dealt with by alienists. It became evident early on that psychiatry could not establish itself as a medical science only (or primarily) by the exclusive tracing of pathological changes in the brain (Kraepelin 1887/2005 p. 351-352; Guenther 2015 p. 48).[50]

In the late 1880s, some of psychologically-oriented psychiatrists who read each other had begun to sketch a way out of this derailment in the clinical ethos of psychiatry. Apart from Ludwig Kahlbaum, Paul Julius Möbius, and Theodor Ziehen, this loose faction of psychologically inclined dissenters included the young psychiatrists Robert Sommer and Emil Kraepelin. These two had entered the field as scientific assistants of important neuropathologists such as Meynert, Fleichsig, and Wernicke, all of whom championed the hegemonic deductive and eliminative materialism that their students were beginning to distance themselves from. This younger generation took emphasis away from the brain, and tried out inductive methods to study the symptom complexes of their patients in more systematic ways. They saw bedside research not merely as a truth-verification tool, like neuropathologists had been seeing it, but instead, they saw in systematic inductive methods the very means for arriving at the truth with regard to mental illness (Hoff 2015 pp. 32-33; Jablensky 2007 pp. 382ff). The remainder of this

[50] Criticism came also from neuropathologists themselves, who were disenchanted with the project. For example, Franz Nissl and Konrad Rieger admitted that the procedures were extremely laborious and too intricate, and only to produce very little significant knowledge (Guenther 2015 pp. 63-64).

section (and in a way, of the chapter) is dedicated to the discussion of the ways in which these psychologically-inclined, nosology-infatuated, and observation ward-centred psychiatrists, attempted, with relative success, to reshape the means by which psychiatry could try establish itself as a true medical science.

These early neuro-sceptics from within, as we could call them, believed that their older teachers had been prioritising the wrong phenomena. They saw the speculative interpretations of figures such as Meynert and Wernicke as having degenerated into a 'brain mythology' (Hoff 2008 p. 13). They considered vital to return to its rightful central place in the discipline the most important methodological skill for the study of mental illness, namely, the 'incisive gaze' (*durckblickender Blick*) into the active psyche of a patient (Engstrom 2003 p. 121). Yet this had to happen in a way that did not let doctors succumb to the pitfalls of early nineteenth century forms of psychic romanticism. On the one hand, anatomical findings were still considered by Sommer and Kraepelin to be important, but not central. On the other hand, psychological explanations of mental illness (not theoretical diagrams of reflexes) were to be responsible for guiding empirical research, yet in ways that did not compromise objectivity, rigour and exactitude. Sommer and Kraepelin believed that this would be achieved by directing their clinical gaze not primarily to individual patients, but to 'disease entities' (*Krankheitseinheiten*). The existence of 'disease entities' seemed to manifest itself exclusively through, first, the (statistical, quantitative) data gathered by a disciplined clinical observation of the course of illnesses of a large number of patients over long periods of time, and second, through the (statistical, quantitative) supplementary psychological experimentation with these patients.[51]

Kraepelin began his professional career in 1878 working with Bernhard von Gudden (1824–1886) at the District Mental Hospital in Munich, where he stayed until 1882. He then moved to Leipzig to work with Paul Flechsig and Wilhelm Erb (1840–1921). He was promoted to university lecturer there in 1883 but was soon after fired by Flechsig due to irreconcilable views. This was when Wundt, who was running a cutting-edge experimental laboratory in the city, encouraged him to join him. After a couple of seasons there, Kraepelin took a teaching position at the German occupied Estonian city of Dorpat, where two years later, he was given the chair of psychiatry (Engstrom 1990 pp. 44-45). On his appointment in 1886, Kraepelin delivered an inaugural lecture. At the time, he was 30 years old and had been working in psychiatry for only 8 years (including the period doing experimental psychology under Wundt). The lecture was entitled: 'The Directions of Psychiatric Research' (1887/2005). W can observe there that he firmly believed that establishing the laws that translated anatomical and

[51] I discuss the clinical method in the remainder of this section and throughout the next one (III). The second chapter is dedicated to the experimental-psychology method. It is by using the latter that Isserlin started publishing in psychiatry. The first one amounted to his day-to-day training in Giessen with Sommer and in Heidelberg with Kraepelin and later with Nissl.

physiological data into psychological explanation – in other words, the neuropsychiatric goal – was possible and desirable. What he argued for was for a reconceptualization of pathological anatomy and neurophysiology as auxiliary sciences (Kraepelin 1887/2005 p. 355).[52] With respect to the formation of disease groups he felt that, in the absence of neuropathological criteria, he had to make do with clinical descriptions. Thus, in his quest for stable descriptions of disease he resorted, first, to operational definitions: 'I tried to organize the confusing manifestations of disease in my patients by describing their behaviour as *exactly* as possible' (Kraepelin 1983 p. 35). But he would get nowhere with the classificatory tools available; the 'taxa' he had at his disposal were not distinct enough. The failure of pathological research to deliver a system of classification of mental illnesses according to structural aetiologies had left psychiatry, as Engstrom (2003 p. 127) put it, in a 'nosological limbo'. German psychiatry was in critical need of a reliable system of classification, a nosology up to the task presented by the diversity and complex reality of mental illness (Kraepelin 1887/2005 p. 360).[53] Actually, the problem was that, even if one day pathological anatomy was to fully uncover the functional architecture of mental processes, this would have contributed nothing to the actual *analysis* of subjective processes where psychopathology manifested. The lesion model had proven insufficient for the description of the range of pathologies psychiatrists confronted in their clinics. To address this situation, Kraepelin found inspiration in the intuitions of Karl Kahlbaum. Whilst in Dorpat, paraphrasing Kahlbaum, he also 'was led to consider the importance of the course of the illness with regard to the classification of the mental disorders (Kraepelin 1983 p. 49; 1887/2005 p. 360).[54]

Some circumstances in Dorpat played in Kraepelin's favour. There was, for instance, a relatively high influx of cases of psychosis in mild or very early stages, which allowed Kraepelin to study clinical histories in detail and follow the course of illness in its various manifestations. He realised that the distinction between the 'form' (or 'essence') of a disease and its various 'presentations' (*Erscheinungen*), which had been introduced by Kahlbaum as early as 1863 needed to become the cornerstone of a renewed medical psychology. Kahlbaum had emphasized the conceptual and methodological differences between neuroanatomy and psychopathology. Accordingly, he had put forward an 'empirico-clinical approach' that followed a longitudinal, diachronic concept of disease, to be distinguished from the cross-sectional, synchronic used by neuropsychiatrists such as Wernicke. In

[52] Contrary to what some authors claim (for instance, Guenther 2015 pp. 66-67; Roelcke 1997 pp. 383ff; Hagner 1999 p. 179), namely, that Kraepelin effected a 'clean break with the past' and implemented a 'fresh' and 'new psychiatry', or that he 'rejected the physiological pretensions of neuropsychiatry', things seem to have been more nuanced. As we will see, he just re-accommodated, with the help of Isserlin and others, the neuropsychiatric project as auxiliary within a major disciplinary arrangement.

[53] All these problems with nosology and aetiology were in one way or another also present in the psychiatric profession in other parts of Europe, from Vienna, through Paris, to York. See Shorter (1997) and Scull (1982).

[54] Philippe Pinel seemed to have been the first to have had attempted a classification taking into account, not only symptomatology, but also the observed course of the illness. The work of Kahlbaum had obvious parallels with this approach, See de Boor (1954).

other words, when a disease was judged by its form, movement, variation, patterns, in short, by its trajectory in time, Kahlbaum suggested, the nosological intransigency of the cross sectional approach (that of correlating lesions with symptoms vertically, at given points of time) could be overcome. With progressive paralysis of the insane as a powerful example, he exemplified the path from a mere syndrome course unit (*Syndrom-Verlaufs-Einheit*) to an etiologically defined disease entity (*Krankheitseinheit*) (Hoff 2015 p. 32). Indeed, the 'essence' of the disease was to be found in its natural history and temporal profile. Kahlbaum had also hinted at the distinction between acute and chronic states as crucial for classification. Thus, Kahlbaum had been defending a longitudinal approach already by the time Griesinger was implementing his urban asylum. Kahlbaum's views were, however, abstract, programmatic and unsystematic, and were not backed by enough empirical evidence. Kraepelin's challenge in the late 1880s became the testing, systematising, and implementing of Kahlbaum's intuitions. The test was, in theory, simple: what symptoms – Kraepelin asked – carry information about the essence of diseases, and what symptoms were accidental? He hoped that, once such distinction was established, those essential symptoms could be used reliably as criteria for an objective classification of disease entities (Berrios and Hauser 1988 p. 815). Ten years after his inaugural lecture in Dorpat – and once Heidelberg – Kraepelin announced that, finally, he had 'found a new way of looking at mental illness' (quoted in Berrios and Hauser 1988 p. 816).[55]

IV. E. Kraepelin in Heidelberg and R. Sommer in Giessen: a Discipline of Diagnosis and Prognosis

In 1891 Kraepelin was appointed to the chair of psychiatry at the university of Heidelberg. The university had already a well-trained staff, as well as a fine neuropathological laboratory.[56] Thus, Kraepelin had, for the first time, enough time to explore and put in practice his own research ideas. As mentioned, Kraepelin had become by then quite disenchanted with the psychiatry being practiced almost exclusively in pathological laboratories and dissecting rooms and he was therefore promoting a clinical and experimental, not anatomical foundation for the classification of mental diseases. Consequently, he worked towards the implementation of Kahlbaum's longitudinal method. From his early work in Munich and Dorpat he had become convinced about the fact that there was only a handful of *main types* of mental illness, each with their *own natural and characteristic course and outcome*. In addition, he believed that given the proper clinical armament, these types could be spotted. With the

[55] For more on Kahlbaum's research, see Lanczik (1992)
[56] The building was near a railway station and this facilitated patient attendance and follow-ups (Berrios and Hauser 1988 p. 816).

aid of inscription technologies that optimised observation, a clinically experienced gaze could cut through the life story of large numbers of patients, and as a consequence, mental diseases, as any other natural phenomena, could be made scientifically graspable. By 1890, Kraepelin – and shortly after Sommer – had effectively abandoned the nineteenth century cross-sectional approach as the leading procedure in psychiatry (Shorter 1997 p. 102).

Kraepelin established mechanisms for follow-up of patients transferred to rural asylums or sent back into the community. Outpatient clinics (*Ambulanz*) were crucial in the case of the latter. For all patients having been transferred from his clinic, clinical notes were intensively amassed in especially designed 'index' or 'diagnostic cards' (*Zählkarten*) (Shepherd 1995 p. 176). As Volker Roelcke (1997 p. 387) points out, these 'counting cards' were no less than 'semi-structured case summaries'. With every admission, one of these cards would be assigned. The card was then regularly updated as much as several times a day by different members of staff. Kraepelin used a kind of 'pattern recognition' process involving iterative permutations and rudimentary statistical methods to detect differences and similarities among cases. Eventually, certain hierarchical order, as in groups and subgroups, emerged, which begun to be used for more refined descriptions of prototypes of 'essences' of mental illnesses. Crucial was the idea that these essences and types were not written in stone, and further observation would inevitably bring about changes in them (Jablensky 2007 p. 384; Shepherd 1995 p. 176). Success here thus depended directly on the quantity of patients observed over time and on the possibility of establishing reliable classifications out of the implemented regimes of inscription. Thus, quick turnover of acute cases, detailed observation, examination and surveillance over time for the ongoing updating of diagnostic cards, formulations and reformulations of prognosis, discharge or transfer patient, statistical analysis, updating data bank – all became crucial activites (Berrios and Hauser 1988 pp. 815-820; Engstrom 2003 Ch.5; Roelcke 1997 pp. 385ff).[57]

As Kraepelin explained, the establishment and classification of disease categories needed to be preceded by a backward extrapolation from the outcome of the disease; it was the recorded trajectory, not the abstract, atemporal symptoms, that made mental illnesses visible to the medical eye. Kraepelin – and soon after also Sommer, as I will briefly indicate – thought about the 'urban asylum' as inscription factories that facilitated the clinical and scientific identification of psychopathological entities using the longitudinal approach on large numbers of mental patients. For Kraepelin's generation of psychiatric clinic directors, the clinic should aim at seeing as many patients as possible, diagnosing them, an at the earliest convenience, discharge them. Accordingly, Kraepelin established sophisticated surveillance wards in his clinic (Engstrom 2003 pp. 131-137). He also used bed therapy not only as a convenient

[57] For examples of how the cards and the clinical discipline around them created medical categories, see Shepherd (1995) and Jablensky (1995). On how the cards themselves were allegedly not as empirically used as Kraepelin advertised, see Engstrom and Weber (1997).

therapeutic, but also as a way of making that surveillance easier for medical staff: patients could be observed at all times in the same standard circumstances. In addition, proceeding like this helped him establish an outward impression of the psychiatric clinic as a medical centre (*Heilanstalt*), where the image of the asylum as the mere depositary for the mentally insane (*Irrenhaus/Irrenanstalt*) was fully erased (Engstrom 2003 p. 138).

However, this generation of clinical psychiatrists also encountered serious obstacles. Kraepelin had to contend with the fact that soon after his appointment in Heidelberg, chronic and demented patients were rapidly growing in number in the clinic. As the law dictated in Baden, the clinic could not refuse admissions, and there was a tendency for patients to accumulate as the long-stay rural institutions at Pforzheim and Emmendingen – to which patients who did not get better were meant to be swiftly transferred – seemed to be always overwhelmed.[58] He addressed the Ministry suggesting three amendments to the insane laws in place in Baden: the construction of another long-term hospital, the right for his clinic to select patients, and the acceptance of voluntary admissions; all measures designed to secure the turn-over of patients in acute and early phases of diseases for purposes of research and teaching. On this, he was opposed by orthodox alienists – such as Schuele from Illenau – who instead demanded the diversion of funds towards Pforzheim and Emmendigen. Kraepelin did not convince the Ministry and the overcrowding of chronic patients continued to obstruct his plans. As Berrios and Hauser (1988 pp. 186-187) suggest, these difficulties might have prompted his decision to leave Heidelberg for a less state regulated university clinic.

Despite the inconveniences, Kraepelin had managed to establish through his inscription regime of diagnostic cards and surveillance wards that, regardless of the clinical picture at early stages of the trajectory of their illnesses, a significantly large number of patients had ended up in an irreversible state of dementia. Thus he explained in his *Memoirs*:

> It gradually dawned on me that many patients, who initially presented a picture of mania, melancholia or amentia showed progressive dementia. In spite of individual differences they began to resemble one another. It seemed as if the earlier clinical differences had little bearing on the course of the illness. This evolution was similar to what was known with regards to paralysis. Thus, I could not resist concluding that only one illness process might be affecting many of the institutionalized patients that developed dementia. The process might be slow or quick and sometimes accompanied by delusions, hallucinations and excitement. On some occasions there might be a sad (or an elated) mood – whatever its presentation, it always led to the destruction of the personality (Kraepelin 1983 p. 383).

[58] Kraepelin's antipathy towards state-run mental institutions started to consolidate at this point, which, as we will see in later chapters, was vital for crucial early twentieth century developments in biopolitics.

This realisation, namely, that one essence, one disease entity was behind many of the different psychotic presentations could have only been possible with the implemented long-term observation regime. This work in Heidelberg brought about the understanding of dementia praecox as a central type of psychosis. Many of his patients, who firstly presented mania, melancholia or amentia, deteriorated intellectually in more or less the same patterns, though at many different paces, yet ultimately reaching the same outcome, namely, dementia (Jablensky 2007 p. 384).

Kraepelin developed his views on prognosis further. The outcomes were mapped in the successive editions of his *Textbook* and through the development of his lectures. Kraepelin's research in Heidelberg made him consolidate two distinct disease entities (technically still only 'clinical concepts'): 'degenerating psychological process' and 'dementia praecox'. As he explained in the 4th edition (1893),

> [t]he common feature of those illnesses which we group under the name of degenerating psychological processes is the rapid development of a lasting state of psychological weakness... What we call dementia praecox is the sub-acute development of a peculiar, simple condition of mental weakness occurring at a youthful age (quoted in Berrios and Hauser 1988 p. 817).

These 'essential' distinctions were further enhanced by the results of his correlational work with the diagnostic cards. He managed to distinguish two groups of symptoms: those common to all the psychoses but insignificant for the prediction of outcome, such as 'sensory deceptions', hallucinations and 'affective pathology'; and those present only in some psychoses but indicative of dementia as outcome, such as 'flight of ideas, orientation failures, perceptual disturbances, motor excitement and inhibition' (Kraepelin 1897 pp. 840ff). Thus, research on the so called 'Dorpat question' (how to differentiate essential from accidental symptoms), had been consistently showing that Kahlbaum was right all along: the clinical principle for symptom classification was the study of illness courses. Attentive longitudinal observation and ascertainment of terminal state allowed the clinician to differentiate between essential and accidental symptoms. Kraepelin corroborated that, as Jablensky puts it, that the aim of 'clinical research consisted in identifying replicable patterns of intercorrelations between symptoms, course and outcome' (Jablensky 2007 p. 383).[59]

[59] As Hoff (2015 p. 33) explains, between the second and the ninth editions of his textbook (1887-1927) Kraepelin did not change his clear-cut, albeit mostly implicit, philosophical realism. As for the essential features of mental disorders, he stated that especially psychotic disorders would eventually be classified in a 'natural' system. Consequently, he postulated that there would be no fundamentally different nosological findings depending on the scientific method which was applied. In other words, pathological anatomy or clinical symptomatology including long-term course of illness (the latter being his own life-long focus of research) would ultimately converge in the same 'natural disease entities', simply because they were natural kinds. These natural kinds were, in Kraepelin's mind, being detected, not created by research.

Parallel to Kraepelin's regimentation of psychiatric observation, Sommer – soon to be Isserlin's first mentor in psychiatry – was developing something quite similar in Giessen. After studying medicine and philosophy with Karl Ludwig and Wilhelm Wundt in Freiburg and Leipzig, by the mid-1880s, like Kraepelin, Sommer worked intensively as a doctor's assistant in a foreign language. In the asylum at Rybnik, today southwest Poland, Sommer also became concerned with the stagnation of neuropathology and, even more than Kraepelin, with the futility of rural asylums. His dissertation titled 'Sommering's[60] doctrine of the seat of the soul' (1891) was a new defence of medical psychology against backward romanticism. Moreover, in 1890 he had moved to Würzburg, where he worked under the neuro-sceptic Konrad Rieger and his *Habilitation* thesis 'A rare case of speech-disturbance' of the following year made evident his critical stance towards the doctrine of diagrams, centres, and lesion models. Again, like Kraepelin, he worked towards a reform of psychiatry through classification and diagnosis of disease entities, which he presented in 1894 in his widely read *Diagnostik der Geisteskrankheiten*. There he defended the promotion of an analytical and longitudinal, and not a symptomatic-anatomic oriented nosology (Meyer 1986).

In 1896, Sommer implemented an internal reorganisation of Giessen's university psychiatric clinic with the purpose of optimising observation of mental illness in large numbers of patients. Through the implementation of surveillance wards and night reports, he established ways for extending observation beyond the hours that the doctors and carers were physically present with the patients. Two thirds of female and three quarters of male patients were under 24 hour 'subtle' observation from adjacent rooms. Moreover, Sommer and his assistants and carers implemented electrical lighting during the night in a way that did not disturb patients' rest, tracking food intake, hygiene habits, moods, compulsions, menstration, fits, and any other behaviour which could be in some way inscribed so as to produce potentially informative patterns. By recording and organising the information in tags, charts, lists and tables, the staff of the university clinic in Giessen achieved what Engstrom (2003 pp. 131-132) referred to as an actual 'institutional hierarchy of observation' that involved a radically 'new disciplinary economy'. Both Sommer and Kraepelin had changed the fundamental understanding of medical psychiatry from that which reigned in the (neuro)psychiatric clinic since the early 1870s: it was not organic aetiology and lesion, but *prognosis*, that made diagnosis vital in clinical psychiatry. As Aschaffenburg – Kraepelin's main collaborator in Heidelberg – articulated it, Kraepelin and his followers came to realise that 'a wrong diagnosis is not an incorrect diagnosis but one that has "no purpose" i.e. does not empower the clinician to make any educated guess as to the future of his patient'(quoted in Engstrom 2003 p. 99). As we will see in the following chapters, this realisation made this generation of researchers as well as that of his students, not only distinguished scientific

[60] An orthodox alienist Sommer particularly disliked.

psychiatrists, but also powerful social and political agents, especially during and after the First World War.

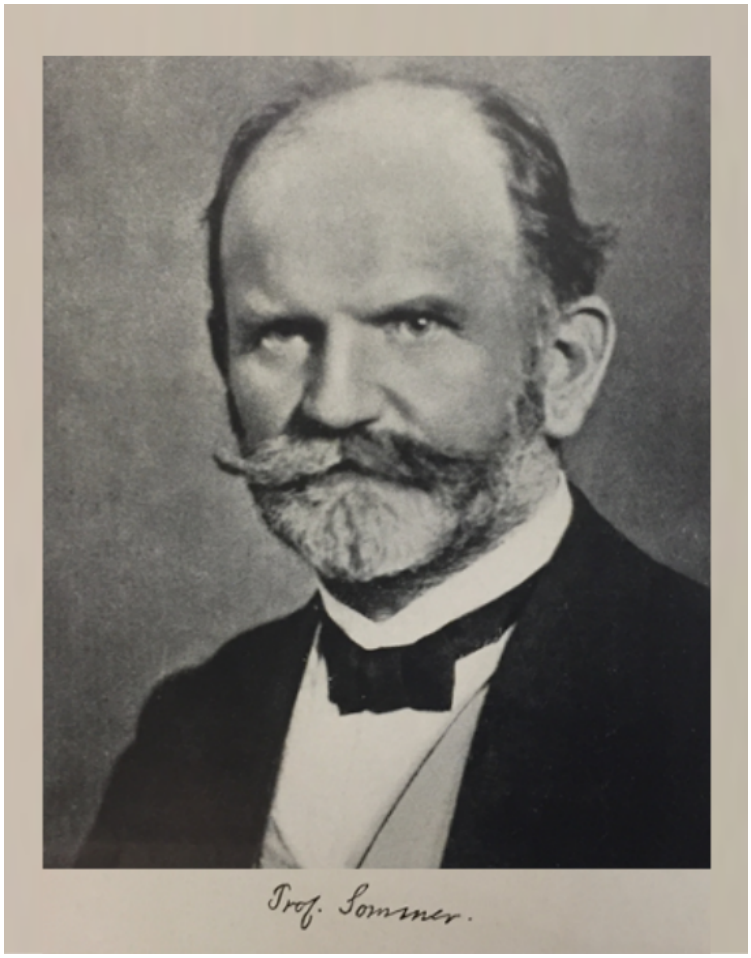


Figure 1.2: Isserlin's portrait of Robert Sommer
[MS/1935: Box 6]

Figure 1.3: Portrait of a young Emil Kraepelin
Taken by Dorpat photographer Carl Schulz.
[University of Tartu Library, F 78, Fo Norm 17:123]

V. Conclusions

In a way, this new generation of clinically oriented psychiatrists recovered what the cerebral pathologists had neglected from Griesinger's idea of an urban-based, medical psychiatry: disciplinary observation. On the other hand, however, they went against Griesinger's downplaying the methodological criterion of prognosis as crucial for research of insanity. In other words, contrary to what Griesinger had prescribed decades earlier, when it came to empirical medical research in psychiatry, short-stays and rapid turnover of patients was a method necessarily intertwined with the criterion of curability/non-curability, or prognosis. This was something new, and began to establish itself slowly in mainstream German psychiatric methodology.[61] The classification developed by Kraepelin during those crucial years (1886-1896) proved fruitful. His intention had been to identify a clinical picture and create a taxonomy for the psychoses. His longitudinal analysis allowed him to use reliable prognosis as symptom discriminator. Added to a rudimentary statistical analysis, he 'generated a view of disease which 'was light years ahead of Esquirol's' (Berrios and Hauser 1988 pp. 819-820)

[61] As chapter 4 will evidence, this dynamism would be later replicated in Isserlin's clinic.

and, as we have been able to observe, also of Griesinger's, who had postulated a unitary psychoses. Perhaps the main clinical result of this period – first fully articulated in the sixth edition of 1899 – was the well-known dichotomy of endogenous psychoses: that is, the separation of 'dementia praecox' with, as he had already clearly established, a poor prognosis, from 'manic-depressive illness' (today called bipolar disorder), with a better prognosis. With respect to dementia praecox, he assumed an organic anomaly at its root, a kind of 'auto-intoxication', leading to the destruction of brain cells. In manic-depressive illness, the aetiology was much less clear than in dementia praecox. As Hoff (2015 p. 36) indicates, Kraepelin proposed a 'genetically determined irritability of affectivity', so that 'the psychosis itself emerged from certain predisposing basic states' (*Grundzustände*).

Apart from establishing committed collaborations with Sommer, Ziehen, Konrad and other clinical psychopathologists of his cut, Kraepelin recruited an important number of life-long, loyal, top students in Heidelberg. Among these were, Isserlin, Gustav Aschaffenburg (1866-1944), Robert Gaupp (1870-1953), Ernst Rüdin (1874-1952) and Franz Niessl (1860-1919) (Hippius and Müller 2008 pp. 5ff). Under his leadership, and with very little resources, they had managed to put together a laboratory for experimental psychology in the lines of Wundt's in Heidelberg, an event which, contrary to the story sketched in this section, has not yet sufficiently attended by historians of psychiatry. At the beginning of the twentieth century Kraepelin's leadership had bolstered his reputation as a scientific psychiatrist and he continued to attract prominent and promising scientists to help materialise some of his research plans. To this less covered aspect of what we could call 'Kraepelinianism', I now turn, especially so in order to describe and appreciate some of Isserlin's first publications of empirical work carried out as part of such programme or research paradigm. If Kraepelin's projects had so far, at least in part, involved a return to Griesinger's original plans for university clinics, that is, clinical observation and neuropathology working together, the introduction of the psychological experiment around 1900 became a completely new feature of German psychiatry.

2. Kraepelinian psychiatry and Isserlin's association experiments (1890-1910)

On the Introduction of the Psychological Experiment and Degeneration Theory in German Psychiatry

I. Introduction: Alternatives to Neuropathology

In 1883, Kraepelin started a lifelong personal and professional relationship with Wilhelm Wundt (1832–1920). After an assistantship under von Gudden at the university psychiatric clinic in Munich, Kraepelin had moved to Leipzig the year before following Paul Flechsig's offer of a position as a lecturer. Early on, however, Flechsig and Kraepelin realised their academic collaboration had no future; the latter became quickly disenchanted with the materialistic and reflex-centred stance of the former. Finding himself without a job in Leipzig, Kraepelin immediately started volunteering at Wundt's Institute for Experimental Psychology founded only four years earlier. His time in Wundt's laboratory as an experimental psychologist did not last long due to financial needs and yet it proved incredibly formative and productive.[62] However, Kraepelin never lost contact with Wundt, visiting him right up until the latter's death in 1920 (Hirschmüller and Whitrow 1999 p. 402; Hoff 2015). A few years later, Robert Sommer spent a season (1888-1889) in Leipzig too, performing the same volunteering assistantship that Kraepelin had (Meyer 1986). As we will see, the time that Isserlin's mentors spent in Leipzig would prove decisive for Isserlin's commitment to psychological and experimental research.

Kraepelin and Sommer maintained throughout their careers a sceptical attitude towards subjective, especially biographically determined aspects in the study of mental disorders not only because they were formed originally under cerebral pathologists but also because of the influence of Wundt. As Hildebrandt (1993) and Allik (2016) have argued, too little attention has been paid by historians of Kraepelinian psychiatry to the role of experimental psychology in the development of clinical psychiatry at the turn of the twentieth century. After their time in Leipzig, Kraepelin and Sommer realised that the psychological experiment could work for psychiatry the same way experiments on sensibility and motility were working for physiology. Moreover, they hoped that measurements of reaction-time, of attention span, of decision making and other mental aptitudes of a large number of

[62] Kraepelin's early publications came out of Wundt's journal. Encouraged by Wundt, Kraepelin, age 27, also wrote there his 'Compendium of Psychiatry', which became later on the subsequent editions of his influential 'Textbook of Clinical Psychiatry'.

patients could compensate the lack of psychological insight provided by post-mortem brain examinations and by alienists' day-to-day practice in the asylum (Jablensky 2007 pp. 382ff). In addition, such practices could reinforce the scientific study of mental illness by providing a higher degree of reproducibility, rigour, and hence, objectivity.

The extrapolation of Wundt's experimental approaches into clinical psychiatry brought about some disruption in terms of the primacy of the clinico-anatomical study of the brain in German psychiatric clinics. If German neuropsychiatry of the 1860s and 1870s – following Griesinger's dictum 'all diseases of the mind are diseases of the brain' – aimed at establishing itself as a legitimate *medical specialty among many others*, with the 'psychological psychiatry' that began to establish itself in the 1890s Kraepelin and Sommer intended the opposite, namely, to establish psychiatry as a *sui generis medical endeavour*, one that was detached in important ways from the rest of medicine (Engstrom 2003 p. 125).[63] To put it differently, and taking into account the discussion of the previous chapter: after all the struggles of Griesinger and the first generation of urban asylum clinicians in trying – with modest success at best – to set the image of the scientific psychiatrist on equal terms to that of the hospital internist, the new generations of clinicians were reverting to an idea of psychiatry as a distinctive discipline, something orthodox alienists had been defending throughout the nineteenth century (although for different reasons). What psychologically oriented psychiatrists like Sommer and Kraepelin were arguing was that, different to an specialist or an internist who dealt with the patient from the vantage point of an organ or a physiological system, the psychiatrist was dealing with that (the brain) *as well as with the psyche*, and thus, his object was ultimately irreducible to purely somatic considerations. The part played by Wundt's theory of the mind and by the implementation of psychological methods of investigation in clinical psychiatry can be hardly overestimated, and these developments marked the start of Max Isserlin's career.

In his *Psychologische Arbeiten* published throughout the period 1882-1897, Kraepelin devised some of the ways in which the observation regimes of diagnostics and prognostics discussed in the previous chapter could be enhanced and complemented by psychological experiments. One way of achieving this was through the comparison of 'artificial psychosis' induced by alcohol, sedatives, or sleep deprivation, with 'actual psychosis'. Another way involved the use of methods of normal psychology such as measuring of reaction-time, the analysis of recognition of visual stimuli, tests of memory performance, concentration, selective attention, vocabulary, and general knowledge – many using ergographic registration (accounting for muscle contraction). These types of experiments allegedly compensated the limited reach of clinical discipline and inscription technologies, especially with regard

[63] Despite the otherwise huge incompatibilities, as we will see in the next chapter, this aim was shared with psychoanalysts.

to fine differential diagnosis. What a clinician could not identify properly at the bedside, Kraepelin thought, the measurement of induced psychological events in a controlled setting might (Kraepelin 1895; 2005). Isserlin's first mission as a psychiatrist consisted in helping Sommer and Kraepelin in implementing the psychological experiment in psychiatry in a systematic way with such purpose in mind.

Moreover, it is important to note that the Kraepelinian's institutional and scientific achievements of the first decades of the twentieth century were not just the outcome of a psycho-experimental outlook, nor just the upshots of an economy of observation. As a matter of fact, by the turn of the century, renowned and powerful psychiatrists of the likes of Von Gudden, Hoche, Kraepelin, Bonhoeffer, and Sommer, were already heavily relying on evolutionary theory and working in the wake of social Darwinism. This aspect, namely, the impact of evolutionary biology on Kraepelin and his followers has been also somewhat muddled by historians of psychiatry. Nevertheless, it could be argued that, in the early twentieth century, the turn to bedside psychiatry, the revaluation of the psychiatrist's 'incisive gaze', the use of psychological methods of investigation, as well as the new regimes of inscription and classification, were all coordinated within a loose theory of mental disturbances as degenerative inherited disease with biopolitical significance.[64]

The following chapter explores Max Isserlin's scientific training during the first decade of the twentieth century. On the one hand, by pinpointing the work and ideas of his mentors at the time in Giessen and Heidelberg/Munich, namely, Robert Sommer and Emil Kraepelin respectively, we can have a relatively clear idea of what Isserlin learnt in the period between his graduation in Königsberg in 1902 and his *Habilitation* in Munich in 1910, namely, Wundtian experimental methods and degeneration theory. On the other hand, by looking specifically at Isserlin's word-association experiments with epileptics and manic depressives, we can exemplify his early contributions to the field of psychopathology in general and to Kraepelin's program in particular. Among other things, Isserlin 'corroborated' some at the time new methodological, experimental, and forensic claims of his colleagues and contributed to differential diagnosis and categorisation of symptom complexes. Moreover, Particular tensions emerge when we consider the empirical outlook of both Kraepelin's and Isserlin's experimental and clinical psychiatry and at the same time look at the bio-politic and ideological elements of their professional agendas.[65] All these aspects can be contrasted in the context of a description of what we know about Isserlin's

[64] Degeneration theory was pretty much ubiquitous in university clinics and new urban asylums in Germany around 1900.

[65] Some elements of these tensions have been pointed out by some authors, see for example Decker (2004) and Hoff (2015). These author hint at the ambivalences that arise when Kraepelin's many-sided psychiatry is seen as a whole. However, they still downplay the experimental work.

psychiatric trajectory as a young medical graduate in Giessen, Heidelberg, and Munich between 1903 and 1907.[66]

The chapter begins by describing how Isserlin's mentors at Heidelberg and Giessen devised the application of the psychological experiment, of instruments for measurement, and of Wundtian theories to clinical psychiatry, and why. Sections II-III illustrate some aspects of Kraepelin's influential program of a psychologically based clinical psychiatry and its quest for scientific legitimacy in the word-association tests that Isserlin carried out. The first example is taken from a series of experiments Isserlin conducted in Giessen under the supervision of Sommer in 1904 with a forensic case of epilepsy. The second example comes from a series of experiments Isserlin led in Heidelberg in 1906 with a large number of manic depressive patients.[67] With the presentation of Isserlin's experiments, I show, moreover, that word-association tests had acquired in the first decade of the twentieth century – independently from Jung and Freud, with whom such tests are commonly associated – a role in psychopathology, particularly so in fine differential diagnosis and investigations of the personality. The last section is dedicated to the description of the intellectual origins of the biopolitics of the emergent so-called 'Kraepelin group', a research-oriented assemblage of high profile German scientists of the mind and brain, to which Isserlin belonged. Here it becomes evident that at the time Isserlin was conducting his psychological experiments he was also learning that studying mental illness entailed – due to the fact that it was degenerative and inherited – social expertise and political commitment.

II. The Introduction of the Psychological Experiment in Psychiatry

Articulating a theory of mind with the experimental study of mental illness

Wundt had proposed a theory of mind that made of this easily accessible – at least in principle – to scientific analysis. This became attractive to psychiatrists disenchanted with the paradigm of cerebral localisation. If the mind could be analysed without looking at the brain, perhaps mental illness could be spotted through psychological analysis. According to Wundt,

[66] Some slightly later texts of Isserlin and others are used in the first section of this chapter since they made reference to these years too.
[67] Both published the following years, i.e. 1905 and 1907 respectively.

> [t]he general task of experimental psychology consists in the breakdown of the contents of our consciousness in their elements, then in classifying these elements according to qualitative and quantitative properties, and finally in establishing with precision the respective relations of co-existence and sequence [between those elements] (Wundt 1883 p. 2).

This was possible because the human mind (normal or pathological) was believed by Wundt to be a composite of three basic elements: sensations (the 'first mental acts'), perceptions, and representations ('the real mental'). The multiple sequences and combinations of these elements – which gave them life and conscious character – was a product of 'unknown' automatic transformations produced by the individual's neurophysiology (Wundt 1868 p. 446ff). However, Wundt – as Isserlin would later do in very similar terms – alleged that some of the aspects of these unknown combinations, or 'associations', were identifiable through psychological phenomena (such as co-existence, sequence, intervals, and so on, between analysable elements) brought about in experimental settings. The Kraepelinians adopted different variations of this take on the composition (and decomposition) of the mind for the purposes of the experimental study of mental diseases (Kraepelin 2005 p. 355ff).

Yet, more than anything, the Wundtian principle of apperception was central to Kraepelin's use of experiments. Apperception was considered by Wundt to be a psychical process of the highest possible order, as he called it, an *Überassoziativesprinzip* or supra-associative principle, which commanded the directionality (or 'intentionality') of both inner and outer attention. It was a core principle of mental function and mental life because it elicited automatic control of stimuli selection, the filtering of unimportant stimuli, as well as the stimuli association. Without apperception, the associations and combinations of sensations, perceptions and representations under *one* individual consciousness would not be possible. In fact, mental illness, Kraepelin thought, could be understood as the lack of control over one's mental representations and associations. Dementia praecox (DP) was particularly suitable for a Wundtian framing: the symptoms of the schizophrenic could be readily understood, Kraepelin claimed, as an 'apperception enfeeblement' and a 'disturbance of the mental basic function' or *Grundfunktion* (Kraepelin 1913 p. 749). Kraepelin and his followers would claim to have collected enough evidence to claim that 'partial' and 'individual mental functions', which were 'subordinate' to apperception – such as memory or intellectual performance – could remain in place in cases of DP. Therefore, the symptoms and symptom complexes of DP could not be brought about by 'individual function deficits' (*Einzelfunktionsdefizite*) or a combination thereof. Rather, the central problem in DP was taken to be that the subordinate mental functions begun working almost autonomously, 'according to their own laws'. The fact that apperception was somehow affected in DP explained why 'in dementia

praecox we expect to encounter a debilitation in the production of general representations, controlled emotions, and lasting volitional tendencies' (Kraepelin 1913 p. 748).[68]

Furthermore, Kraepelin, Sommer and later Isserlin believed, with Wundt, that the mind unfolded in time in the form of sequences of discrete mental states (*psychische Zustände*), thereby presenting measurable relations among them – for example, quantifiable time intervals – and all this went through the unity of apperception. Moreover, they also believed that, from such measurements, quantifications and analysis thereof, certain aspects of the mental states of psychiatric patients could be inferred – such as an 'apperception enfeeblement' (Isserlin 1907b). Around the turn of the century, Kraepelin and Aschaffenburg – joined soon after by Sommer and Isserlin – took Wundt's theory of mind and applied it systematically to the experimental analysis of several forms of mental disease. They did this not to differentiate the normal from the pathological – the clinician's trained gaze sufficed for this – but in order to identify further subtle differences between cases presenting the same symptom-complexes as well as in order to spot indicators of the particular personality of a subject-patient. It is also worth highlighting the fact that this Wundtian background ultimately enhanced the notion that experimental considerations over the use of time (as in trajectory, intervals, durations) was a crucial precondition in scientific psychiatry. This was yet a further contrast to the cross-sectional method of neuropathologist: the correlation symptom-anatomical finding was inevitably timeless.

How to use experiments in clinical psychiatry

There were countless psychological experiments that Sommer and Kraepelin practiced in Leipzig under the guidance of Wundt.[69] Simple experiments involved, for instance, pointing to certain objects in a sequence and asking the subject to identify them and describe them; reading texts out loud and asking the subject to reproduce what they hear in written form (*Diktate*); observing subjects counting and calculating with the abacus Kraepelin and Sommer themselves designed; underlining certain letters in a text according to Bourdon's method;[70] determining the reaction of the pupils to light and other sensory

[68] Others following Kraepelin, e.g. Weygandt (1904), Jung (1907), and Bleuler a bit later, helped him legitimise this conceptualisation (see next chapter).
[69] Isserlin would later use many of these with his war-injured patients.
[70] Bourdon's psychometrics (crucial in the development of experimental psychology in France at the time) was a test of attention and concentration still used today with some modification as the 'Bourdon-Vos' test. See Kamphuis (1962) and Vos (1992). Isserlin used them extensively in the 1920s.

stimuli;[71] letting subjects throw objects to test their motility and strength; or even startling the subject in order to observe their reactions (Kraepelin 1895; 2005; Löwenstein 1925; Hildebrandt 1993).

But these simple procedures turned usually into more complex experimental settings. Thus, for instance, in the latter test, is was not enough for the experimenter to observe the psychological reaction of the subject after the shock, but it usually involved also registering it in quantifiable terms, such as by measuring the pulse and respiration throughout the psychological reaction; by using a plethysmograph, an instrument for identifying variations of the volume of organs through measurement of the quantity of blood or air in them; by analysing the posture of the head and the extremities; or also by determining the intervals between stimuli and reaction with timers and ergographic registration. In the ambit of normal psychology, these methods had already been proving productive. For example, it became possible to measure and analyse in quantifiable terms concentration, attention, reaction-time, memory, mental and physical work capacity, through the association of representations with physical movements, with writing and speech, with blood-pressure oscillations, with changes in the innervation vessels,[72] among other things (Löwenstein 1925; Hildebrandt 1993; Schäfer 2016; Engstrom 2016).

After their respective times in Leipzig, Sommer and Kraepelin introduced in the psychiatric clinics they worked for some of these methods that Wundt had been developing for the study of normal psychology and normal physiology. Accordingly, with mentally ill patients, they went through very similar stages in their experimental procedures. Thus generally speaking, firstly, they tried to establish the 'status praesens' and 'status psychichus' of their subjects, now subject-patient. This meant determining the current physical and mental state of a patient on the basis of clinical examination involving mostly measurements of visual, acoustic, and tactile performance. Next, by altering the conditions and circumstances of the patient-subject, they registered and measured all they could. Finally, they attempted to infer, from the experimental data, correlations that emerged between the psychical elements (the Wundtian sensations, perceptions and representations that made up consciousness) and study its possible implications for classification, diagnosis, or for an account of the individual personality (Isserlin 1905; 1907; 1910a; 1911).[73] Isserlin followed this general protocol very closely in his experiments in Giessen, Heidelberg and Munich.

It was certainly not possible to apply all the testing and measuring techniques to all mentally ill patients, since there was a certain level of collaboration required on the part of the subject that might be absent

[71] Westphal had determined a particular 'catatonic stare' through this method.
[72] Under the influence of certain mental events, physiological correlations could be determined in some blood vessels.
[73] This routine can be evidenced by looking at the patients histories of Isserlin's contained in the Isserlin-papers (MS/1935: Boxes 7&8).

in the case of the insane, or even the hysteric. Some tests required the ability of the subject to reflect on their own experiences – what was known as introspection – as well as their disposition to follow certain protocols (Kraepelin 1895). For instance, one of the most important method used for the temporal analysis of mental associations was the so-called 'reaction experiment' (*Reaktionsversuch*) with the 'Hippian chronoscope' (*Hippische Chronoskop*), an electromagnetically controlled timer with precision to 1/1000th of a second. Reaction-times (intervals between conscious events) could be registered with millimetric precision (Schmidgen 2000 pp. 168-177; 2004 pp. 34-35).

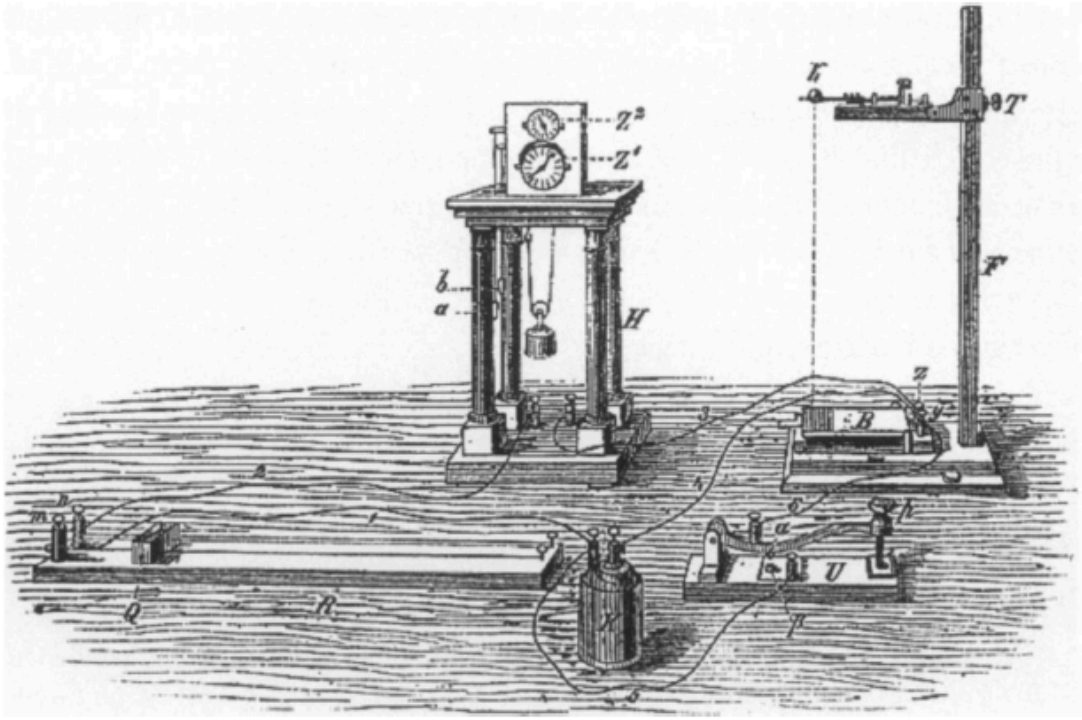


Figure 2.1: The Hippian Chronoscope used by Wundt
The subject was asked to respond to a sound by pressing a circuit breaker (U). The sound was produced from the impact on platform (B) of a falling metal ball released from point Γ. Upon impact, the chronoscope (H) became electrically connected to the rest of the apparatus and begun counting until the subject pressed the circuit breaker. With the exception of the latter, all was kept hidden from the subject. Among other things, the aim was to measure (up to 1/1000th seconds) the time interval between sensory (hearing) and motor (pressing) functions of the psyche.
[Wundt 1874 p. 770]

The use of this instrument had marked the transition of Wundt's scientific methodology from sense-physiology into sense-psychology, thus becoming the emblem of experimental psychology for decades to come.[74] By 1920, no psychiatric clinic in the German lands lacked one of these in their laboratories

[74] However, this instrument had insuperable problems. For instance, it needed to work with and be calibrated by further complex equipment. Still, this was an era of intensive collaboration between instrument manufacturers

either (Gundlach and Albert 1997 pp. 111-116).[75] Sommer and Gustav Aschaffenburg[76] helped disseminate Kraepelin's experimental programme in psychiatry throughout the German lands around the turn of the century, also creating new instruments and elaborating new experimental settings themselves. They incorporated into the clinician's armament for the study of different forms of mental disturbances, among other things, Veraguth's psychogalvanic reflex phenomenon and Mossos' plethysmograph (Löwestein 1925 p. 241). With his call to Giessen in 1895, Sommer created his own methods and devices. They were made with the purposes of measuring the three-dimensional movement of vocal expressions, the movement of the extremities, and mimicry, all of which, he claimed, represented special forms of the complex language of inner mental life, and thus, were informative with regard to psychopathological processes. He even constructed a device for tracking 'the cerebral effect upon the reflexes' (Meyer 1986). Moreover, Sommer published his 'Textbook of Psychopathological Research Methods' in 1898, where a huge universe of old and new instruments, including the many styles of the Hippian chronoscope, were detailed and reviewed with regard to their application in the psychiatric clinic. Furthermore, important scientific journals begun to circulate, such as the 'Journal of Psychology and Neurology' (1902), soon attracting some promising young psychiatrists with an experimental vein, such as Isserlin, Jung, and Rilkin.

In his programmatic text 'The Psychological Experiment in Psychiatry' of 1895, Kraepelin had emphasised the importance of what he called the 'artificial mental illnesses' (*künstliche Geistesstörung*). The methods used to study these, also labelled 'artificial psychoses', were, for instance: observation of the mental disturbances caused by purely somatic ailments from somewhere in the body; or observation of psychological and somatic consequences of mental and bodily fatigue – this also in combination with (and with manipulation of) the varied regimes of distribution of work, breaks, sleep, and food-intake (Isserlin 1913 pp. 10-12). Thus for instance, through the work of Aschaffenburg, it was established that certain forms of fatigue present in states of delirium were the same phenomena (although of different intensity) present after substantial sleep deprivation. But perhaps the most important method to produce and study psychosis artificially was provided by intoxication with alcohol, sedatives, opium, cocaine and many other substances. Kraepelin and his followers intended not only to establish scientifically what was the actual psychical effect of substances and what was the cause of alcoholism and addiction, but they also sought to explain the 'essence' of mental (or nervous) illnesses

and experimental psychologists, both advertising each other (See Benschop and Draiasina 2000 pp. 1-25 and Gundlach 1996 for more details).

[75] Criticisms to the complex Wundtian instrumentation had arrived from Paris (e.g. Ribot) already in the 1880s. In Leipzig, the French experimentalists argued, the subject was in isolation, alone with their thoughts and with intimidating machines and stimuli. Instead of this setting, the chronoscope and other Wundtian instruments were implemented in Paris in connection to hypnosis, introspection and self-observation. Consequently, the lived-experience was allegedly re-integrated in the experimental situation (See Löwenstein 1925 p. 242 and Schmidgen and Carroy 2004 pp. 39, 51-54 for details).

[76] Close experimental collaborator of Isserlin in Munich.

through the study of intoxicated subjects (DFP 1921 p. 356; 1925 p. 623).[77] Kraepelin and his collaborators argued that it had been already demonstrated how much intoxication could tell about epilepsy and the 'flight of ideas' of manic depressive insanity (Isserlin 1907b pp. 532ff; 1911 pp. 594ff).[78] These became important avenues that the psychiatric experimenter could take.

Thus, as Löwestein (1925 p. 248) listed:

> Hoche and Kraepelin investigated the psychological effects of the components of tea. Loewald of the bromides, Aschaffenburg the effect of alcohol in the workplace, Haenel that of Trionals [a hypnotic]. More work on the effect of alcohol came from Isserlin, Ach, Aschaffenburg, Kraepelin, Kiüz, Martin Mayer, Rudin, Furer, Busch, Goring, Schmidtmann and many others. Lange, among others, investigated the effect of cocaine, scopolamine, and morphine.[79]

The methods used by all these psychiatrists were at their core essentially Wundtian. Ergographic and other methods for registering musculature activity, together with the tests already mentioned above (on work capacity, sleep, memory, association, reading, and so on) were for these investigations pretty much directly extrapolated form the laboratory of Leipzig to those psychiatric clinics in Giessen, Heidelberg, Halle, Berlin, and many others (Engstrom 2016 pp. 340-344). It can be clearly observed that, when Isserlin arrived in Giessen in 1903, and later in Heidelberg in 1905, experimental studies in psychiatry with 'artificial psychoses' and with instruments imported from other disciplines were in vogue.

By the early 1900s, these psychiatrists believed it would be eventually feasible to determine individual personality traits through a combination of the results of many different experimental investigations. This individual psychology could then become the starting point for a new empirically-based doctrine of the natural dispositions of the personality and thus, of the 'internal causes' of mental illness. Indeed – and once again based on Wundt's theory of mind – Kraepelin and Isserlin maintained that the basic personal traits of people could be identifiable through the study of individual mental performances. This was attained by measuring the pace and form in which the most varied simple mental processes take place and could interact with each other. The three core directions in which these processes unfolded were: the reception of sensory stimuli, the association of ideas, and the execution or control of

[77] 1st and 5th reports of the German Research Institute of Psychiatry (DFP, *Bericht zur Stiftungsrtatzsitzung*) of 1921 and 1925 respectively, where reference was made to the ongoing validity of such methods and how were being further developed.
[78] In his *Kraepelin's experiments with little doses of alcohol* (1912) Isserlin presents a defence of Kraepelin's artificial psychoses as a productive line of research against some critics as well as an overview of the results of his own trials and those of other contributors during the previous decade.
[79] Through these studies, Kraepelin and his collaborators became the first to establish the mental effect of alcohol and other toxic substances, how each influenced attention, comprehension, volition, memory, motility, among others (Hildebrandt 1993; Löwestein 1925).

(voluntary) bodily movement. These elementary mental processes, or rather their deficiencies, shed light, they believed, on different forms of mental illness (Kraepelin 1895; Isserlin 1907b pp. 301-306). Thus, measurements of elementary mental processes became a powerful clinical tool in the psychiatric clinic at the turn of the century.

Individual mental performance was commonly measured by these psychiatrists in labour settings. In their *Ermüdungsversuche* or 'fatigue experiments' Kraepelin and Isserlin realised that the capacities for staying on task and for memory, and some mood tendencies, such as irritability or the ability to overcome fatigue, had a direct correlation with the length of the breaks taken by the workers and the daily distribution of their labour, rest, and nourishment. Thus, for example, the memory of workers was tested by counting the number of individual memories that they could reproduce after varied forms of routines and daily work distributions, or by inducing sleep deprivation on them and altering their activities and routines. In addition, they measured the depth of sleep through the potency of the stimuli (noises) which were sufficient in different stages of sleep, to wake the subjects up. All this was shown – soon influencing studies in work psychology – through curves and statistical analysis (Isserlin 1913 pp. 110-120; Kraepelin 1920a pp. 855-859). Contrary to Taylorism, the role of these tests was not primarily implemented in order to establish the best economy of production. The ultimate aim for psychiatrists such as Sommer, Kraepelin and Isserlin was to measure the qualities and quantities of elementary mental processes induced through all these different methods, so that, afterwards, details with regard to the form and course of mental diseases (or 'disease entities') could be inferred and aspects of the personality of the subject identified, including information about the pre-disposition (*Anlage*) towards disturbance (Kraepelin 1895; Sommer 1899; Isserlin 1913; 1921).

The importance of Isserlin's experimental work was acknowledged at the time by his fellow psychologically-inclined psychiatrists. Hildebrandt (1993 pp. 16-17) argued that Isserlin remained one of the most consequential of the Kraepelinians when it came to experimentation. Isserlin indeed defended the application of the experimental program of Kraepelin to clinical psychiatry until the end of his life, albeit with important modifications. Yet, there is no record of any of the experiments he conducted – in fact, no record of any of the Kraepelinian experiments at all. When it came to experimental work – with the exception of the experiments with alcohol intoxication – Kraepelin, Sommer and Aschaffenburg, less so Isserlin, did not normally stand out in the historical psychiatric landscape of the turn of the twentieth century. Much more attention has been paid to Freudian ideas and post- or anti-Wundtian programs.[80] Thus, the following two sections will serve the purpose of working towards filling that gap: how was Kraepelin's psychological psychiatry implemented by Isserlin in the

[80] One exception is Müller et al (2006), who have provided a detailed account on how Kraepelin and his collaborators carried out experiments with some substances and how were they interpreted, using charts and statistics. The argument of the piece is intended to portray Kraepelin as a pioneer of pharmacology.

first decade of the twentieth century? What methods and techniques did he use? How much of Wundt was in his tests of mental processes of mentally ill patients? What did he discover? From the beginning – and Isserlin emphasised this many times throughout his experimental discussions – the use of the psychological experiment in psychiatry ought to stick as much as possible to common, every-day activities. The devices and methods used (*Versuchsanordnungen*) should remain also as simple as possible in order to reduce interference in the natural unfolding of mental phenomena. Moreover, even though individual methods could only cover one or two aspects of mental phenomena (in the following cases association capacity and reaction-time), many studies and many methods were meant to be integrated so that the psychiatrist could address the person as a whole, not only their memory, or attention, or association capacity.

III. Isserlin's Word Association Experiments in Giessen with an Epileptic Patient

After graduating from medical school in Königsberg in 1902, Isserlin moved to Heidelberg in the early months of 1903, where, whilst completing the compulsory military service, he begun assisting Kraepelin, in an unpaid position, in both psychological experimentation as well as in the implementation of a sophisticated discipline of observation, diagnostics and prognosis (see previous chapter). Moreover, in Heidelberg, as he put it himself, he also 'attended the lectures of the prominent neurologist Wilhelm Erb and the philosophers Kuno Fischer and Windelband…with great enthusiasm' (Isserlin CV P. 1). Neurology and philosophy represented indeed, early on, a focus of Isserlin's multifaceted clinical interests. Yet the scientific (clinical and experimental) study of the mental 'as it appears to us, in experience' (CV p. 1) remained his focus for the following four years. Between the summer of 1903 and the winter of 1904, Isserlin carried out an internship at the neuropsychiatric university clinic lead by Robert Sommer in Giessen. However, his clinical and experimental training was abruptly interrupted due to a lung inflammation. This kept him in bed for many months, hence his investigations in Giessen had to wait until 1905 for publication, once he had resumed his assistantship in Heidelberg. Once again in Heidelberg, with Kraepelin now in Munich, he continued experimenting with mentally ill patients. In this and the following sections, I look into two publications that came out of the experimental trials he carried out around this time: in this section (divided into three subsections), a series of experiments carried out in Giessen in 1904 with a forensic case of epilepsy; in the next section, a series of experiments carried out with several manic depressive patients on his return to Heidelberg.

An experiment in two acts

During his first season in Heidelberg, Isserlin quickly confirmed what Kraepelin had taught him, namely, that particularly in periods of relative mental health, that is, where morbidity laid dormant and obscured to the clinical eye, experimental analysis of psychological reactions and intellectual performances could determine the presence of a disease process in the patient-subject's mind. In fact, this became a fairly common believe among academic psychiatrists in many university clinics by the turn of the century. The value of these studies was even becoming patent in forensic psychiatry. Isserlin's first ever publication in psychiatry can give testimony of these developments.[81] The piece, entitled 'Association Experiments with a Forensically Examined Case of Epilepsy', was the result of a series of word-association experiments with an epileptic prone to severe stupors (*Dämmerzustände*), referred to as "C". This patient was being subjected to psychological re-examination at the Giessen university psychiatric clinic after six and a half years. Back in 1897, Isserlin's supervisor, Robert Sommer, had examined the subject extensively, clinically and experimentally. Among other methods, Sommer had used the word-reaction association technique. The experimenter uttered a predetermined word (part of a well-thought scheme) and the subject was meant to reply with whatever came to mind, as soon as possible. After the reaction, the experimenter, once again, gave the subject another stimulus word, and so individual series carried on for a certain time. All the series were protocolled. However, as Isserlin explained, 'back then, due to lack of confidence on the method when applied to epileptics…Sommer did not put together an evaluation of the results' (1905 p. 419). As a consequence, Isserlin's paper of 1905 was: firstly, an evaluation of Sommer's results of word-association tests conducted in 1897 with "C" using a particular scheme; secondly, it was an extensive report and evaluation of a new series of experiments conducted with the same subject, in the same clinic, using the same experimental scheme, six and a half years later, that is, in 1904, this time by Isserlin himself. Finally, the paper aimed at a comparison between the results of the experiments conducted in 1897 and those conducted in 1904. This last step constituted an analysis of the trajectory of the disease 'epilepsy' in "C" over time.

Association experiments on epileptics were carried out by Sommer again in 1899 and1901, and by Karl Bonhoeffer in 1901. Accordingly, Isserlin had planned to put to test what these psychiatrists had concluded about the psychology of the epileptic, that it was characterised by a 'dearth repertoire of representations, plagued with stereotypes, and perseveration of ideas' as well as reflected in 'an egocentric character of associative forms and peculiar mood anomalies which manifest predominately

[81] As mentioned in the introduction, Isserlin had only published on epistemological and physiological subjects until he became a licensed medical practitioner (1900; 1902; 1903).

in erratic reactions' (1905 p. 421). Isserlin used in 1904 the same unitary scheme of stimulus-word association used by Sommer in his experiments with "C" ('the Sommerian Scheme' as Isserlin referred to it). Despite some disadvantages, the fixation of schemes containing groups of stimulus-words classified in different categories beforehand allowed reproducibility, and thus, comparison of the reactions of two different personalities. Moreover, as Isserlin was demonstrating in this piece, it also 'permitted the analysis of the same personality's associative psyche reacting to the same stimulus in different circumstances of their lives', and hence, made possible to 'observe how the trajectory of a disease manifest itself through different associative tendencies when applied in time intervals' (1905 p. 422). Isserlin clarified that the psychological experiment could never penetrate the 'real' mental associations, in this case, of the epileptic. However, inspired by Wundt,[82] he believed that 'empirical laws of association' that could be inferred in the experimental investigation presented themselves as 'useful artefacts' for 'setting individual differences' when confronted with seemingly identical clinical pictures. In other words, through the old and new association tests on "C", Isserlin saw the possibility of establishing empirical laws of association of representations (co-existence, sequence, and the like), which, although arbitrary, that is, objective only in the experimental situation, presented nonetheless considerable potential for refined differential diagnosis; in this case, of epilepsy.

As Isserlin explained before he presented his results, Sommer's psychiatric examination of "C" in 1897 had not responded, in the first instance, to scientific curiosity. "C" had been accused of fraud by his sister and brother in law, allegedly falsifying documentation, using the signature of his diseased father for financial gain. To the accusation, "C" pleaded not-guilty, even though there was clear circumstantial evidence against him; he claimed not to have any recollection of the events. It did not seem that he had any reasonable motive to commit the fraudulent act. After verifying that they were dealing with an epileptic, the court system sent the accused to be inspected by Sommer from August 20th to October 6th 1897. The day of the hearing, the defence called Sommer to the stand to testify as expert witness. To the question of whether it was possible for an epileptic to enter in a trance-like state of mind, thereby forcing them to carry out particular actions without any self-awareness or recollection once the state had passed, Sommer responded affirmatively. Sommer recognised that it was possible that the accused did not commit the criminal act deliberately; that "C" could have signed those documents impulsively in a state of stupor and partial consciousness. Among the conclusive pieces of evidence were the different forms of handwriting produced while in Sommer's examination. One handwriting was typical of him in healthy states of mind, and another type emerged in irritable and depressive states. The latter matched the handwriting of the forged documents. "C" was swiftly acquitted (1905 pp. 420-421).

[82] See Wundt (1903) p. 355.

The 'word-association scheme' and Sommer's results in 1897

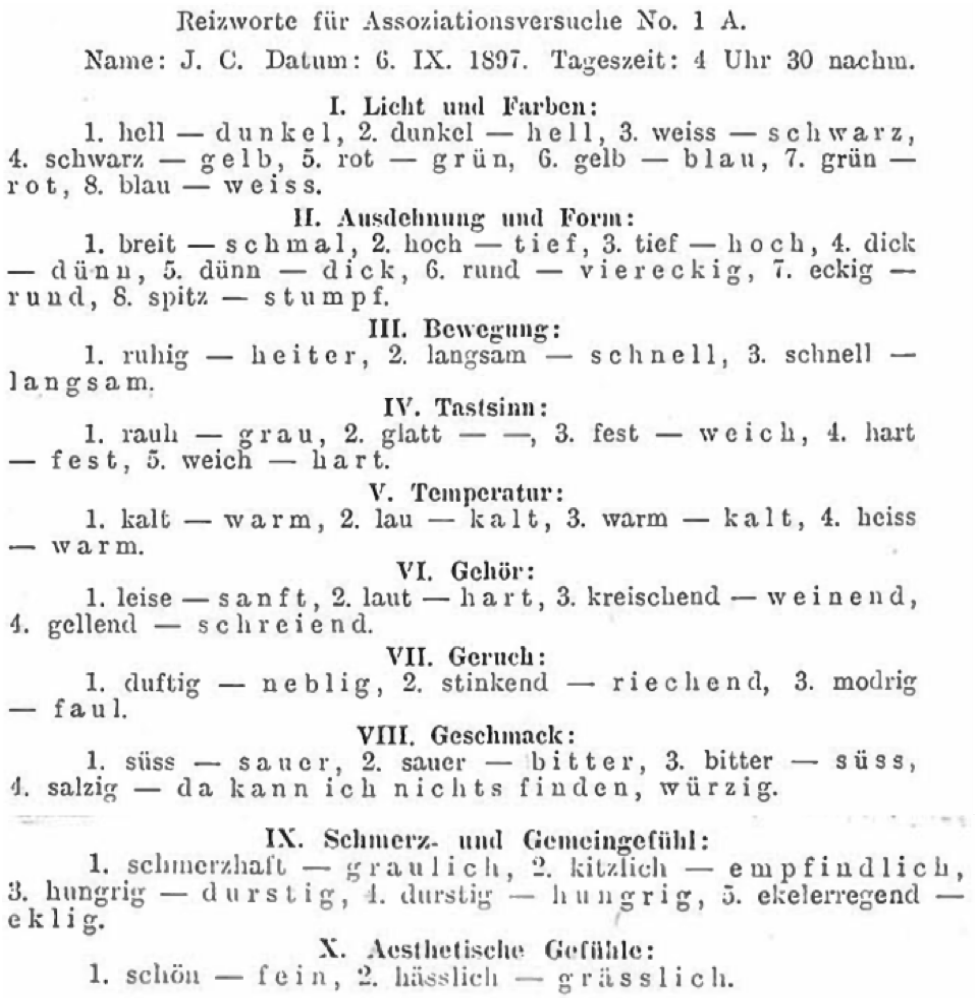
As Isserlin showed, the experiments on "C" conducted by Sommer in 1897 had consisted of three sets of tests with three series of associations each. The same 'Sommerian scheme' was applied throughout the sets. In the reports, as I will exemplify, the stimuli were described with Arabic numbers (1,2,3, and so on). Moreover, the scheme included three artificial psycholinguistic divisions, in which to classify the 'grammatical form' of the reactions: adjectives, concrete nouns, and abstract concepts, as represented in sections A, B, C respectively. Furthermore, with roman numbers, Sommer had 12 fixed categories of different sensory and motor qualities of perception and representation, such as I. Light and Colour, II. Extension and form, III. Movement … VIII. Taste … X. Aesthetic Response and so on, used to register the qualities of the reactions. As mentioned, Sommer did not analyse the results of his experiments. In 1904, Isserlin did it for him.

Thus, for example, see figure 2.2. This was the first section of the first set of tests Sommer conducted with "C" in 1897, presented by Isserlin in his piece as 'No. 1A'. One could observe that the reactions were almost entirely made of coordinate and contrasting adjectives (41 of 45); that only on one occasion, there was no reaction (IV, 2); then, that there were only two associations by sound (IV, 1 and X, 2). As Isserlin put it: 'in total, there was a reaction to 46 words, 42 of which were coordination or rather contrasting associations (10 of these were manifestations of perseveration), sound associations 2 and iterations 1, repetitions in the ratio of 11/45=ca. 24%' (1905 p. 423). It could indeed be observed how conspicuous was the phenomenon of repetition and perseveration, which would manifest throughout the sets of tests. Thus, in the following sections of the first set, 'No 1B and 1C', 62% and 65% respectively of associations were word repetitions and perseverations. For instance 'schön' (pretty) was a reaction word used 13 times and 'gross (big)' 7 times. In fact, only 10 reactions in the entire sections where words uttered only in one occasion (see pp. 424ff). These were the types of observations made by Isserlin on Sommer's report on "C". [83]

As Isserlin observed from these and other features of the experiments carried out by Sommer, which, for reasons of space and language specificity I cannot describe in any detail, the tests showed that at that at the time, the subject-patient had a very limited universe of representations available to him, and

[83] Just to give another example, from test 2A, Isserlin observed that that the association words were 21 coordinate adjectives and 2 coordinate substantives, 1 relation of coexistence, 10 totalising object associations, 12 iterations and/or perseverations, 4 incoherent reactions, 2 subject-state associations, 1 word enhancement and 1 attributive association. The total of repetitions was here less, at only 26%. 2B – which was conducted five minutes prior to the start of 2A according to the records – however, presented again a high number (63,8%) of iterative and perseverative phenomena (Isserlin 1905 p. 427).

that these relatively few representations at his disposal were associated almost automatically, independently of the stimulus word; 'the subject seemed to cling to them regardless of the quality and meaning of the different stimuli words' (1905 p. 424). Furthermore, the quality of the associations featured the patient's emotional state. From 1C, for example, it became evident 'the profound depressive state in which the subject found himself' through his reactions to word-stimuli such as 'happiness, consciousness, disease, court, impulse, sleep, memory, law, crime'. In addition, certain 'mannerisms and a submissive attitude' were also powerful 'extra-verbal indicators' of the depressive state of "C" at the time (1905 p. 425).



Reizworte für Assoziationsversuche No. 1 A.

Name: J. C. Datum: 6. IX. 1897. Tageszeit: 4 Uhr 30 nachm.

I. Licht und Farben:

1. hell — dunkel, 2. dunkel — hell, 3. weiss — schwarz, 4. schwarz — gelb, 5. rot — grün, 6. gelb — blau, 7. grün — rot, 8. blau — weiss.

II. Ausdehnung und Form:

1. breit — schmal, 2. hoch — tief, 3. tief — hoch, 4. dick — dünn, 5. dünn — dick, 6. rund — viereckig, 7. eckig — rund, 8. spitz — stumpf.

III. Bewegung:

1. ruhig — heiter, 2. langsam — schnell, 3. schnell — langsam.

IV. Tastsinn:

1. rauh — grau, 2. glatt — —, 3. fest — weich, 4. hart — fest, 5. weich — hart.

V. Temperatur:

1. kalt — warm, 2. lau — kalt, 3. warm — kalt, 4. heiss — warm.

VI. Gehör:

1. leise — sanft, 2. laut — hart, 3. kreischend — weinend, 4. gellend — schreiend.

VII. Geruch:

1. duftig — neblig, 2. stinkend — riechend, 3. modrig — faul.

VIII. Geschmack:

1. süss — sauer, 2. sauer — bitter, 3. bitter — süss, 4. salzig — da kann ich nichts finden, würzig.

IX. Schmerz- und Gemeingefühl:

1. schmerzhaft — graulich, 2. kitzlich — empfindlich, 3. hungrig — durstig, 4. durstig — hungrig, 5. ekelerregend — eklig.

X. Aesthetische Gefühle:

1. schön — fein, 2. hässlich — grässlich.

Figure 2.2: The first series of associations carried out between Sommer and "C" in 1897, presented by Isserlin as No. 1A
[1905 p. 422]

From the results of the three sets of tests carried out by Sommer in 1897 (see figure 2.3), Isserlin concluded worthy of attention, first, the sameness and uniformity of the reactions as well as the high number of perseverations, and moreover that 'the quality of the reaction was poorer when the quality of the stimulus word was higher'. This was evidently correlated to the presence of an inhibited and self-conscious personal character and 'a meagre reaction style' (*Dürftigkeit der Reaktionsweise*), that is, a poor associative capacity (1905 p. 431). Furthermore, Isserlin noted that in in section C of each set 'emerged the individual depressive disposition' of the subject, as well as 'his egocentric tendency'. The latter was inferred from the fact that the stimuli seemed to be taken very personally; the style of reactions determined that the ego of the subject interfered in many associations; in short, it showed how intensively he (pre-)occupied himself with himself. Isserlin determined that the results were indeed indication of the diagnosis of epilepsy. Thus, even though back in 1897 they had not been worked out, and hence not used in court, Sommer's association experiments were meant to become important diagnostic aids in forensic neuropsychiatry.

Reaktionen:		Zahl der Reaktionen insgesamt	Adjektiva	Substantiva	Verba	Andere Wortformen
Versuchs-Reihe 1	Abteilung A	45	45	—	—	—
	" B	48	47	—	1	—
	" C	46	40	3	—	3 Interj. Ergzg.
Versuchs-Reihe 2	Abteilung A	46	31	15	—	—
	" B	47	47	—	—	—
	" C	47	41	1	—	4 Ergzg.
Versuchs-Reihe 3	Abteilung A	46	39	7	—	—
	" B	48	48	—	—	—
	" C	47	43	2	—	2 Ergzg.
		420	381	28	1	9

Figure 2.3: Chart comparing the results of the three sets of 1897
The headings read: total number of reactions, adjectives, substantives, verbs, other word forms
[1905 p. 429]

Isserlin's re-examination of "C" in 1904 and the results

Six and a half years later, in April 1904, "C" found himself again in the Giessen psychiatric clinic. By then, Isserlin had been volunteering for a year there, both in observation wards and in psychological investigations under Sommer's supervision. Apart from the experiment discussed above and another one by Sommer in 1899 and by Aschaffenburg in 1901 no other experiments of this kind were

conducted on epileptics in Germany, and thus, the presence of "C" was taken by Isserlin as a good opportunity for verifying the claims of his colleagues. The subject confirmed he had not presented any major chronic disturbances from the time he was last examined in the clinic. However, he had presented three seizures with loss of consciousness that ranged from 1 to 1 ½ minutes. 'Using the three-dimensional Sommerian apparatus' Isserlin noted that the subject presented '…strong tremors in fingers…the reflexes were heightened…the Sommerian apparatus shows a wide swinging of the lower legs when inhibitions are low, and this stops arbitrarily only to start over again without the influence of any external force'. Moreover, as had been noted by Sommer in 1897, "C" struck Isserlin as a well-behaved, 'submissive, trusting, and humble' individual. Isserlin ascertained that his school knowledge was relatively good, even though his mathematical and writing abilities were somewhat defective. However, '[s]pecially defective was his memory; he could not remember the year he married his wife and complains about recurrent vanishing memories'. Furthermore, Isserlin carried out new 'intelligence tests', one of which, he indicated, was particularly telling with regard to the incidence of memory loss in epilepsy, as had been already argued in connection to the alleged deliberate forgery years earlier. This particular test consisted in Isserlin asking the subject to read out loud a short 'touching' story, and then reproduce it verbally, without the text. The subject, thus read out loud:

> A brother had ventured into the open see. The sister had promised that she would leave every night a lantern illuminating right at the window until his return as a symbol of how much she misses him. One night, the light went out. The neighbours, thinking that the brother had finally returned, rushed over there only to find the sister sitting at the window stiff dead, next to an extinct lantern (Isserlin 1905 pp. 432-433).

Immediately after, "C" started crying, and did not stop for three minutes. Once the subject regained composure, Isserlin asked him to reproduce the story, only to find that he only remembered the premise. The second part of the story was made up, claiming that the brother returned home, and the sister did not die. "C" explained to Isserlin that because of the profound sadness he experienced, he had forgotten the rest of the story. Isserlin observed that the subject had indeed become fixated by 'the emotive image' of 'the waiting with the lantern at the window' to the extent that everything that followed this 'representation' was impossible for him to grasp. This gave Isserlin reassurance with regard to the phenomenon of 'confabulation',[84] which he established as characteristic of the epileptic (Isserlin 1905 pp. 433). Generally speaking, in both neurophysiological and psychological levels, nothing significant seemed to have changed between the mental states, the personality and the health of "C" between 1897 and 1904. Isserlin explained that the rigorous new psychological and physiological examinations he carried out with "C" were to be complemented with new word-association experiments. Repeating this test would help him detect much more subtle psychological differences when confronting the states of

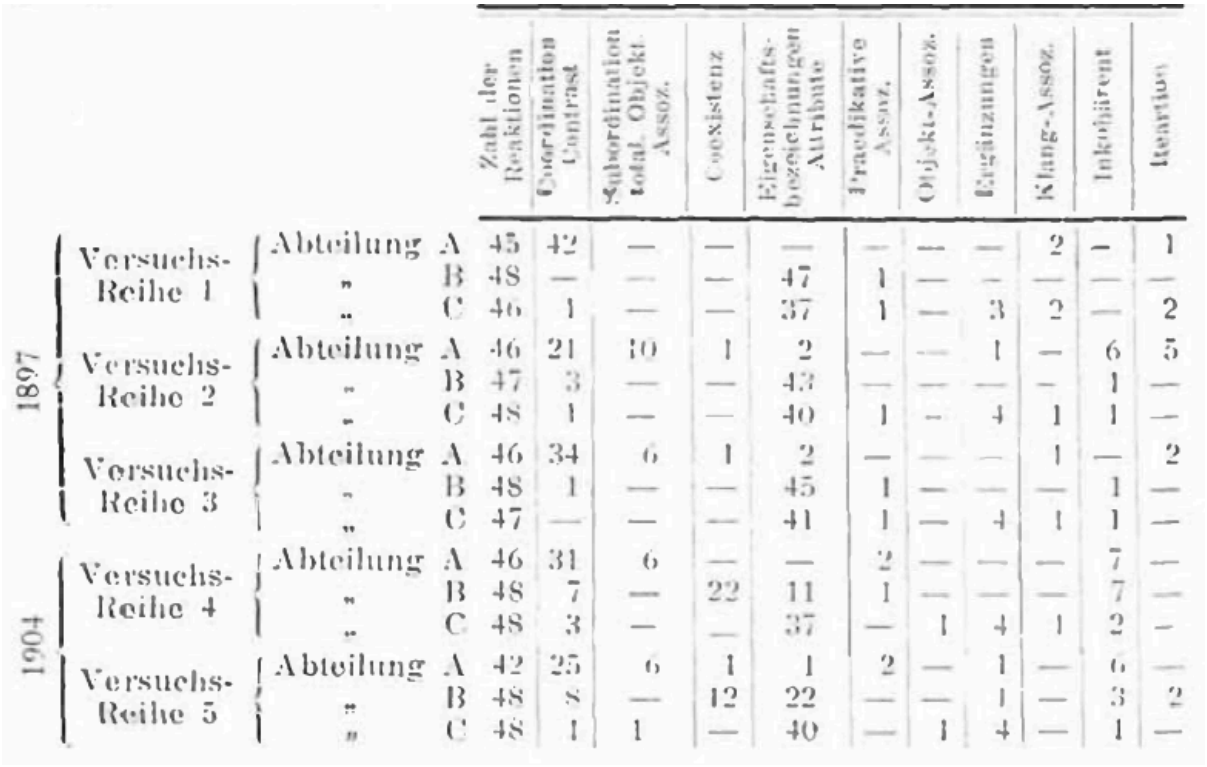
[84] Term coined by Bonhoeffer during his experimental trials with epileptics in 1901 to describe the psychological mechanism of making up stories in order to fill up memory gaps.

the disease in 1897 with the new ones 1904, and therefore add valuable diagnostic and prognostic knowledge to the disease entity.

After carrying out two sets of association using the same method of answer-to-word-reaction, the same scheme (grammatical forms etc), and the same psychological categories and groups of stimuli, Isserlin was able to compare sets 1A-3C of 1897 with 4A-5C of 1904 (see figures 2.4. and 2.5.). The latter were not so uniform as had been the case with the former; this time around, reactions were more wide-ranging regarding to both form and content. Whereas in 1897 almost 90% of verbal reactions were adjectives, in 1904 there were also a significant number of substantives and occasionally some other word forms. In addition, the association forms themselves seemed to be a bit more diverse, as shown with 'coexistence' and 'description of properties' in sections 4B and 5B. Furthermore, 'instead of the meagre reaction style deployed before, we can observe now coordinated concrete representations, mostly representations of objects, emerging more often, even though it must be noted also that these objects are the most simple and common ones, all present in his immediate presence'. In contrast, the meagre style of the last sections of all sets of 1897, persisted in the last sections of the 1904 sets (4C and 5C). The most evident phenomena of 1904 were, again, the perseveration and the egocentrism of the forms of association, although 'with a less depressive tone' (Isserlin 1905 p. 441).

		Zahl der Reaktionen insgesamt	Adjektiva	Substantiva	Verba	Andere Wortformen
Versuchs-Reihe 4	Abteilung A	46	36	10	—	—
	" B	48	11	36	1	—
	" C	48	39	4	—	5
Versuchs-Reihe 5	Abteilung A	42	36	6	—	—
	" B	48	24	24	—	—
	" C	48	43	2	—	3
		280	189	82	1	8

Figure 2.4: Chart comparing the sets of 1904
[1905 p. 440]



				Zahl der Reaktionen	Coordination Contrast	Subordination total. Objekt. Assoz.	Coexistenz	Eigenschafts-bezeichnungen Attribute	Praedikative Assoz.	Objekt-Assoz.	Ergänzungen	Klang-Assoz.	Inkohärent	Iteration
1897	Versuchs-Reihe 1	Abteilung	A	45	42	—	—	—	—	—	—	2	—	1
		„	B	48	—	—	—	47	1	—	—	—	—	—
		„	C	46	1	—	—	37	1	—	3	2	—	2
	Versuchs-Reihe 2	Abteilung	A	46	21	10	1	2	—	—	1	—	6	5
		„	B	47	3	—	—	43	—	—	—	—	1	—
		„	C	48	1	—	—	40	1	—	4	1	1	—
	Versuchs-Reihe 3	Abteilung	A	46	34	6	1	2	—	—	—	1	—	2
		„	B	48	1	—	—	45	1	—	—	—	1	—
		„	C	47	—	—	—	41	1	—	4	1	1	—
1904	Versuchs-Reihe 4	Abteilung	A	46	31	6	—	—	2	—	—	—	7	—
		„	B	48	7	—	22	11	1	—	—	—	7	—
		„	C	48	3	—	—	37	—	1	4	1	2	—
	Versuchs-Reihe 5	Abteilung	A	42	25	6	1	1	2	—	1	—	6	—
		„	B	48	8	—	12	22	—	—	1	—	3	2
		„	C	48	1	1	—	40	—	1	4	—	1	—

Figure 2.5: Combined results of the five sets, this time as corresponding to 'forms of associations'

The headers read: number of reactions, coordination and contrast, object subordination, coexistence, attributes and relational properties, predications, object association, additions, sound resemblance, incoherence, iteration.

[1905 p. 441]

After lengthy comparative analysis of data, Isserlin argued that all the experiments with "C" had provided empirical evidence about an important aspect of epilepsy, namely, 'a limiting emotional disposition towards association of representations' and 'a general lack of imagination'. Despite the fact that, as Isserlin recognised – again following Wundt and Kraepelin – the personality and the real psychological process remained inaccessible to the scientist, 'we can nevertheless infer certain aspects of it' by observing 'the forms of the associations'. Accordingly, 'we can confirm that a substantial number of associations have been repeated in identical forms after 6 ½ years; this is certainly not a mechanistic fixation, but can only be caused by a particular constellation of psychological dispositions' (Isserlin 1905 p. 444). In short, Isserlin's evaluation of the old and new association experiments with an epileptic had informed him about two aspects of the disease entity, and something about the individual personality of "C", the epileptic.

In addition, Isserlin concluded that in cases where more precise differential diagnosis were deemed necessary, as in other forensic cases, the verbal stimulus-reply method could be of great diagnostic value, inasmuch these could trace 'internal movements' in 'the special quality of the association' in

psychiatric subjects (1905 p. 443). This had been further demonstrated, he explained, by the fact that the peculiar reaction style and the repetitions and perseverations from 6 ½ years earlier were the same, and, after all, they were not conditioned by experimental constrains, but by the individual personality of the subject.

IV. Isserlin's Word Association Experiments in Heidelberg with Cases of Manic-Depressive Insanity

Fully recovered from his illness, and having published his experimental results with the epileptic in Giessen, Isserlin moved back to Heidelberg in the Autumn of 1905. In charge of the clinic in Heidelberg now was Franz Niessl, another important supporter of Kraepelin's scientific programme since the 1890s. Kraepelin had relocated to Munich two years earlier, and Isserlin and Nissl would follow him a year and half later (Isserlin CV pp. 2-3). While in Heidelberg, among other things, Isserlin carried on conducting association experiments, this time with the clinic's transitory and acute manic depressive patients, which led him to the publication of his *Psychological Investigations on Manic Depressives* (1907b) in the widely circulated *Monatschrift für Psychiatrie und Neurologie*, the same journal that published his first experimental investigation.

As Isserlin observed, these investigative methods provided by word association experiments had proven suitable also for investigation of manic depressive insanity, precisely because of the abundance of changeful clinical pictures that emerged in the course of that illness. Isserlin saw again an opportunity to corroborate previous experimental claims, this time, those of his colleague Gustav Aschaffenburg. Isserlin explained that excepting this psychiatrist's experimental studies with manic depressive patients, 'only two systematic experimental studies with this disease form has been conducted, namely those of Lefmann and Wolfskehl' (1907b p. 302). More importantly, however, was Isserlin's intention of updating the experiment with the recently acquired 'new clinical knowledge' of the condition. Kraepelin and others had recently established that manic depressive insanity – only having been distinguished from dementia praecox a couple of years earlier by Kraepelin – mostly manifested itself in 'mixed states' (*Mischzustande*), or mixed episodes of depression and mania, and less frequently so in 'pure', alternated ones (1907b pp. 303; 524).

Isserlin argued in his new piece – as he had done it with regard to epilepsy in his previous experimental work – that the word association experiment was remarkably useful when applied to manic depressives; the same methods of analysis, the same psychological principles, and similar schemes, groupings and

categories. This time, time measurement acquired a bit more significance. Accounting for the different forms and clinical pictures of manic depressive insanity was perhaps more challenging than accounting for nuances within a case of epilepsy. Measuring and registering imperceptible behavioural changes and patterns through different instruments and time units was, Isserlin claimed, of clinical value in this regard. As he explained,

> [d]ue to the fact that the inclusion of time-measurement in the association experiment not only serves the qualitative investigation of the content of the associations but also a quantitative analysis of their duration, this suited well for the individual investigation (*Einzelerkenntnis*) of various disturbances occurring simultaneously in different areas of mental experience (1907b p. 303).

Since manic-depressives went often through mixed states, that is, combinations of euphoric, hyperactive, impulsive or irritable moods with the displaying of depressive emotions and inhibited psychological function, Isserlin wanted to show that quantitative analysis of the durations of reactions and of representations registered in association experiments conducted on manic depressives, when compared with the data produced by healthy subjects, could, as it were, catch the illness while this unfolded in different subtle directions, otherwise imperceptible through other experimental techniques. However, despite the recordings and time measurements performed, Isserlin admitted that such techniques – which he only employed with a couple of patients – where still unreliable, and thus, the results of his investigation did not account for the results of time measurements.[85]

Isserlin reassured the reader of his piece that in his tests he had taken the necessary precautions to abide to the experimental discipline laid out by Sommer, Aschaffenburg, and more recently by Jung. These were, firstly, to prevent that the subject's associations were influenced by anything external, such as equipment and other potentially inhibiting environmental elements; secondly, to make sure that the reaction occurred as quickly and spontaneously as possible, thus allowing the subject the adoption of a

[85] Yet, by also registering, with the aid of phonograms, the quantity of syllables and phonemes contained in the reactions of both healthy people and manic depressives, he claimed to have managed to establish important quantitative differences at a more psycholinguistic level between the two groups. For his procedures with time measurements, see (1907b pp. 517-520). Moreover, Isserlin did not trust the Hippian chronoscope for reaction time measurement in psychotics. On the one hand, the chronoscope required that the subjects reacted with the shortest possible verbal expression, for example, with a syllable. Due to their characteristic 'tendency to ramble on' and drift away from the stimulus word (and generally from the topic of conversation) (*die Tatsache des Weiterscheifens*) (1907b pp. 304; 307; 530), the mental state of the manic depressive was not suitable for such millimetric measurements. In addition, complex settings inevitably induced inhibitions in the experimental subject. The mechanics of the Hippian chronoscope were noisy and its operation obstructed the natural unfolding of the mimic and facial expressions. This was a problem because 'usually the mimic indicates a mental event anticipating the verbal response' (1907b p. 304). Furthermore, Isserlin acknowledged that 'the magnitude of the reaction-time which takes place in-between states in the unfolding of manic depressive episodes is usually so large that the measurement provided by a timer capable of marking to 1/5th of a second generally suffices' (1907b p. 304).

reaction style (*Reaktionsweise/Reaktionstypus*) unconditioned by the experimental settings; and finally, to guarantee that the Wundtian precept of renouncing any potential interference of introspective mechanisms was preserved at all times. These preconditions were to be satisfied if the aim was the identification and classification of 'reaction types'. As indicated in the discussion of the association experiments with the epileptic patient in Giessen, Isserlin emphasised that the goal was not the direct apprehension of the real psychological processes. Rather, the purpose was identifying certain patterns in the ways manic depressives associatively reacted to the same stimuli-schemes. As Isserlin explained, the experimenter 'could distinguish traces (*Fingerzeig*) of the real subjective state(s) in which the subjects find themselves during the test' through the quantitative and qualitive analysis of word reactions. Such tip-offs and hints were not given to the naked eye of the clinical psychiatrist, no matter how experienced they were (1907b pp. 302-303). Therein rested the significance of the psychological experiment in psychiatry; in this case, of association experiments.

Nevertheless, Isserlin recognised the controversy around the use of arbitrary categories and schemes in these experiments. He called this the 'crux of association experiments' (1907b p. 304). The standard scheme (as Isserlin called it by then, the 'Wundt-Aschaffenburg-Kraepelin Schema') used by the Kraepelinians had been denounced, Isserlin believed to a degree correctly so, as 'illogical… incorrectly grouping the most heterogenous psychological elements in the same categories…' and as ultimately 'oblivious of the individual psychological process of the association'. For, 'if we understand by association that through which it is first possible that an experience emerges from another experience', the artificial scheme and categories used in reaction-time tests 'are not that advantageous'. In other words, the standard scheme used by psychiatrists at this time was not useful for what we could call an 'intentional' psychological study, for an investigation of the depth of the personality. However, if instead of 'theoretical and psychological considerations', the aims of the investigations were those 'of *a differential psychology and psychopathologic diagnostic*'[86]exclusively, these inconveniences became, he argued, rather insignificant. This was due to the fact that 'all diagnostic association experiments fundamentally seek to establish, out of the first and last items of the reaction process, certain reaction styles (*Reaktionsweisen*) as individual or rather psychopathologically characteristic' (1907b p. 307). This meant for Isserlin, furthermore – as it did for Kraepelin – that at least to some extent, the experimental methodology for diagnostics did not require access or particular clarity as to the specifics of the real psychophysical events involved.

In Figure 2.6. we have an example of how the associations were conducted. The categories of the scheme Isserlin used in his experiments to group the content of the associations of the manic depressive subjects in Heidelberg were, first of all, divided into 'inner and outer'. The inner associations were

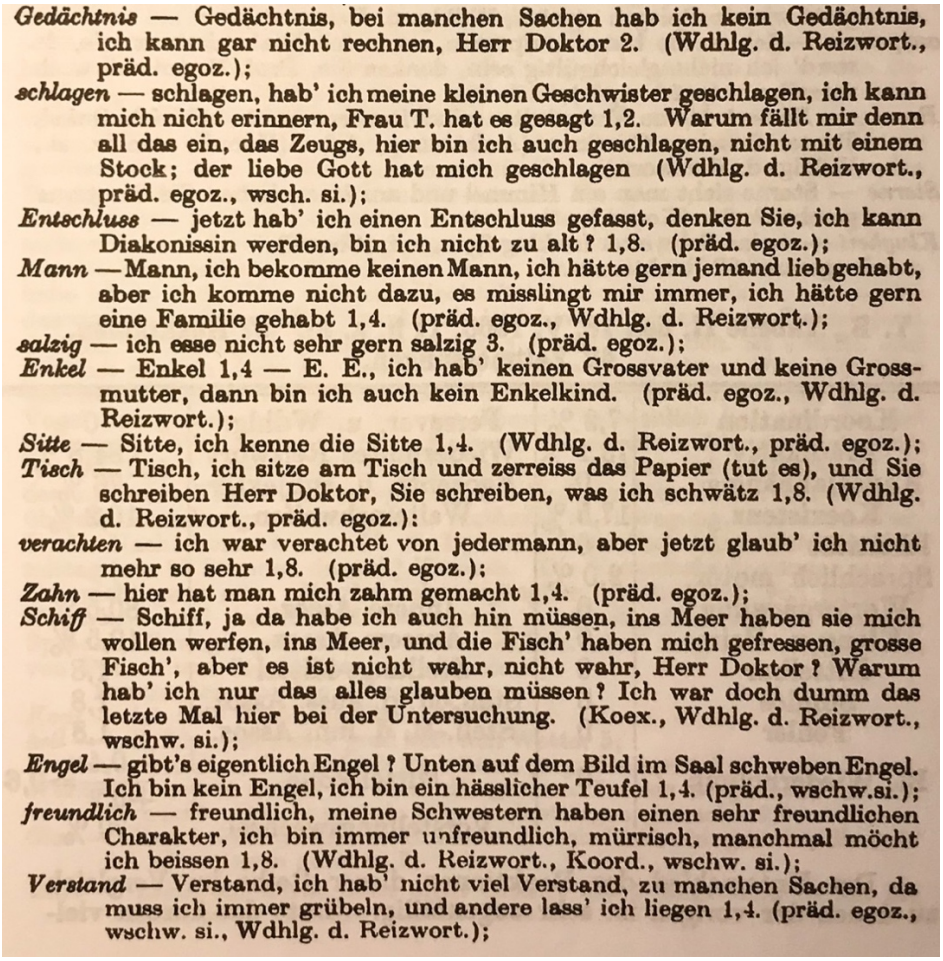
[86] My emphasis.

further allocated into three categories, namely, 'coordination, predicative relation, and causality', while the outer associative reactions (some of which can be seen in the example) were classified in five subcategories: 'coexistence, identity, linguistic-motoric conjunction (*sprachlich motorischer Verknüpfung*), word-enhancement (*Wortergänzung*) and auditive associations (*Klangassoziationen*).' Moreover, Isserlin also classified the 'mediated (*mittelbar*), senseless (*sinnlos*) and mistaken reactions (*Fehler*)'; these latter included also silences that took over 60 seconds. Moreover, there were the 'mere repetitions' of the stimulus word[87] and the perseverations or recurrences (*Perseverationen und Wiederholungen*), which, different from the former, consisted of reiterations of either past stimulus words or past associative reactions (1907b p. 308ff).[88] Mere repetitions were considered by Isserlin to be particularly informative about the subjective events in associative processes of this kind of patient, because these phenomena were indicative of either of these two fundamental disturbances: 'either a disorder of cognition or a weak focussing capability, whereby the will to stay focussed leads to repetitions' – for example, as when there are way too many representations called upon at the same and it becomes paralyzing – 'or a deficit of representations, so characteristic of states of inhibitions' (1907b p. 310). In addition, rambling, typical of manic depressives, was made a distinct category, further devided into two: as either 'meaningful' (*si*) or 'senseless' (*wschw*).[89] Finally, there was the category 'subjective-egocentric', which entered in combination with others. So for example, a reaction could be classified as both predicative and egocentric, or as showing both coexistence and egocentrism (1907b p. 308).

[87] 'Wdhlg. D. Rz. W.'

[88] Isserlin clarified that the stimulus word were used again only after a minimum of four weeks from the time it was last used with the same subject.

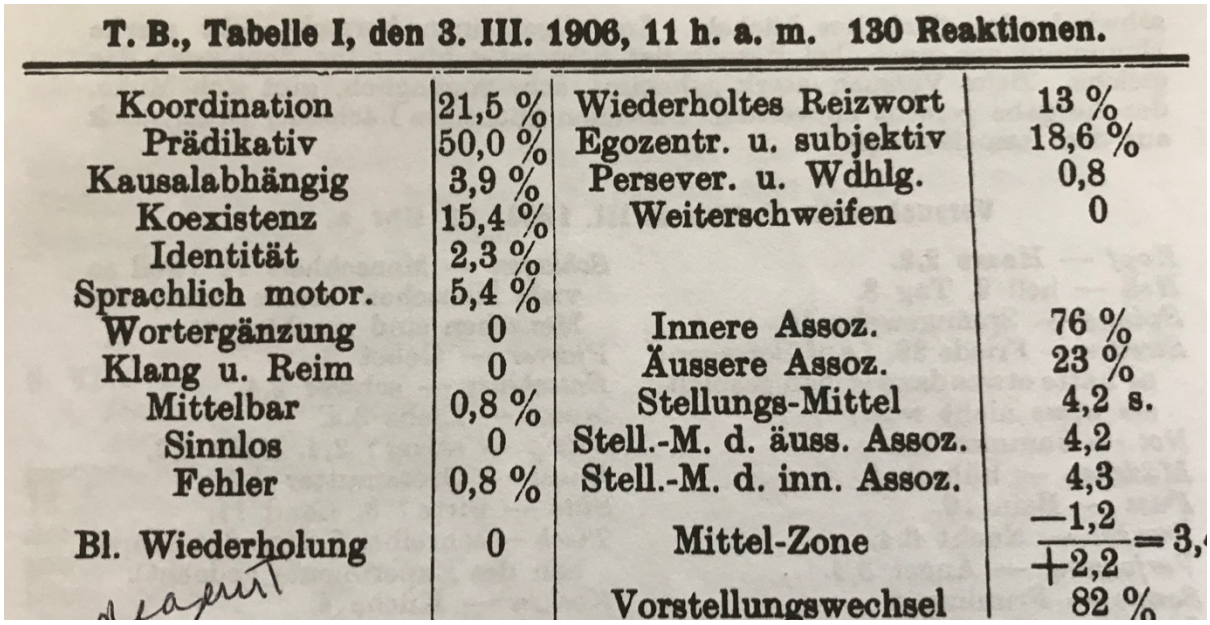
[89] An example for meaningful rambling would be: '***dancing*** – I learnt once, even twice perhaps.. if I can still do it? For that I have lost my mind; or through music'. In contrast, a senseless rambling would be: '***flower*** – emblem of the March violets, symbol, simply, nonsense, dumb, chimney sweeper, black; I think, no.. I don't think that a chimney sweeper attends church' (1907b p. 309).



Gedächtnis — Gedächtnis, bei manchen Sachen hab ich kein Gedächtnis, ich kann gar nicht rechnen, Herr Doktor 2. (Wdhlg. d. Reizwort., präd. egoz.);
schlagen — schlagen, hab' ich meine kleinen Geschwister geschlagen, ich kann mich nicht erinnern, Frau T. hat es gesagt 1,2. Warum fällt mir denn all das ein, das Zeugs, hier bin ich auch geschlagen, nicht mit einem Stock; der liebe Gott hat mich geschlagen (Wdhlg. d. Reizwort., präd. egoz., wsch. si.);
Entschluss — jetzt hab' ich einen Entschluss gefasst, denken Sie, ich kann Diakonissin werden, bin ich nicht zu alt? 1,8. (präd. egoz.);
Mann — Mann, ich bekomme keinen Mann, ich hätte gern jemand lieb gehabt, aber ich komme nicht dazu, es misslingt mir immer, ich hätte gern eine Familie gehabt 1,4. (präd. egoz., Wdhlg. d. Reizwort.);
salzig — ich esse nicht sehr gern salzig 3. (präd. egoz.);
Enkel — Enkel 1,4 — E. E., ich hab' keinen Grossvater und keine Grossmutter, dann bin ich auch kein Enkelkind. (präd. egoz., Wdhlg. d. Reizwort.);
Sitte — Sitte, ich kenne die Sitte 1,4. (Wdhlg. d. Reizwort., präd. egoz.);
Tisch — Tisch, ich sitze am Tisch und zerreiss das Papier (tut es), und Sie schreiben Herr Doktor, Sie schreiben, was ich schwätz 1,8. (Wdhlg. d. Reizwort., präd. egoz.):
verachten — ich war verachtet von jedermann, aber jetzt glaub' ich nicht mehr so sehr 1,8. (präd. egoz.);
Zahn — hier hat man mich zahm gemacht 1,4. (präd. egoz.);
Schiff — Schiff, ja da habe ich auch hin müssen, ins Meer haben sie mich wollen werfen, ins Meer, und die Fisch' haben mich gefressen, grosse Fisch', aber es ist nicht wahr, nicht wahr, Herr Doktor? Warum hab' ich nur das alles glauben müssen? Ich war doch dumm das letzte Mal hier bei der Untersuchung. (Koex., Wdhlg. d. Reizwort., wschw. si.);
Engel — gibt's eigentlich Engel? Unten auf dem Bild im Saal schweben Engel. Ich bin kein Engel, ich bin ein hässlicher Teufel 1,4. (präd., wschw.si.);
freundlich — freundlich, meine Schwestern haben einen sehr freundlichen Charakter, ich bin immer unfreundlich, mürrisch, manchmal möcht ich beissen 1,8. (Wdhlg. d. Reizwort., Koord., wschw. si.);
Verstand — Verstand, ich hab' nicht viel Verstand, zu manchen Sachen, da muss ich immer grübeln, und andere lass' ich liegen 1,4. (präd. egoz., wschw. si., Wdhlg. d. Reizwort.);

Figures 2.6: Association experiment carried out by Isserlin with a patient diagnosed with manic-depressive insanity, accounting for 'inner and outer associations' and reaction-time
For example, the first series reads: '***memory*** – Memory, I've got a bad memory for many things, I can't do mental calculations, Herr doctor'. It took 2 seconds for the patient to react, and Isserlin saw here, apart from the repetition of the stimulus word, a 'predicative' inner association and an 'egocentric' outer association.
[1907b p. 315]

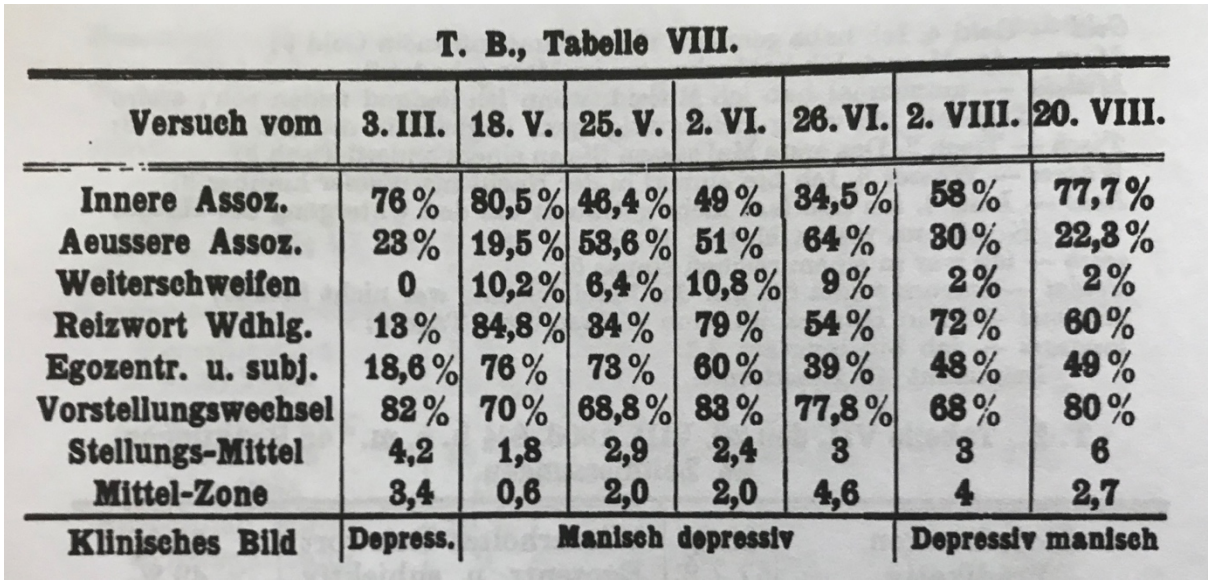
The forms of inner and outer associations were then inscribed and organised in charts, exhibiting percentages, medians, and patterns; qualitative and quantitative data was thus laid out in a comprehensible way so that the psychiatrist could pinpoint potentially useful regularities and correlations for differential and refined diagnosis of, in this case, the variety of forms of manic depressive insanity (see Figures 2.7 and 2.8).



T. B., Tabelle I, den 3. III. 1906, 11 h. a. m. 130 Reaktionen.

Koordination	21,5 %	Wiederholtes Reizwort	13 %
Prädikativ	50,0 %	Egozentr. u. subjektiv	18,6 %
Kausalabhängig	3,9 %	Persever. u. Wdhlg.	0,8
Koexistenz	15,4 %	Weiterschweifen	0
Identität	2,3 %		
Sprachlich motor.	5,4 %		
Wortergänzung	0	Innere Assoz.	76 %
Klang u. Reim	0	Äussere Assoz.	23 %
Mittelbar	0,8 %	Stellungs-Mittel	4,2 s.
Sinnlos	0	Stell.-M. d. äuss. Assoz.	4,2
Fehler	0,8 %	Stell.-M. d. inn. Assoz.	4,3
Bl. Wiederholung	0	Mittel-Zone	$\frac{-1,2}{+2,2} = 3,$
		Vorstellungswechsel	82 %

Figure 2.7: Organisation of results of a morning session with patient T.B.
[1907b p. 314]



T. B., Tabelle VIII.

Versuch vom	3. III.	18. V.	25. V.	2. VI.	26. VI.	2. VIII.	20. VIII.
Innere Assoz.	76 %	80,5 %	46,4 %	49 %	34,5 %	58 %	77,7 %
Aeussere Assoz.	23 %	19,5 %	53,6 %	51 %	64 %	30 %	22,3 %
Weiterschweifen	0	10,2 %	6,4 %	10,8 %	9 %	2 %	2 %
Reizwort Wdhlg.	13 %	84,8 %	34 %	79 %	54 %	72 %	60 %
Egozentr. u. subj.	18,6 %	76 %	73 %	60 %	39 %	48 %	49 %
Vorstellungswechsel	82 %	70 %	68,8 %	83 %	77,8 %	68 %	80 %
Stellungs-Mittel	4,2	1,8	2,9	2,4	3	3	6
Mittel-Zone	3,4	0,6	2,0	2,0	4,6	4	2,7
Klinisches Bild	Depress.	Manisch depressiv				Depressiv manisch	

Figure 2.8: Comparison of association forms throughout multiple sessions with the same patient
T.B. was a manic depressive patient of the clinic. The forms of association allowed Isserlin to correlate the predominance of reaction styles with the predominance of either depressive states, manic episodes, and mixed states in manic depressives
[1907b p. 316]

Results and diagnostic value

Establishing patterns, regularities and correlations in the forms and contents of associations was not the end of the story. As Isserlin observed, '[w]e need to compare with the results of healthy individuals the results of these investigations since we intend to determine characteristic association styles for particular "disease forms" (*Krankheitsformen*)' (1907b p. 522) which, in turn, could enhance the knowledge of 'disease entities' (*Krankheitseinheiten*), one of the central tasks of the Kraepelinian clinical program. Isserlin recognised that such comparison had been facilitated by the 'extensive material with healthy subjects' that had been recently provided 'by Aschaffenburg, Jung and Rilkin'. He explained that it had been particularly valuable to learn the importance of education and the personality of each individual when it came to association studies. For instance, Jung and Rilkin had established that on average educated people (*Gebildete*) had a more uniform reaction style (*Reaktionstypus/Reaktionsweise*) than the uneducated (*Ungebildete*), and that the former concentrate on the meaning of the stimulus word more than the latter (1907b p. 522-523).[90]

Taking the findings of his contemporaries – regardless of whether he agreed or not with the methods and purposes behind them – Isserlin became convinced that 'the *content* of the associations and the *form* of their expression provide characteristic peculiarities' of the entity that it was – or was becoming – manic-depressive insanity early on in the twentieth century (1907b p. 522). Firstly, that the phenomenon of prolonged-reaction time during depressive states was almost generally present; intense emotions related to depressive representations normally resulted in 'excessive time until reaction'. Moreover, the amount of 'reaction based on simple sound associations' had made possible the detection of two different types of inhibitions in depressive states; sometimes it was the case that motoric or mere physiological issues were at the root of this form of inhibitions; other times, it was observed, it was a matter of 'active comprehension' (*Auffassung*), that is, a psychological dysfunction (such as lack of imagination) what brought about inhibition in the form of pure sound associations. Furthermore, it was observable, Isserlin explained, that in cases of pure depressive states, reaction styles show generally a tendency to stick to the meaning of the stimulus word and the form of the reactions was generally short and concise (1907b p. 522).

With regard to manic episodes or predominately manic states, Isserlin corroborated 'almost all the essential points made by Aschaffenburg…on the flight of ideas' (1907b p. 524). The flight of ideas was the inability to control a discursive act due to 'a rapid flow of thoughts'; it meant talking about multiple topics, jumping from one to the other without any coherent or rational expressive or communicative

[90] Isserlin also recognised the value of association studies in normal psychology of Ach, Watt, and Messer.

purpose. The phenomenon of rambling, so present in the experiments Isserlin had conducted, gave a unique opportunity for studying such characteristic feature of psychotics' behaviour in a somewhat less inhibiting and controlled setting. However, Aschaffenburg had apparently missed the fact that the flight unfolded in different degrees of intensity, which, Isserlin believed, were prone to further differentiations. As he claimed, '…we can observe that the individuality of the patient presents a unique variety of flight of ideas' (1907b p. 525). Furthermore, and building on the Wundtian conceptions of consciousness and apperception, the flight of ideas was for Isserlin a disturbance whereby the mental activity regulating attention had been impaired. As he was able to determine, whereas healthy people would stick to high level representations (*Obervorstellungen*) – such as a topic, an argument, motive or an event more or less throughout the series of associations, the manic depressives on manic states 'moved erratically and without any higher regulation', that is without an operative apperception. Moreover, and also with Aschaffenburg, Isserlin was able to determine that the flattening quality of the associations of manic depressives during manic states had a general correlation with its quantitative overproduction (1907b pp. 527-529).

Among other important diagnostic advances, we can mention Isserlin's claim that association experiments had also established a differential diagnosis that allowed a distinction between manic depressive insanity 'in its catatonic-like mix states' from dementia praecox. This was of immediate practical importance because, as Isserlin himself recognised, at the time many recently called manic depressives, due to the variety of shapes their illness could take – mixed states, flight of ideas, inhibition and so on – were being incorrectly diagnosed and treated as victims of dementia praecox. The association experiment, according to Isserlin, allowed the clinician to recognise a fundamental distinction between a case of manic depression and dementia praecox in that while the manic depressive consistently had a tendency to 'engage with the task' – regardless of the performance –, a patient with dementia praecox by contrast, would generally stick to stereotypes and present a much higher degree of repetitions (1907b pp. 529-530).

Isserlin was aware of the limitations of his methods and analysis, and that much more refined analysis needed to be developed, something he reiterated throughout the piece published in 1907. Thus, he illustrated his cautionary attitude as follows:

> It has not been the intention of these discussions to give the impression of having provided a definitive answer to any of the questions…We are only at the beginning of a systematic, psychological research endeavour with regard to manic depressive insanity, as it is as well the case with most of the psychoses, and every step forward brings new insights as well as corrections to old assumptions (1907b p. 536)

However, Isserlin noted, his study had occupied itself also with the question as to what extent the flight of ideas could be traced back to 'involuntary dispositions', that is, to what extent the flight of ideas (also in dementia praecox and other psychoses) *responded to a natural, inborn trait.* 'Put succinctly', he observed, 'such a fast and sustained associative power, flat in its quality and nevertheless continuously changing in direction, which is characteristic of the flight of ideas, cannot be performed by a constitutionally healthy individual' (1907b p 531). He did not elaborate on this at all in his 1907 piece. However, this was the first time that Isserlin raised the question of pathological constitutions with regard to mental illness in published material. As we will see, this question would gain serious momentum throughout his career.

V. 'Degeneration' and the Origins of the Munich Group of Psychiatrists

In 1902, overcrowding and excessive bureaucracy in transferring patients into and out of the Heidelberg clinic made Kraepelin re-consider the involvement of the state in his clinical projects. Munich, where he was better connected,[91] was much better suited for his purposes because there was less state control in Bavaria than in Baden. In 1903 Kraepelin thus became ordinary professor of psychiatry in Munich. In 1904, he opened the new building of the psychiatric hospital of the Ludwig Maximilian University (Engstrom 2003; Hoff 2015) and it was there that he became particularly concerned with the theory of degeneration in mental illness. His emphasis on psychological explanations and clinical work, as previously discussed, did not make mental illness in theory any less biological, or any less rooted in the brain. His psychiatry permitted a balance between body and mind (roughly a form of psychophysical parallelism) because – as exemplified in Isserlin's experiments – it exploited exclusively the methodological and clinical advantages given by the study of psychological phenomena. In other words, psychological investigations aided diagnosis, prognosis and classification and did not bother with aetiology. These investigations could thus continue alongside the ongoing search for structural abnormalities and biological causes of mental disease. Isserlin fully subscribed to this methodological parallelism.

Back in 1857, the French psychiatrist Benedict Morel (1809-1873) had tried to explain mental illness as the consequence of hereditary dispositions. Mental illnesses were meant to be understood as the pathological momentums within a family tree; as viral and cross-generational maladies. In fact, the mentally ill person was merely symptomatic of a grander social disease, which, although it might have originated in an individual, spread rapidly, first to the family and progeny, thereafter to the social

[91] There he worked under Bernhard Von Gudden between 1878 and 1882.

organism, and ultimately to the whole race (Caponi 2010 p. 478). Moreover, Morel observed that 'the degenerate human being, if he is abandoned to himself, falls into a progressive degradation' and, as a consequence, '[h]e becomes not only incapable of forming part in the chain of transmission of progress in human society but he also is the greatest obstacle for its progress' (quoted in Shorter 2005 p. 229). Like Morel, Kraepelin wanted to place the study of mental illness in turn-of-the-century Germany in a theory of biological involution, and thus as part of the science of heredity, while at the same time advocating for the importance of epidemiological research on the antisocial and morally infectious character of many forms of unwanted behaviour (Roelcke 1997 pp. 390-391; Caponi 2010 p. 478ff; Engstrom 2007 p. 392).[92] But the balance between, on the one hand, endogenous and constitutional factors (nature), and on the other, of environmental and psychogenic ones (nurture), was rarely easy to conserve by the Kraepelinians in their multifaceted research on mental illness. However obscure the balance, some mental abnormalities for Kraepelin and Isserlin pointed to a degenerate constitution, to an 'inferior predisposition' (*Minderwertigkeit der Veranlagung*) brought about either by inherited abnormalities in the composition and behaviour of nerve cells, or by acquired abnormalities of the personality.[93]

When it came to inferior predispositions, the Kraepelinians considered cure to be impossible and thus, psychotherapeutic measures were considered to be merely palliatives, fulfilling orthopaedic and prophylactic functions. Psychiatrists could treat some symptoms but did not have any influence on pathological constitutions. Psychiatry's goal became *preventing* infection of mental illness from setting on, from becoming chronic, and from being passed on. Accordingly, what we have been delineating as the core aspects of the Kraepelinian program, namely, to understand the clinical forms and behaviours of mental illnesses and put together a reliable system of classification of mental diseases, were all tasks coordinated by the theory of degeneration; by the idea that mental illness was degenerative brain disease in need of prevention and prophylaxis.

Once in Munich, Kraepelin and his collaborators utilised state resources and institutions in order to collect the largest possible amount of data about the family, ancestry, and progeny of people with mental illness and neurological disorders in the region. They collected data from asylums, private clinics,

[92] These ideas had been made available in German language only in the late 1880s.
[93] Hoff (2015 p. 36) clarifies: 'The main clinical result of this period—first proposed in the sixth edition of 1899 of his 'Textbook'—was the well-known dichotomy of endogenous psychoses: that is, the separation of dementia praecox with, as he saw it, a poor prognosis, from manic-depressive illness (today called bipolar disorder) with a good, or at least better, prognosis. With respect to "dementia praecox", he supposed an organic defect as the basis of the illness, a kind of 'auto-intoxication', leading to the destruction of cortical neurons. The patient's personality may promote the development of the psychotic illness, but it is not a central pathogenetic factor; contrary to most other nosological areas, degeneration was believed to be of *low* importance in dementia praecox'.

prisons, insurance companies, schools, as well as from local and juvenile detention facilities. Kraepelin also developed an international network and specially trained commissions abroad for the sole purpose of data collection. Eventually, Kraepelin's fascination with degeneration theory made his psychiatric practice concerned with the health of the *Volkskörper*, that is, with the vigour of the body politic (Engstrom 1991; Roelcke 1997). The notion of degenerative forces destroying the fabric of German society and culture became the core of the social and biopolitical background for studies carried out by psychiatrists working in the university clinic in Munich. From 1904 until the 1920s, these studies ranged from topics such as: heredity of mental illness; alcoholism; venereal disease and crime; histopathology and genetics of abnormal tendencies; experimental psychology; and comparative studies of population statistics at local, regional, national and international scales, among many other cutting edge research subjects in biology and anthropology. Nothing the Kraepelinians studied was exempt of the ideological guidelines provided by the doctrines of moral and biological degeneration (Kraepelin 1918a pp. 333-337).[94] And yet, Kraepelin did not create what we could refer to as a proper 'research school'. In Munich, Kraepelin's assistants were not really pupils, nor employees of the clinic; they did not study a particular subject as part of a pre-established research program either. Instead, Kraepelin made sure he had as many unpaid (though partially financed) 'scientific assistants' (*Hilfswissenschafter*) and collaborators as possible who could cover different research areas. Kraepelin did not impose any particular method on them and instead coordinated and integrated their findings (Hippius and Müller 2008 pp. 5ff).[95]

From Heidelberg, Kraepelin brought with him to Munich the assistant professor Franz Nissl[96] (1860-1919) in 1903. Alois Alzheimer (1864-1915) – who had worked with Nissl for seven years in Frankfurt – was also invited by Kraepelin that year to work in histopathology for the Ludwig Maximilian University Clinic. Alzheimer's and Nissl's histological research began immediately by addressing the aetiological distinction between simple processes of aging, pathological processes in the brain, and more deeply rooted degenerative conditions. Felix Plaut (1877-1940) – already in Munich and well regarded in psychiatric circles for his pioneering serological and immunological research in tertiary syphilis – was also convinced by Kraepelin to join his research group in 1903 (Hippius and Müller 2008

[94] For example, in 1904 Sommer published a monograph on criminal psychopathology (*Kriminalpsychologie und strafrechtliche Psychopathologie auf naturwissenschaftlicher Grundlage*), whereby he investigated Lombroso's theory of 'born criminals' by establishing correlations between his clinical findings on the criminal patients in Giessen, such as characterological features, external influences and action. Sommer's 1897 experiments with "C" and others of the sort were sources of empirical evidence for degeneration.

[95] Kraepelin was fully aware of the fact that methodological diversity was an indispensable feature of clinical psychiatry.

[96] Out of a collaboration with Alzheimer in Frankfurt during the late nineteenth century, Nissl had become a renowned histopathologist after developing a staining technique that made visible several new nerve-cell constituents. Nissl, like Kraepelin, had been heavily influenced by degeneration theory introduced in Germany by their common teacher Von Gudden, who started promoting it already by mid-nineteenth century in an asylum in Illenau (Hippius and Müller 2008; Engstrom 2003).

pp. 6-10; Kraepelin 1918a pp. 333-337). Isserlin was brought to Munich originally as an experimental psychologist in 1907 from Heidelberg, and immediately embarked himself in intensive collaboration with the likes of Aschaffenburg, Nissl and Alzheimer (see figure 2.9).[97] Ernst Rüdin (1874-1952) – later on one of the leading Nazi doctors in charge of the extermination of the 'unworthy of living' – also joined in 1907, after finishing a psychiatric residency at a Berlin prison. Next to Kraepelin, the right winger Rüdin was the most politically engaged of the members of the Munich group. He was a result-oriented scientist, consumed with transforming the outcome of research on inheritance into policy and legislation. Moreover, few people had been at the turn of the century as outspoken as Rüdin had been regarding degeneration theory and negative eugenics. He repeatedly drew attention to the financial burden that the sick and disabled represented to the German people (Engstrom 2007 p. 393; Roelcke 2018 p. 3).[98]

[97] Gudden, Kraepelin's master, had become the leading researcher in degeneration of nerve-cells.
[98] In the period 1907-1917, Rüdin became Kraepelin's most prolific assistant, at least in terms of Kraepelin's personal agenda. Among other things, he made considerable progress in the genetics of dementia praecox. With his studies on mood disorders, he debunked the theory of simple Mendelian inheritance when it came to psychological disturbances, thus showing that environmental causes were also of importance. Apparently he decided not to publish his results in order to be able to advance his eugenic agenda. Yet, Rüdin pioneered and refined complex techniques for conducting studies of inheritance, was widely cited in the international literature for decades, and is still regarded as 'the founder of psychiatric genetics' (Joseph and Wetzel 2013).

Figure 2.9: Kraepelin with some of his assistants and collaborators on a walk through a botanic garden in Munich in 1906.
Kraepelin is standing far left in a grey suit. Isserlin – still in Heildeberg at the time – first on the right. At the back, standing, Alzheimer (last from the left); Gaupp third from the right, partially leaning on a tree. No complete list of names is available.
[Original negative with some documentation in possession of John C. Burnham, taken from Falzeder and Burnham p. 1226]

Even though Kraepelin's *Hilfswissenschaftler* were autonomous scientists in terms of research, their clinical work was inextricably interconnected through the theory of degeneration. Their questions were generally oriented in evolutionary and neo-Lamarckian terms: how can clinical science and neurophysiology determine the biological mechanisms (of use and disuse) responsible for passing on pathological characteristics from generation to generation; or, how can science predict abnormal mental behaviour; and particularly important: how can science outlay the best method to contain the spread of mental degeneration, which happened not only vertically through inheritance, but also horizontally, through social and cultural contagion? (Caponi 2010; Engstrom 2007; Hoff 2009).[99]

[99] It is difficult to answer the question as to whether Kraepelin and his followers, including Isserlin, made any systematic distinction between hereditary and non-hereditary mental illness at any point.

Kraepelin's obsession with degeneration theory went far beyond science. He became more convinced through the years that cultural expression and life experiences ultimately impacted on the development of germ cells, which in turn could endanger the natural process of human evolution (Engstrom 2007 p. 395). Degeneration (*Entartung*) was ultimately involution, regression to more primitive stages of humanity, a sort of evolution in the opposite direction. In addition, evolution was understood by Kraepelin in affinity with Lamarckian precepts: he believed that humanity was subjected to transmutation of both culturally and physically acquired characteristics between generations (Caponi 2010 p. 485; Hoff 2009 p. 6).[100] Accordingly, in degenerative mental illness there was expected both a steady decline in mental functioning as much as an increase of social inadequacy from one generation to the next.[101]

Furthermore, and also in close affinity with most mental hygienists since Morel, Kraepelin and his collaborators had the ambition of conceptualising existential and social problems in medical and organic categories. For them modern life produced a number of factors that endangered the innate mechanisms of self-preservation that individuals needed in their inevitable 'struggle for life' (*Kampf ums Dasein*). Mental illness was, in a way, a manifestation of a weakness of volition and temperance; a manifestation of a weak personality (Decker 2004 p. 255ff; Caponi 2010 p. 484). But that weakness seemed to comprise factors of both *nature and nurture*. As Pereira (2008) indicates, what Kraepelin ultimately seemed to have aspired to was to explain the complex correlations that existed between social events and biological processes, out of which mental illness arose, bodies weakened, and families and races degenerated (Pereira 2008 p. 493; Decker 2004 p. 272ff). In fact, in *On the Question of Degeneration* (1908), Kraepelin showed as much concern over the social causes of neurosis as Freud did in the *Civilised Sexual Morality and Modern Nervous Illness* published the same year (Caponi 2010 p. 481).[102]

Later on, Kraepelin and his collaborators seemed to have found some reassurance of the organic origin of mental illness with the discovery of the bacillus as causal agent in tertiary syphilis (1912), as well as the uncovering of the role that the thyroid gland and hormonal phenomena played in mental abnormalities (Falzeder and Burnham 2007 pp. 1225-1226). Due to this, as well as to commitments with interdisciplinary genetic research, Kraepelin was in his early years in Munich an evolutionary naturalist. For him, all features of human existence – including the pathological – were subjected to natural laws of inheritance as any other living organisms. In passages of later texts, the philosophy of his 1908 piece on degeneration was further underscored. The quest to save German culture from the

[100] The rediscovery of Mendelian inheritance by Bateson in 1900 seemed to have been still unavailable for Kraepelin and his circle.
[101] For instance, an individual with neurotic tendencies (e.g. insomnia, bed wetting), in just a few generations, would onset clinical depression in some of its progeny; these, in turn, overt psychosis in some of theirs; and finally, later generations would develop full blown dementia (Hoff 2008 p. 15; Shorter 1997 p. 95).
[102] Note also that both seem to have been influenced by Beard's 1881 piece here (Engstrom 2007; Caponi 2010).

moral debacle it had fallen into during the First World War became top priority and his clinical psychiatry – as that of Isserlin, as we will see – was meant to serve in that quest. Among other things, Kraepelin was adamant that alcohol and syphilis damaged germinal cells, which resulted in degeneration of entire linages of descent (Decker 2004 263ff).[103] But in the most varied social factors, from the intake of toxic substances to bourgeois mores, every product of modernity seemed for him to affect, in one way or another, the nervous systems of Germans. Mental illness was prompted by the interaction of processes of inheritance of acquired characteristics and particular social and cultural contexts.[104] Isserlin fully subscribed to this.

VI. Conclusions

As we have seen, from the outset, Kraepelin had declared that his central aim was to create a reliable scientific nosology. In the 1880s, his intentions seemed, indeed, to be purely scientific and empirical: to establish clearly defined mental disease entities. By the turn of the century, the motivation of his clinical psychiatry (and that of his followers) became increasingly informed by social and political concerns. Thus, the quest for reliable prognosis, for example, through experimental psychology, assumed a prophylactic undertone when articulated through degeneration theory. For the same reason, it became imperative to keep studying the brain. Nosology was meant to be always informed by aetiology. This time, however, theoretical models of the 1870 such as those of Wernicke and Meynert were not meant to be the guiding principle for empirical research. Instead of relying exclusively on neuropathology and neurophysiology as nineteenth century academic psychiatrists had done, experimental psychology, bacteriology, epidemiology and genetics became central to the study of the disturbances of mind and brain (Roelcke 1997 p. 386). All these features of Kraepelin's psychiatry would inform, in fundamental ways, Isserlin's professional work in the brain and mind sciences.

By the time Isserlin arrived in Munich in 1907 to work under Kraepelin, there were two new major themes guiding the Kraepelinian-influenced research agendas of the urban psychiatric settings in Germany, and Isserlin got involved in both. They would also retain their significance for the paths that his own professional career would take in the following three decades. As we have seen, the first one was the clinical-experimental diagnostic approach developed by Kraepelin, Sommer, Aschaffenburg

[103] There is disagreement among historians in this regard. Engstrom (2007) emphasises the social and psychogenic causes of degeneration in his account of Kraepelin's ideas, while Decker (2004) simply infers that Kraepelin was aware of the patent contradictions.
[104] Different to Darwin, Kraepelin did not seem to advocate for the idea of the persistence of adaptive forms and elimination of non-adaptive ones in organisms (in this case, the nervous system and brain).

and further implemented by Isserlin. They all sought to extend to the largest quantity of mentally ill people the inscription technologies that had been developing in places like Heidelberg and Giessen. We have observed how significant Wundtian psychology was for them in both theories of mind and in experimental approaches to diagnostics, prognostics, work psychology and forensic psychiatry, among other things. The overarching goal was to render the classification of chaotic clinical pictures into neat disease entities possible. Isserlin's experiments, as exemplified in this chapter, contributed precisely to this enterprise. The second theme was informed by concerns with biological and moral degeneration, which Kraepelin and Isserlin sought to address through socio-political hygienic measures, as we shall see in chapters 4-6. It is, however, quite difficult to reconcile these aspects of Kraepelin's and Isserlin's professional and research agendas. On the one hand, we see the Kraepelinians (now unofficially referred to as 'the Munich group' of Kraepelin) as empirical scientists publicly committed to the establishment of rigorous and evidence-based clinical science, that could manage to overcome both the remnants of romantic alienist psychiatry, as well as the exaggerated eliminative materialism of the second half of the century. On the other hand, however, we have in Kraepelin, Sommer, Rüdin, Alzheimer, Isserlin and most Kraepelinians 'ideological and idiosyncratic' scientists who, as they got older, adopted, rather uncritically, the scientifically frail and putative doctrine of degeneration theory, assumptions in brain genetics, and controversial Darwinian biopolitics (Hoff 2008; Shepherd 1995; Engstrom 1991; Weindling 1991).[105] As we will be able to appreciate in the reminder of this thesis, Isserlin's professional career in Munich inherited these and other tensions of early twentieth century psychiatry.

[105] According to Engstrom (2007 p. 395), Kraepelin put degeneration theory at the service of his clinical technologies.

Chapter 3. Isserlin, Jung, and Freud (1905-1910)

On the early rejection of psychoanalysis by German psychiatrists

I. Introduction: Freud as a Problem for Scientific Psychiatry

Isserlin's commitment to the substantiation and expansion of a Kraepelinian psychiatry involved efforts at deligitimising divergent approaches. In particular, the theories of Freud and the momentum they were acquiring by the start of the twentieth century represented a considerable threat to the professional legitimacy as well as to the institutional plans of the German psychiatric establishment of which Isserlin formed a part. In the eyes of Kraepelin and Isserlin, Freud and his followers could potentially take away from them much needed patients, students and material resources.

Despite professional and institutional motives, the rejection of psychoanalysis by the German academic establishment was not psychologically and scientifically unfounded. While the Kraepelinians saw themselves also as working towards a re-integration of the mind into clinical psychiatry after decades of brain-centred research, they judged the Freudians' attempts at achieving this to be pseudoscientific, antinaturalistic, non-medical, and sectarian. According to Isserlin, at the core of the doctrine of psychoanalysis stood the idea of returning to a 'pure' and 'deep psychology', that is, to a full-blown mentalistic and speculative conception of psychopathology. To Isserlin it seemed that Freud's message was that it was a hidden nurture, not the interaction of nature and conscious life, what modern doctors of the mind were meant to tackle. Consequently, Isserlin believed that in Freud's doctrines there was no real objective science. It was rather the subjectivity of the 'trained' analyst that formed the only vantage point from which to understand insanity.

During the first decade of the twentieth century Isserlin not only conducted experiments of the kind we discussed in the previous chapter but also dedicated himself to demonstrating that Freudian 'deep psychology' was not informed by empirical data, nor by a valid scientific methodology. Measuring the quantifiable manifestations of elementary mental processes, prudence with regard to unwarranted inferences, systematic observation over long periods of time, reproducibility, and other indispensable aspects of Isserlin's scientific ethos, were considered by him to be absent in Freud's writings. Thus, if the resurgence of clinical psychiatry commanded by Kraepelin and his followers in the 1890s was against 'brain mythologies', Freud's ideas begun to be perceived as 'mental mythologies', and, in

Isserlin's words, as a 'Sisyphus work' (1907a; 1910a). Clinical psychiatry needed protection from radical forms of materialism as much as from radical subjectivism and psychologism.

Furthermore, the image of Freud that many academic psychiatrists working in university clinics were sharing was that of a malcontent neurologist who had renounced to an understanding of mental life in biological terms. In particular, Isserlin lamented Freud's intentions of reducing factors such as heredity and constitutional dispositions to 'mere general pre-conditions' for neurosis and psychosis. Indeed, Isserlin explained that Freud and his followers had unwarrantedly 'superposed to heredity emergent specific causes' when it came to questions of aetiology of mental disorders. In other words, they believed that 'the ultimate causes of hysteric and psychotic symptoms are supposed to always be definite experiences' (1907a p. 331), not genetically transmitted brain anomalies or emotional and volitional innate weaknesses, which, by the turn of the century, and especially in Munich, were considered serious candidates as ultimate causes of both types of symptoms.

Isserlin became one of the loudest critics of psychoanalysis in the 1900s and in this chapter I will present a selection of his grievances, many of which, in one way or the other, have been raised later on by other authors in the twentieth century. Through Isserlin and his older colleague Gustav Aschaffenburg, the psychiatric clinic of Munich led by Kraepelin became one of the German institutions which participated in an orchestrated attack on Freud's ideas. The first coordinated confrontation with Freud's followers took place in 1906 at the 37th annual Assembly of Southwestern German Psychiatrists in Tübingen, where young analysists were invited to give a presentation on their use of the analytic method. Isserlin and Alfred Hoche on the one side and Jung on the other, started a quarrel that would last for years. The attacks on psychoanalysis at that assembly and others in the years 1906-1907 were followed by Isserlin's publishing rigorous examinations on the works of Jung and Freud. These and other events made of the Kraepelinians the most insufferable opponents of psychoanalysis in early twentieth century Germany. Moreover, the critical work of Isserlin on psychoanalysis could also help explain why Kraepelin did not publish on the subject. Isserlin was evidently Kraepelin's delegate when it came to dealing with the Freud-problem. As a matter of fact, a conflict took place without Kraepelin and Freud ever meeting, corresponding, or writing about each other's work. Kraepelin and Freud fought instead indirectly by proxies, especially, as I will show, through Isserlin and Carl Jung (1875-1961). Eventually, Isserlin would become the reason as to why psychoanalysis failed to establish itself in Munich in any systematic way during the first decades of the twentieth century. And yet, as Isserlin explained in 1910, it had not really been Freud's writings, but the work of his militant followers, especially those of the so-called 'Zurich group' led by Eugen Bleuler (1857-1939) and Jung, that generated serious concerns among established German psychiatrists at the time. Above all, Isserlin saw Jung's deployment of experimental psychology to prove Freudian dynamics as challenging the work that he and his mentors had been carrying on in the field (1910a p. 53).

This chapter serves two purposes. The first is historical. Virtually nothing has been written[106] about Isserlin's critique of Jung and Freud and what they represented. Moreover, the minutes of the Assembly of psychiatrists in Tübingen (1906)[107] in which Isserlin participated as well as his texts on Freud (1910a) and Jung (1907a), calls for some revision of the revisionist literature on Freud's reception. Hence, the second purpose is historiographical.

Can Isserlin help us 'revise' the revisionists?

One of the most read biographers of Freud had been one of his best friends, the Welsh psychologist and neurologist Ernst Jones (1879-1958), who contributed greatly to the dissemination of the heroic image of Freud, whose fate, he argued, was comparable to that of no less than Galileo. In the first volume of his *Life and Work of Sigmund Freud* (1953 pp. 360-361), Jones portrayed the father of psychoanalysis as being snubbed by his Austrian and German medical colleagues. For instance, he considered preposterous that it took the medical community over 18 months to review the *Interpretation of Dreams* first published in 1899 and that, once the book attracted some attention, it received a total of 'only five reviews'. With the publication of the *Three Essays on Sexuality* in 1905 – Jones' story goes– dismissal turned into vicious bias. In the *Essays*, Freud had claimed that hysteria and other neurotic conditions could in principle always be traced back to unfulfilled sexual desires and unresolved sexual frustrations of childhood; particularly to those triggered by sexual abuse. Allegedly, his theories went then from being snubbed to being unjustly vilified as an assault on the innocence of children. Unlike his ideas on the unconscious and dreams – Jones explained – the central role that perversity played in Freud's theories regarding the development of both normal and hysteric personalities made of him a target of contemptable criticism (Jones 1953 p. 12). The historical judgement of Jones and other biographers regarding Freud's circumstances around 1900 seem to have been substantially biased by Freud's own perception of how his ideas were being received by fellow doctors.[108] Jones and other biographers must have been particularly taken by the stories Freud narrated in his autobiography of 1925. There, Freud referred to the decade following 1895 as a 'period of splendid isolation'. He recalled that, at the time, 'I had no followers, I was completely isolated. In Vienna I was shunned; abroad no notice was taken of me; my *Interpretation of Dreams* was scarcely reviewed in the technical journals' (quoted in Sulloway 1979 p. 449).

[106] With the exception of Uwe Peters (2002a), where some of the issues I lay out in this chapter are alluded to.
[107] Taken by Dr Finckh and published in *Central Blatt für Nervenheilkunde und Psychiatrie* in 1907. In section II, where passages of the minutes are reproduced to some extent, the reference will show only the page of this publication, which in the bibliography appears as (1907c).
[108] For an example of the ongoing reverent attitude towards Freud even among objective critics in more recent times, see Gay (1988).

Revisionist historians since the 1960s have determined that 'nothing could have been further from the truth'; that the isolation and ostracism story told by Freud and perpetuated by his biographers had been, after all, no more than 'a myth' and 'a legend' (Bry and Rifkin 1962; Ellenberger 1970; Decker 1971; 1977; 1982; Sulloway 1979; Esterson 2002). Contrary to what Jones had claimed, Freud's writings, including those on dreams, had received at least 30 reviews by philosophers, theologues, neuropsychiatrists, and clinicians, all of which, put together, amounted to more than 17,000 words, whilst the *Interpretation* had been widely read by the educated elite at an international scale very early in the twentieth century (See Bry and Rifkin 1962 pp. 21-22). What is more, the doctors who had written reviews on the book already by 1901 were reputable researchers in Germany.[109] Even though all these doctors provided critical comments at the end of their reviews and did not agree with everything Freud said, they highly praised the *Interpretation.* For example, in 1901 Paul Näcke insisted that 'the book is psychologically the most profound that dream psychology has produced so far' (quoted in Sulloway 1979 p. 451). Similarly, there are enough indications that the *Three Essays on Sexuality* of 1905 were well-received by the scientific German speaking world. Besides, due to the work of people like Sacher-Masoch, Krafft-Ebbing and Weininger, Freud's discussion of child sexuality had certainly not been a novelty in Vienna, less a source for contempt (Esterson 2002 p. 119).

Moreover, some have argued (see Sulloway 1975 pp. 452-453; Decker 1975 p. 140) that in 1901, Freud had been fully aware of the already seven (not five, as Jones claimed) reviews that were written about his book on dreams. These authors argue that it could have been the case that Freud perceived himself as being isolated and ignored because he had not yet received any lengthy articles in the most important medical journals of Berlin, Munich, and Vienna. He seemed to have 'craved medical acceptance' from only the best scientists of the time. The revisionists argue that Freud was definitely a victim, though not so much of ostracism, but mostly of his own unrealistic expectations (Decker 1975 p. 134).[110] Ellenberger (1970 p. 454) went even further than other revisionists. Freud was 'a celebrity and a much sought after therapist', who had many devoted disciples. Moreover, despite common belief, Ellenberger claimed, around 1900 Freud's publications did not meet with 'the ice silence and disparaging criticism' that was said to have existed, but rather the early reception of Freud 'was mostly favourable, though at

[109] Among them were, for instance, the pioneer on child psychology William Stern (1871-1938), as well as well-known neuropsychiatrists like Paul Näcke (1851-1913), who had just coined the term 'narcissism' to describe people who were consumed by the sexual objectification of their own bodies, and the future member of the Nazi party, Wilhelm Weygandt (1870-1939), who at that time was concerned with the representation of sexual degeneration in art and occupied with the development of intelligence tests.

[110] Moreover, the fact that Freud's doctrines did not infiltrate German psychiatry as much as he would have expected had at time, some claim, more to do with Freud's and his followers' 'own reluctance' to participate in medical congresses and to write in psychiatric journals than to the psychiatrists' alleged disdain (Decker 1982 p. 589). Esterson (2002 pp. 123-124) attributed Freud's misreading of the events surrounding his publications and ideas to his unquestionable neurotic and paranoid tendencies, which were allegedly exacerbated during this period due to his use of cocaine to treat a number of his ailments.

times accompanied by a mixture of surprise and puzzlement. It was seldom a direct rejection'. In particular, his theories on dreams and hysteria were well received, for example, by the audience at the Society of Neurology and Psychiatry in 1896. Even though Krafft-Ebing, chairman of the society at the time of his lecture, thought that Freud's theories were a bit outlandish, he nonetheless backed Freud's nomination as extraordinary professor in Vienna the following year (Ellenberger 1970 p. 455ff). Finally, it seems that Freud was never denied a publication; neither a single article of Freud was rejected from a journal, nor any of his books rejected from a publisher during the time he claimed to have been 'shunned'. Again, it appears that the exact opposite had been the case.[111]

However, there are some problems with the narrative revisionists have adopted to demystify Freud's ostracism story. One problem is given by the fact that they have not shown much consistency with their timelines, a fact that obscures the question as to whether Freud was eventually justified in complaining about ostracism from the medical community. They have been particularly vague when referring to the so called 'period of discovery' and 'the period of isolation'. In fact, if one asks *when exactly did Freud start receiving strong opposition and how did that opposition look* – for example whether it was objective or irrationally hostile, or mixed, or whether it took any organised form – it is not easy to find answers in the updated historical literature on Freud's reception. Were it to be true that some time before 1907 Freud had objective reasons to see himself as being 'shunned' – as I attempt to discuss in the following sections – some elements of the revision should be themselves revised. Moreover, another problem emerges when we observe that the revisionists have not really addressed what the critics themselves thought at the time about the issues at hand. Thus, for example, in a piece on Freudian methodology from 1910, Isserlin – already working with Kraepelin at the psychiatric clinic of Munich and teaching at the Ludwig-Maximilian University – admitted that Freud's writings of the period 1895-1905, at the time of their respective publications, 'did not attract significant attention' (Isserlin 1910a p. 53). If isolation, hostile reception, and ostracism were myths, why would this image be also suggested by Freud's early critics, such as Isserlin?

In a paper entitled 'A perfectly staged concerted action against psychoanalysis: the 1913 congress of German psychiatrists' (2007), authors Ernst Falzeder and John Burnham ask: '[d]id Freud receive a fair hearing in the scientific community of his time?' The authors suggest that, overall, he did not, and thus, refute Esterson's (2002) claim that pretty much everything was in Freud's head. In order to substantiate their claims, they point to the 1913 Congress of the German Society of Psychiatry in Breslau and some events that surrounded it. There were important psychiatrists, such as Hoche and Kraepelin, who,

[111] For example, the prominent neuroanatomist and child psychiatrist Theodor Ziehen (1862-1950), editor of the *Monatsschrift für Psychiatrie und Neurologie* – one of the most prestigious monthly journals worldwide for the psy-sciences at the time – had accepted eleven papers from psychoanalysts between 1898 and 1907, four of them from Freud himself (Sulloway 1979 p. 456).

'working behind the scenes', plotted against Freud in that congress. The idea behind the congress was not to give Freud's followers a chance to vindicate their theories. Rather, it had as its sole purpose providing Eugen Bleuler (1857-1939) – by then director of the Zurich psychiatric hospital and important member of the psychiatric elite in the German speaking world – the chance to 'back-peddle' from publicly endorsing and promoting Freud's and Jung's teachings (Falzeder and Burnham 2007 pp. 1236ff). However, Falzeder's and Burhman's argument does not directly challenge the revisionist narrative and its ambiguities, or rather, it does so in a way that does not address the timeline ambiguities: by 1913 Freud had long stopped claiming he was isolated or ostracised. In the following sections, I show instead that there was also a 'concerted action' plotted 'behind the scenes' against psychoanalysis *within the time frame Freud claimed to have been 'shunned*'. The work of Isserlin serves to this purpose. As it will become evident later on in this chapter, Isserlin's work indicates that Kraepelin and other powerful psychiatrists, such as Robert Sommer, were monitoring, silently in the background, an organised resistance to the infiltration of Freud's doctrine into official psychiatric circles in the German lands very early in the century.

Figure 3.1: Sigmund Freud with Otto Rank, Karl Abraham, Max Eitingon, Ernest Jones, Sandor Ferenczi and Hanns Sachs at Clark University in 1922.
[Online]

In section II, the dispute that took place in the Assembly of psychiatrists in November 1906 is discussed and the protagonists are presented. It will be shown that there were indeed insuperable conflicts between, on the one hand, academic psychiatrists, who were trying to make of mental illness an empirical object of investigation, and on the other, the Swiss analysts, who, according to the former,

where not doing that at all. The minutes of the Assembly of psychiatrists in Tübingen are looked at in close detail in order to understand how a decade long rivalry began. In sections III and IV I survey some of Isserlin's arguments against Jung and Freud published in 1907 and 1910 respectively, in order to find out, firstly, why he became one of the most hated men of the early Freudian circle, and second, what arguments did he use to keep psychoanalysis away from mainstream psychiatry. The chapter concludes by reassessing both the historical and historiographical questions laid out in this introduction.

II. The Joint Attack on Psychoanalysts at a Psychiatry Assembly in 1906

The Swiss Freudians as a problem for German psychiatrists

Eugen Bleuler (1857-1939) was the best known and most powerful psychiatrist in Switzerland by the turn of the twentieth century. His reputation had been built on innovative work in the psychopathology of dementia praecox – re-named by him as schizophrenia in his widely acclaimed 1911 book – autism, and paranoia (Clark 1955 p. 605). Like Kraepelin, Bleuler had studied with Von Gudden in Munich, and, like Freud, with Charcot in Paris. At the university psychiatric clinic of Zurich – commonly referred to as 'the Bürghölzli' – he became first assistant of August Forel and soon after, in 1898, replaced him as director of the clinic, a position he would hold for over thirty years. Bleuler opened the clinic to Freud, recruiting mental health professionals who were openly committed to psychodynamic questions and willing to work along Freud's precepts (Falzeder 2007 p. 347). Bleuler thought that Freud's theories could help him give meaning to the delusional symptoms of his schizophrenic, autistic, and paranoid patients in what was otherwise an epoch of therapeutic pessimism in psychiatry. Furthermore, contrary to clinical psychiatrists and neuropathologists, Bleuler was convinced that the symptomatology of the psychoses could be fully determined by psychological 'complexes', as Freud argued.

After graduating in Basel in 1900, Carl Jung (1875-1961) began assisting Eugen Bleuler at the Bürghölzli as well as at the city's mental asylum. Like his father's, Jung's career was marked by a fascination with mysticism, spiritualism, and hypnotism; his doctoral dissertation was entitled *The Psychology and Pathology of So-called Occult Phenomena* (Clarke 1955 p. 605). In 1903, however, after reading Freud's writings on hysteria, dreams, and slips, Jung turned all his efforts to free association studies, which he used in order to substantiate certain Freudian mechanisms, like repression, with empirical evidence. In the 1880s, Francis Galton, the father of eugenics, had indicated that association experiments 'lay bare the foundations of a man's thoughts with curious distinctness', and Wundt, as we have seen, was also using such experiments in Leipzig. Later on in 1897, Sommer and

Aschaffenburg began to recognise the diagnostic and nosological value of the method for psychiatry. Thus, Jung did not introduce the experiment in the study of mental illness in 1903, but only retuned it in a Freudian key.

For Jung it seemed that the use Sommer and Aschaffenburg had been giving to word-associations was too limited; he thought these tests could do much more than infer aspects of pathological phenomena and personality characteristics from statistics and graphs on the forms of the reactions. Jung believed he could push things forward, and establish association experiments as tools for unveiling 'complexes', that is, unconscious emotions, thoughts, and wishes, which provoked psychological conflict and hence, were the ultimate sources of mental illness. Complexes, Jung believed, became manifest in association experiments through indicators such as pantomime, prolonged-reaction time, and repetition. The experimenter did not need to infer anything; *the pathology as such* could be made accessible to him through this technique. With the express encouragement of Bleuler, Jung started conducting extensive experiments at the Bürgholzli (Falzeder 2007 p. 245). These experiments contributed to setting the tone for the research program in psychodynamics at Zurich for the remainder of that decade (Maetzener 2018).

Jung met Freud in Vienna for the first time in 1907, when he attended – together with another Swiss, Ludwig Binswanger (1881-1916) – the intimate 'Wednesday meetings', where Freud and his very close followers discussed female sexuality, smoked cigars, and tried to analyse each other.[112] Nevertheless, as early as 1903 the Bürghölzli publicly and openly endorsed psychoanalysis as the centre around which their research and clinical work would revolve (Falzeder 2007 p. 344). This endorsement was for Freud a game changer. Referring to Jung and Bleuler, Freud wrote to Fleiss in April 1904: 'Just imagine, a full professor of psychiatry [promoting] my studies of hysteria and dreams, which so far have been labelled disgusting!' (quoted in Masson 1985 p. 461). By 1905, the epicentre of psychoanalysis had effectively shifted from Vienna to Zurich (Maetzener 2018 pp. 550ff).

When Jung, Bleuler and other psychiatrists working in Zurich began to cooperate with Freud in 1904-1905, psychoanalysis was still years away from becoming a movement of critical mass. Nonetheless, at that time, psychoanalysis was perceived already as a real threat by both psychiatric clinicians (for example, by Kraepelin and Sommer) and by more traditional neuropathologists (such as Alfred Hoche and Karl Bonhoeffer) precisely because of its endorsement by the Bürghölzli. Many reacted to the threat. Kraepelin did so through Isserlin. His rejection of psychoanalysis, however indirect and delegated, has been largely downplayed by historians (See Falzeder and Burnham 2007; Decker 2004).

[112] As Falzeder (2007 p. 343) indicates, this visit marked the end of psychoanalysis as an all-Jewish and all-Viennese school of psychology.

Undoubtedly, the period from 1899 to 1905 was the most fecund in Freud's career. In these six years, the core of his doctrine of analysis first came into print. Among the most influential were: *The Interpretation of Dreams* (1900), considered by virtually all (including Freud himself) his most important book; *The Psychopathology of Everyday Life* (1901), with its theory of 'Freudian' slips; his study of the psychology of humour in *Jokes and Their Relation to the Unconscious* (1905); the first of the later popular case histories, 'Dora' (1901-1905); and the *Three Essays on the Theory of Sexuality* (1905). Moreover, Freud already had many disciples who idolised him, all of them 'proud and arrogant' (Aschaffenburg to Isserlin 12/12/1907).[113] They were convinced that Freud had not only achieved real breakthroughs in the understanding of dreams, the unconscious, mental illness and sexuality, but that he had actually discovered the only proper technique for glancing into the human soul (Ellenberger 1970).

Aschaffenburg – having conducted experiments using free association at Kraepelin's laboratory in Heidelberg in the late 1890s –, has been portrayed as the most vocal opponent of psychoanalysis in Munich in these so called 'years of discovery' for Freud (Falzeder 2007 p. 344). According to him, 'Freud's method [was] wrong in most cases, objectionable in many, and superfluous in all' (quoted in Falzeder and Burnham 2007 p. 1227). Aschaffenburg's statement – undoubtedly backed by Kraepelin – reflected an at the time already ubiquitous prejudice for Freud's method of interpretation. Later on, in May 1906, having seen that the popularity of Freudian concepts and techniques among medics had advanced significantly, Aschaffenburg desperately insisted at a psychiatric congress in Baden-Baden that it was time to confront psychoanalysis publicly (Falzeder and Burnham 2007 p. 1228). Aschaffenburg's plea resonated among colleagues the way he expected. On 3-4 November 1906 the 37th annual Assembly of Southwestern German Psychiatrists (*Versammlung südwestdeutscher Irrenärzte*) took place in Tübingen. Aschaffenburg was not present at the assembly.[114] In his place, as representative of the Munich group, was Isserlin, who, as we have seen, at age 27 had already become an expert on free association experiments with mentally ill and epileptic patients. This event signalled the start of Isserlin's public attempt to debunk psychoanalysis and keep it away from Munich. Nevertheless, officially, the assembly had as the main event Alzheimer's presentation of what would later be called by Kraepelin 'Alzheimer's disease'. The minutes of the assembly (pp. 176-186) show that the only lengthy discussion of the first day of the event arose after the papers of Ludwig Frank (1863-1935) and Dumeng Bezzola (1868-1936), the young Swiss members of the Zurich group lead by Jung and Bleuler. In the discussion of their paper – the real motive of the assembly – Alfred Hoche

[113] In MS/1935: Box 3.
[114] Nevertheless, he would command again the action against psychoanalysts a year later, in the International Congress of Psychiatrists in Amsterdam on 2-7 September 1907.

(Breslau) and Isserlin (Munich) were on one side, and on the other was Jung, who, although he had not yet met Freud, was already committed to defending his cause.

The first day opened with Robert Wollenberg's (1862-1942) overview of the life and work of Karl Fürstner (1848-1906), who had recently died. Fürstner had been a prominent neuroanatomist and neuropathologist, having been student of Karl Westphal in Berlin as well as predecessor of Kraepelin as the chair of psychiatry in Heidelberg. This was followed by physiological and neuroanatomical presentations (p. 176) and then by Alzheimer's presentation on 'The peculiar diseases of the cortex'. There he publicised his discovery of the existence of 'extremely altered neurofibrils' as well as a 'not enough studied substance in the gangliocytes' (pp. 177-178). For the first time, Alzheimer was presenting his histopathological finding's on the particular form of dementia later dubbed by Kraepelin 'Alzheimer's disease'. The tone of the first day of the assembly could not have been set more clearly away from 'psychology'.

The next presentation was that of the psychiatrists Bezzola and Frank. They went on to present four cases of women with a variety of neurotic and psychotic symptoms. The use of psychoanalytic principles and therapeutic techniques, they argued, had proven to be accurate in determining the 'origin, trajectory, and possibilities for cure' in cases of the 'psychoneuroses' presented by their patients (p. 179). Throughout their presentation, phobias, hysteria, obsessions, but also psychosis and manic depression were conflated and all explained as a result of sexual experiences in childhood. This conflation of psychosis and neurosis as products of traumatic experiences associated with sexual elements could have not resonated well with the audience. These case histories were meant to echo Breuer and Freud's *Studies on Hysteria* (1895), which insisted in the etiological power of the purely unconscious.

Despite the variety of symptoms discussed, the accounts ultimately conveyed the same message and arguments. For instance, in the case of one of these women, 'all these anxious reactions were triggered by a particular complex: the death of her brother-in-law'; in the case of another, a paranoid patient, 'by repressed masturbatory fantasies' after having seen 'her mother having intercourse' years earlier. How they came to these conclusions was not mentioned in the presentation. In terms of treatment, they went on to say that, in the latter case, it took '10 days to cure' the patient. In this time, Bezzola 'let her re-live all her fears through a mild hypnosis until they were all removed' and that 'she is now at home, healthy and happy'. Bezzola concluded the presentation of this case by stating that 'such anxiety-complexes (*Angstkomplexe*) could be found "in other psychoses."' (pp. 180-182). It was clear what was being contented: psychosis and neurosis were caused by repressed memories of childhood; they were only different manifestations of the same 'anxiety-complexes'.

The paper of the Swiss doctors cannot have sat well with most of the listeners. First of all, throughout their presentation, Bezzola and Frank had referred indistinctively to what their audience understood to be very different things: phobias and neurosis were for most academic psychiatrists not qualitatively comparable with paranoia and hallucinations. The former were functional disorders and 'nervousness'; they were conceivably psychogenic, and thus, were in principle influenceable by psychotherapy. The latter, in contrast, were organic disturbances, they were caused by structural abnormalities of the brain and could not be treated with psychotherapy, less be cured, as the speakers had so lightly stated in all their cases.

Moreover, before the cases were even presented, Bezzola and Frank made the disclaimer that it was not really possible to do justice to the practice of analysis on the particular cases they would discuss in the short time assigned for their presentation (p. 179). Once the presentation of the four cases was over, Bezzola made a further disclaimer. He stated that 'whoever has not occupied themselves with these methods is not in a place to judge them' and that 'it is necessary to invest a lot of time, patience, have full mastery of suggestive therapy and full capacity for combining [methods]' in order to be able to judge them (p. 183). If their presentation had already disturbed the organicist tone of the assembly, their disclaimers must have been upsetting. Indeed, what might seem at first glance innocuous comments, gave rise, not only to the first and last discussion of the day, but also to a heated debate over the validity of psychoanalysis for the understanding and treatment of nervous and mental illness.

Discussion and aftermath: talking past one another

The minutes of the discussion taken by Fiskh were incomplete and probably selectively written: there is no sign of the rebuttals from the speakers and what is presented as Jungs' interventions do not say that much. Indeed, there is a strong indication that the publication of the minutes served as a statement on the ludicrousness of Freud's method. The first psychiatrist to comment on Frank and Bezzola's paper was Alfred Hoche (1865-1943),[115] famous for coining the concept of psychopathic inferiority and for his later involvement in the planning and executing of eugenics and euthanasia in the Nazi period. Hoche had become Fürstner's most important student and must have felt irritated by the fact that the paper of the Swiss psychiatrists was being given on the same day in which his master was also being

[115] Hoche defended all along the strict nineteenth century model for psychopathological research, namely, that of pathological anatomy. Hence, he disagreed with Kraepelin and the new clinical approach. Hoche defended the traditional approach of basing diagnosis and classification of mental illnesses according to symptoms and signs (cross-sectional method; they were still reluctant to give the trajectory of the illness too much emphasis, as Kraepelin and Isserlin were doing. And yet, psychiatrists worked that day as a united front.

honoured. Turning to the audience, he said: 'the gentlemen may have the impression that lack of time has hampered a full display of evidence for their case; I am pretty sure, however, that even if they had unrestricted freedom in this regard, they still would not had been able to convince the majority of the attendees'. Hoche was questioning the very possibility of the whole psychoanalytic endeavour from the start. He then went on to dismiss the already infamous allegation that academic psychiatrists were not progressive enough to perceive unconscious elements and childhood sexuality at the root of psychopathological behaviour. He clarified that

> [t]his is certainly not at all about moral indignation with regard to Freudian doctrines; on the contrary, nothing emotional plays a part in the repulsion that the generalisation of the Freudian method causes in the majority [of us psychiatrists], rather [the rejection] comes from calm intellectual considerations…certainly there is much good and new in Freud's doctrines of hysteria etc; unfortunately what is good is not new and what is new is not good' (p. 184).

Then, in a much less courteous tone, he commented on the second disclaimer, trying to show Bezzola and Frank that the 'methodological inexperience argument' not only did not apply to him, but it was also in the opinion of academic psychiatrists, non-sensical:

> Whoever reads unbiasedly any of Freud's writings, will inevitably arrive at the end with a headshake. I for my part must admit to find incomprehensible how anyone could take seriously the thought processes that take place there; at the same time, I do not understand how can we be told – the here present – that we are not in a position to judge because we ourselves have not previously used such methods…What have we heard today? Well, that these diligent doctors have succeeded…, by following suggestive methods, to remove a series of niggling subjective symptoms. That such thing is possible, we have known for long, and thus, we do not need the be presented any of this under the label of a new "method"…The [emergence] of the movement [of psychoanalysis] is certainly, in historical perspective, understandable. It is only part of a widespread tendency towards the mystical that feeds out of a weariness regarding the anatomical and materialistic approach. But this pendulum oscillation will not last long. Most of us will live to see its downfall. In the meantime, we want to protest against being called malicious and backward simply because we do not want to participate in something that we consider to be a mode, and indeed a bad one (p. 185).

Hoche was evidently not debating the paper of the young Swiss. His statements had been obviously prepared beforehand to delegitimise psychoanalysis, not just as bad science, but as an ominous movement of pseudoscience, the claims of which did not even deserve deliberation. Hoche thereby reaffirmed the late nineteenth century idea that psychiatrists' only way into the scientific community was through the practice of pathological anatomy and clinical observation, downplaying the role of a general psychological approach. A reply came, not from the speakers,[116] but from Carl Jung. Seemingly unaffected by Hoche's strong words, he did not do much more than restate the speakers' disclaimer:

[116] According to the minutes they did not speak again after their paper.

> Freud's doctrine of hysteria cannot be simply discarded as incomprehensible. Sexuality plays everywhere a tremendous role and therefore it is not impossible to claim that all cases of hysteria could be reduced to sexual traumas. Indeed, one cannot claim that Freud is wrong without having employed his methods themselves. Nor can someone claim that psychoanalysis is unfit without demonstrating it to be so (p. 185).

There followed an intervention from Isserlin, who, in contrast to Hoche, was a psychologically inclined psychiatrist and had had the opportunity to test Jung's free association methods not only in manic depressive and epileptic patients, but allegedly also in hysterics during his time in Heidelberg.[117] He argued that

> one can demonstrate using association experiments of the type used by Jung and the speakers, that, indeed, emotionally charged representations or 'complexes' have an influence on [for instance], the prolonged reaction time [of the subject]. However, there is no data to be found that could warrant a reduction of all complexes to sexual traumas. On the contrary, the emotionally loaded character proper of hysterics can be traced back to multiple representations [not just sexual ones]. Furthermore, Jung's statement that emotionally charged complex associations are the easiest to forget – a statement corresponding to Freud's theory of repression –, cannot be proved' (p. 185).

Like Hoche had done moments earlier, Isserlin did not discuss the paper. The Q&A was just his chance to tell Jung, in front of many colleagues, that his experiments did not work the way he had been claiming. Isserlin balanced Hoche's more general and visceral rejection of Freud's method with an experimentally supported refutation of Jung's claims. Isserlin claimed that even though analysts were correct in assuming that such things as 'complexes' existed, and that they in fact could induce mental morbid mental states, it was wholly unwarranted, to reduce the aetiology of hysteria to sexual trauma. Adding to this, a swift intervention of Alfred Neumann warned against the 'overestimation of the exogenous affects' and the 'underestimation of affective predispositions in the aetiology of hysterical phenomena' (p. 185). Neumann was also recognising the incompatibility of the perceived psychogenic reductionism with the theory of degeneration generally adopted, at least partially, by the academic psychiatrists present in the Assembly. With these three interventions recorded in the minutes, the psychiatrists had enough to make their case: first, Hoche disqualified psychoanalysis as an unscientific mode undeserving of the audience's attention; second, Isserlin, who claimed having used Jung's method himself, had criticised Jung's experimental claims on an experimental basis; and finally, Neumann had alluded to the fact that the theory about degeneration and predispositions to mental illness was being threatened by psychoanalysis' over-emphasis on environmental and psychogenic factors (against biological and hereditary ones) in the development of mental illness.[118]

[117] See Peters (2002a).
[118] It is worth noting the fact that psychiatrists rarely attacked psychoanalysis using arguments based on degeneration theory, even though the theory in itself was becoming one of the cornerstones of their professional agendas.

Jung could not resort to the 'inexperience' argument against Isserlin as he had done with Hoche.[119] Isserlin was not being dogmatic as Hoche could have arguably been. Instead, he was challenging the analysists on the basis of his own work. As mentioned, however, the minutes seem to be incomplete. From what Finckh wrote down, it can be argued that Jung did not really respond to Isserlin's criticisms. Instead, it was recorded that 'Isserlin himself accepts that associations reveal affective configurations (*Gefühlskonstellationen*)', and that, correcting Isserlin, 'had never claimed that false reproductions (*falsche Reproduktionen*) [in association experiments] always point exclusively to the sites of complexes' (p. 185). Jung seemed to have eluded Isserlin's point. Isserlin was not that prolonged reaction time could not show the involvement of complexes. Rather, he was stating that the phenomena he had observed using Jung's association method did not prove that complexes could be aetiologically reduced to sexual traumata. But perhaps the Swiss and the Germans were just talking from truly incommensurable perspectives. Hoche and Isserlin were arguing that psychoanalysis was either bad science or no science at all. At no point during the presentations and the discussions, did the analysts claim they were doing science.

In a letter dated the 26 November 1906, Jung reported the discussion to Freud. 'I have advanced your matters (*Ihre Sache geführt*) at the assembly of psychiatrists in Tübingen against an overwhelming opposition, where specially Geheimrat Hoche exceeded in idiocy' (quoted in Peters 2002a p. 28). In Jung's letter, for some reason, only Hoche and the Swiss psychiatrists, not Isserlin, were mentioned with regard to the quarrel at the assembly. Jung suspected that the opposition had been orchestrated. There were personal reasons for the suspicion. As Peters (2002a p. 29) points out, Jung's *Psychologie der Dementia Praecox*, although published a year after the Tübingen assembly, had been already finalised in July 1906. Kraepelin and Isserlin knew about this through Bleuler. Kraepelin could not have been comfortable with the fact that his 'dementia praecox' was associated with the term 'psychology' in a title. Isserlin could not have been pleased with the fact that Jung published on the same experiments he was at the time conducting.

The joint attack at the assembly did not stop Freudian ideas from translating into a movement. After 1907, the Bürghölzi – next to Kraepelin's clinic the most influential and innovative research institution for psychological psychiatry in the German lands at the time – became the place to go for young psychiatrists disenchanted not only with pathological anatomy but also with what Jung called the 'schematic dogmatism' of Kraepelin (Falzeder 2007 p. 348). In addition, with the *Freud Gesellschaft* established by the Swiss doctors in 1907 (Falzeder 2002), psychoanalysis begun, despite opposition of

[119] According to Peters (2002), documents at the University archive in Munich suggest that Isserlin also referred during the discussion to his experience working with Wilhelm Erb's 'psychopathic and hysteric' patients. This studies were never published.

psychiatrists, to gain some institutional terrain. For Isserlin and others, more needed to be done to keep Freud away from the discourse on psychopathology.

III. Isserlin on Jung's *Psychology of Dementia Praecox* (1907)

In 1907, soon after Jung's first visit to Freud in Vienna, his book *Psychology of Dementia Praecox* appeared. The publication of the book was received by Freud with enormous gratitude. In his words some years later, Jung's work had contributed to 'a rapid experimental confirmation of psychoanalytic facts' and his book in particular had become 'the first bridge leading from experimental psychology to psychoanalysis…' (quoted in Clark 1955 p. 605). Isserlin's criticisms of Jung's work did not halt at the 1906 assembly in Tübingen. Following Jung's publication, Isserlin published a lengthy 'objective appraisal' of the book, entitled *Über Jungs Psychologie der Dementia Praecox* (1907a). If Freud and his followers were still feeling ignored, this was a turning point. Isserlin's article marked the start of a public systematic aversion towards psychoanalysis in Munich that would span the next twenty years.

Isserlin had two primary motives for reviewing Jung's new book. First, Aschaffenburg had been appointed the chair of psychiatry at the university of Cologne that year and the close collaboration he had had with Kraepelin since their time in Heidelberg was not as intense. Isserlin was one of the few members of the Kraepelin group with experience in experimental psychology, and thus, it seemed just natural that he took over the group's rejection of psychoanalysis. Hence, in a way, Isserlin was only fulfilling his role. Second, Isserlin felt the needed to call out Jung on his lack of originality as well as to show that he was illegitimately pushing the epistemological limits of association experiments. As we have seen, in 1904 Isserlin had conducted association experiments under the guidance of Robert Sommer in Giessen but could not publish his results due to a sick leave. Furthermore, as also discussed earlier, Sommer had already published on the usefulness of association experiments in psychology as early as 1899, and by the time Freud had published his *Interpretation of Dreams*, association methods were being already employed regularly in Giessen and Heidelberg – among other psychiatric clinics – to study a wide variety of conditions. The fact that Jung presented his findings as a novelty must have been a double source of irritation for Sommer's ex-assistant.

Health and illness as a continuum

As was the case with Freud, Jung's work was received with interest in scientific circles outside the German speaking world. This was because, among other things, the book was seen as an important challenge to German academic psychiatry *from within*. For example, in Britain, early reviews of Jung's book suggested that the defining feature of the book was a strident defiance against the idea – defended by Kraepelin, Hoche, and most established academic psychiatrists in Germany – that under no circumstances the laws governing normal and healthy behaviour could be applied to understand the symptoms of mental disturbance (especially so in cases of dementia praecox).[120] Moreover, across the Atlantic, reviewers welcomed the fact that Jung, contrary to late nineteenth-century German psychiatrists, was giving primacy to emotions, irrationality and subjectivity over thought and conscious action as the basis of personality.[121]

For Kraepelin and most established academic psychiatrists in Germany, the nature of a mind subject to abnormal and pathological processes was thought of as being completely divergent from that of a healthy mind. While the latter had the inherent capacity to subject its thoughts and will to rational principles in 'apperception', the former did not, and this incapacity had a – though yet undetermined – somatic, inherited, and degenerative origin. Thus, Kraepelin believed it would be a contradiction in principle to consider *motivation and meaning* in symptoms of mental illness.[122] In the case of dementia praecox, chaos and irrationality were its very defining features. Freud challenged the sharp distinction between health and illness. For him, illness and health were not discrete and opposing states, nor different (natural) kinds, but rather they formed *a continuum*; a person found herself always somewhere in a spectrum, thereby always exposing a natural tension between the healthy and the pathological.

Building on Freud, Jung argued that dementia praecox, with its hallucinations, disorganised thought, and irrational behaviour, was not to be seen as the negation or absence of the common attributes of a healthy mind. Instead, Jung believed it possible to establish experimentally that the mind of a person with dementia praecox was not really different from that of a healthy one. The only difference – and hence the cause of the disturbance – was that in cases of dementia praecox the mind was being held hostage by complexes and unconscious mental mechanisms of repression. In other words, the dynamics of dementia praecox did not reflect brain illness but rather psychological conflict (Jung 1907). The understanding of health and mental illness as a spectrum – the idea that everyone is more or less neurotic

[120] See for instance Hart (1908). Bernard Hart played a crucial part in the introduction of ideas of Janet and Freud in Britain.
[121] See for example Harrison Town (1909).
[122] This idea had been already clearly formulated in the 1890s by Clemens Niesser, one of the little known precursors of bedside clinical psychiatry in Germany.

– was inadmissible for psychiatrists who worked to find, not in emotions, but in nature, structural and genetic events at the root of every mental abnormality.

The reduction of psychosis to neurosis

Freud had challenged what German psychiatrists had taken to be a hard won fundamental psychological principle, namely, that mental illness was the negation of mind and consciousness, not its hidden expression. Isserlin noted that Jung was revising Freud's doctrines, although, he claimed, not for the right reasons. It was then not only the case, as Freud had argued, that mental illness and mental health were a continuum; it turned out that previously fundamentally different conditions, namely psychosis and neurosis, were ultimately also part of a spectrum; they differed only in degree. In other words, Isserlin explained, by departing from Freud in some matters, Jung was now also threatening to tear down the progress that psychiatrists had made in the understanding of psychosis as disease entities.

Indeed, sharp distinctions between dementia praecox and hysteria were blurred by Jung. For him, both mental afflictions were rooted in 'complex-formations', that is, they were caused by unresolved emotional problems, mostly by failings in childhood nurture. The difference was, again, one of degree. In cases of hysteria, Jung had stated that the complex did not ruin the personality but only 'diminished its energy'. Consequently, hysterics could more or less adapt to their environment, of course, only after sessions with an analyst. In dementia praecox, by contrast, complexes dug deeper into the personality, ultimately warping and disconnecting it from the outside world (Jung 1907 pp. 69ff). This was perhaps Isserlin's biggest grievance: he called Jung's attempt to eliminate the distinction between psychosis and neurosis a 'Sisyphus' -like swindle (Isserlin 1907a p. 342).

And yet, in his article, Isserlin portrayed Jung's core ideas sensitively, explaining how dementia praecox unfolded as an unconscious complex fighting to get rid of the self-imposed inhibitions of consciousness. Dementia praecox seemed thus to be, like hallucinations, paranoia, hysteria and obsessive compulsions, not really 'psychoses' but 'defence neuroses' (*Abwherneurosen*). Moreover, Isserlin described how the incongruences between conscious content and affective tone (*Gefühlston*) seemed for Jung to become comprehensible once it was understood that, what seemed to be indifferent representations, had acquired an intensive affective tone which initially corresponded to a repressed representation (1907a p. 331).

As a consequence, Isserlin explained, the fundamental question became for Jung: 'why then, do we have sometimes hysteria and other times dementia praecox?' Freudian mechanisms were apparently

insufficient to provide an answer to this question. Isserlin explained that Jung needed to postulate the existence of an 'after-effect of the emotions' (*Folgeerscheinung des Affekts*) – which, Jung admitted, could be a 'toxin' (1907a p. 334) – that provided a definitive fixation of the complex in the psychophysical organism, thus absolutely damaging the personality as a whole. The possibility that such 'intoxication' was brought about by exclusively somatic causes was for Jung, Isserlin explained, entirely possible. This was nevertheless, irrelevant; the difference between hysteria and dementia preacox needed only to be explained psychologically according to Jung: in the case of the former, the possibility of a resistance of the self to succumb to the complex (*Kompromissbildungen*), allowed only 'a permanent inferiority' (*dauernde Minderwertigkeit*) to remain, a recurrent tendency to neurotic symptoms; in the case of dementia praecox, by contrast, the complex remained unchallenged by a self who completely lost control and had endured permanent damage of the personality, or 'I-complex' (1907a p. 333). Accordingly, although hallucinations did not appear as such in hysteria, dreams of wish fulfilment were, like hallucinations, forms of delirious-complex and absentmindedness. For Jung, these parallels and similitudes should not come as a surprise once both conditions were seen as caused by the repression of an emotionally over-charged complex. Unlike hysteria, 'in dementia praecox the Psyche never broke free from the complex again'. Thus, even though this difference was probably caused by a toxin that provoked an 'artificial de-cerebration' (*künstliche Enthirnung*) in dementia praecox, Jung explained, hysteria and dementia praecox were the outcomes of the same psychological defence mechanisms (1907a p. 334). Isserlin's exposition was undoubtedly impartial; these interpretations could be found in British reviews of the time: the idea of psychosis as 'a flight into the illness', as a psychological shield from the struggles of existence.[123]

Isserlin invited the reader to 'assume for a moment', that Jung's complex psychology was possible in principle. Even then, Isserlin explained, the theory would always be dependent on signs, analogies, and probabilities, which were always 'interpreted in the sense of the very same theory'. Isserlin explained that the mere *possibility* of 'the suitability' of an interpretation was never enough to exempt a theory from scepticism.

> It contradicts every principle of scientific methodology to defend mere probable inferences by demanding from an opponent a demonstration that other alternative [theory] is the correct one; it is instead required from someone that makes a new assumption to show that other possibilities do not exist, or that the probabilities that they do not exist are very high (1907a p. 335)

Similarly, Isserlin argued that the reduction of psychosis to (defence) neuroses could not be upheld under the pretence that such reduction had not been yet proven wrong; for Isserlin such arguments

[123] See fn. 121&122.

evidenced a lack of scientific standards. He maintained that actually the exact opposite was required from Jung; the complex theory of psychosis needed to be *demonstrated*. Moreover, Isserlin claimed that Jung's comparisons between dementia praecox and hysteria were thoroughly superficial. This superficiality, he argued, was understandable because psychoanalysis did not comprise any clinical fundamentals. As a consequence, it focused only on 'momentary appearances' and ignored 'the trajectories of clinical pictures'. This enabled Jung to find 'easy explanations' based on his 'nicely groomed metapsychology', which allowed [him] to ignore 'the absurdity of [his] inferences' (1907 p. 337). Clinical psychiatry worked differently for Isserlin:

> (o)nce we take the whole clinical picture into account, and not only the momentary appearances of single features, then we can appreciate very well the fundamental differences between the performative indolence (*gespielte Indolenz*) of the hysteric, of which Jung gives cute examples (*hübsche Beispiele*), and the imperturbable bewilderment (*gemütliche Verblödung*) that coarsens and distorts the whole personality [in dementia praecox]' (1907a p. 337).[124]

A further problem was identified by Isserlin as the complete disregard for differential diagnosis in Jung's claims about the psychoses. Isserlin argued that 'if it were possible that "a complex" could affect the personality' in such a way that a person's 'greatest intellectual and emotional operating forces (*Betätigungskräfte*) are hi-jacked' or 'caricatured (*karikiert*)' – as was alleged by Jung to be the case with dementia praecox, paranoia, and manic depression –, then it could be possible to understand and treat other, completely different neuro-degenerative conditions which also 'caricatured personality', such as paralysis, epilepsy, or senile dementia, through free association, hypnosis and catharsis.[125] In short, Isserlin argued that if Jung's reductionism was correct, every condition that debilitated intellectual and emotional forces and personalities would also need to be causally linked to psychological complexes – an evidently preposterous conclusion (1907a p. 337).[126]

The disunity of consciousness and the problem with analytic experiments

Isserlin stated that Jung's psychology was:

> a variation of association psychology that can be easily recognised as having strong French influences; its characteristic is the splitting up of mental experience (*Zerspaltung des seelischen Erlebens*) into complexes; as a result it ignores the absolute psychological principle of holding on to a unitary consciousness as the essential phenomenon of mental experience (1907a p. 341).

[124] Adolf Grünbaum (1984) explained why it is in principle impossible to support psychoanalytic interpretations and theories with clinical observations.
[125] As already noted, Alzheimer had uncovered the histopathological elements of the disease that would latter carry his name.
[126] Dolnick (1998) has traced the failed attempts of psychoanalysis to treat schizophrenia, autism and compulsive disorders during the first half of the twentieth century.

Jung was deeply influenced by the fascination with hypnotism of Swiss and French psychologists such Janet (he studied with him in Paris in 1902-1903), Charcot, Flournoy, and Binet, all of which opened the discourse on the disunity of consciousness (Clark 1955 p. 606). Isserlin, heavily influenced by Wundt's theories, rejected Jung's psychology on the grounds that it was inconceivable to speak about the mind without holding to the principle of apperception and its function in the temporal flux of consciousness. Instead of a continuous and unitary experiential self, Isserlin saw Jung presenting mental life as a mosaic of discrete and segregated psychical molecules that associated exclusively through *intentional structures*. This was very problematic for Isserlin: emotional complexes, as Jung explained, were meant to be thought 'intentionally' and 'intellectualistically', that is, as having an 'in-built affective undertone' and thus, an autonomous vitality, which manifested 'independently of the I-complex'. It was particular worrisome for Isserlin that

> the conscious appearances are seen as coming from the mechanics of these autonomous complexes…the autonomous complexes are thus anthropomorphised into mechanical aggregates of representations corresponding to special souls (*Sonderseelen*)…they "think" and "act", "hate" and "love", "repress" and are "repressed", [and they] "develop" (1907a p. 341).

In this way, Isserlin observed, the intended 'complex mechanics was turned into a complex mythology'. Complexes were transformed 'into mythical characters, into parasites of the soul which limited the existence of the I-complex, and which signs of life can only be accessed through psychoanalysis' (1907a p. 342). What had started as an objective appraisal of Jung's book, turned slowly in the second part of the piece into a mockery of the idea of autonomous complexes and special souls, which ran against the Wundtian (and ultimately Kantian) psychological principle of the unity of experience.[127]

Yet Isserlin did not criticise the dynamics of psychoanalysis only on psychological and epistemological grounds. In 1907, once in Munich – and knowing that Jung was conducting association experiments in Zurich, only 300km away – Isserlin had corroborated the existence of the so-called complexes. However, he could not prove Jung's inferences that signalled these as ultimate causes of psychopathological phenomena. Isserlin pointed out that it was 'undoubtedly a merit' to have tried an integration of association experiments with Freudian doctrines, and as a result, he claimed, Jung learnt that complexes indeed manifested in the form of slips, and flattening of the quality of the associations: Isserlin himself had 'been able to substantially corroborate these allegations'. In contrast, however, he 'could not corroborate Jung's assertions regarding complex-based disturbances of reproduction' during free association. Isserlin saw no reason for 'equating every case of prolonged reaction-time' in the free

[127] To this criticism, Bleuler replied in 1910 (p. 634): 'whoever has seen the events we have seen, would argue: *tant pis* for the psychological requirements'.

association of an individual with 'an unpleasant complex'. By doing so, he argued, Jung was thereby 'neglecting all the other reaction-delaying causes (*Momente*)' that were also conceivable (1907a pp. 338-339). Moreover, Isserlin saw in Jung very little reflection on the nature of his own experiments:

> We cannot forget that by common association experiments we only grasp the first and last elements of otherwise very complicated chains; nor can we forget that once we make inferences concerning a specific complex we step out of the domain of possible experimental facts; finally, we cannot forget that the more over-interpreted the phenomena become, the more unreliable inferences become (1907 p. 339)

As exemplified in the previous chapter with his word-association experiments, Isserlin believed that what happened internally in the mind of the subject during the intervals between stimulus-word and word-reaction (or between associations in associative series) was inaccessible for the experimenter. Jung was ignoring this crucial methodological principle by trying to explain what laid beyond any possible experience and thus, empirical science. Moreover, once this 'lack of reflexivity' was combined with Freudian doctrines, 'in order to "conceptualise complexes more clearly"', the result was a psychological method that 'remains at best a method of riddle-solving supported by mere empirical techniques – not a scientific analytic approach to a problem' (*kein wissenschaftlich analysierender Lösungsversuch*) (1907a p. 339).[128]

Isserlin ended his piece on Jung's book – like Hoche had done at the assembly in Tübingen in 1906 – by attempting a historical explanation for the rise of psychoanalysis. He saw psychoanalysis' evolution into a movement as a symptom of the times in which the sciences of the brain and mind found themselves. He recognised that by the turn of the twentieth century neuropathology had not delivered on their promises and experimental psychology had still a long way to go. These circumstances allowed romantic and *Naturphilosophie* ideals of the early nineteenth century that extolled emotions, subjectivity, and empathic intuition (*einfühlende Intuition*) to crop up again. These sentiments were making psychoanalysis attractive to young psychologists and psychiatrists. For, otherwise, Isserlin asked, '[h]ow is it possible for the discipline of psychology to fall back into previous stages of development, which other sciences have long ago for good left behind?' (1907a p 343). What made psychology and psychopathology different to the rest of the natural sciences and medical specialties was that *its object was at the same time the inescapable method for its study*. As Isserlin explained, biology, physics and chemistry would have never fallen back into mysticism the way psychology had

[128] For a more recent experimental refutation of psychoanalytic claims, see Eysenck and Glenn (1973). Isserlin saw in this lack of reflexivity only but one of the many problems with Jung's experiments. For instance, in more p: when talking about prolonged-reaction time during free association – according to Jung, a common indicator of psychological complexes – Isserlin asked 'how are the times actually measured?' Did time stop counting with the beginning of an utterance or when the associative reaction was completed?; also, 'are there long interims between repetition of the stimulus word, or do they follow each other immediately?' (1907a p. 340).

with the rise of Freud. 'The mode of psychoanalysis and other intuitive (*verstehende*) psychologies' (1907 a p 342) arose because subjectivity had, once again, managed to interfere in the disciplinary and methodological infrastructure of the psy-sciences.

IV. Isserlin's Critique of Freud (1910)

By the end of the first decade of the twentieth century, Hoche and Isserlin were not the only ones working to prevent the infiltration of psychoanalysis into science and academia. Many more important psychiatrists in Germany were following suit. For example, Wilhelm Weygandt – at the time director of a mental asylum in Hamburg and soon after appointed chair at the university –, despite having initially been open to Freud's ideas suggested in 1910 to the Hamburg Medical Society that they discussed 'the dangers and errors' of psychoanalysis at every future scientific meeting. He also advised privately against sending patients to a hospital where psychoanalysis was used on patients. Another example is given by the director of a successful private clinic in Berlin, Hermann Oppenheim, who in October 1910 incited his neurologists colleagues to boycott clinics where psychoanalysis was used to treat nervous disorders (See Falzeder and Burnham 2007 p. 1227). That year, Isserlin also published his first comprehensive critique of Freud's psychology: *Die Psychoanalytische Methode Freuds*. In what follows, I put forward a selection of critiques laid out by Isserlin in this piece, most of which were reproduced verbatim in later publications (1925a; 1926). With Kraepelin still under the radar, in the 1920s Isserlin restated Munich's position towards psychoanalysis, virtually unchanged.[129]

The intellectualisation of the unconscious

Isserlin conceived the rise of psychoanalysis as a natural reaction against the experimental psychology that had evolved from the 1880s. Pioneered by Wundt, this psychology endeavoured to provide access into the psyche through experimental means and quantitative and measurable laboratory data. According to Isserlin, this psychology was prone to fall into 'an exaggerated rationalism'. In its pursuit of objectivity, Wundtian precepts for the use of the psychological experiment had 'overstated the intellectual side of consciousness' (1925a p. 269). Indeed, the obsession with the quantitative study of

[129] Most references come from Isserlin (1926) as reproduced from Isserlin (1910a; 1925a).

sensations and representations (ideas) and their associative combinations carried always the great danger of downplaying subjective moments and qualities. Since the emotional, irrational and instinctive features of mental life could not be studied without the aid of introspection, Wundt seemed to have neglected them. In other words, whatever was not thought and perception seemed either not to have any objective value, or to be just mere epiphenomena of conscious activity. This alleged 'one-sidedness' of Wundtian psychology, Isserlin explained, left Freud and others considerable space 'to explore the hidden, unreportable, and unfathomable features of conscious experience' (1925a p. 270). Furthermore, Isserlin explained that these explorations were expected and even welcomed, and that he was open to new psychological methods. For instance, not all association word-experiments needed to be conducted with the 'Sommerian scheme' he used in Giessen and Heidelberg (1905; 1907b).

However, the direction that psychoanalytic discourse took by the turn of the century seemed to Isserlin to be running contrary to its principles: '[p]sychoanalysis started as a reaction against an extreme intellectualism in psychology only to end up as extreme *intellectualisation* – not of consciousness, but *of the unconscious'* (1926 p. 123).[130] Indeed, Isserlin perceived the analytic method as being in reality 'entirely made out of intellectualistic inferences', all of which centred around 'the belief that mental events (*seelische Geschehen*) are not only comprehensible, but are also carriers of meaning and purposeful direction (*Zielstrebigkeit*)'. It seemed that instead of switching emphasis from conscious and rational events to unconscious and irrational ones, Freud was assuming that there was always a hidden meaning in the latter; that irrationality was always rationality in disguise. The aim was to uncover mental illness and dreams elements as 'normal intellectual performance' and thus, 'to find method in madness' (1907a p. 342). With a tone of irony, Isserlin observed that for Freud

> …there are no mysteries…in the unconscious, because there is really nothing amiss (*Verkehrtes*), nothing that as such is actually random in the realm of the mental (*seelischem Gebiete*). Once the appropriate chains (*zugehörige Ketten*) are uncovered, what appears to be thoroughly absurd, turns out to be not only necessarily determined (*notwendig bedingt*), but also meaningfully supported (*sinnvoll begründet*), rational, and purposeful (*zweckmässig*)' (1926 p. 103).

The same way that Wundtian experimental psychology had perhaps gone too far in limiting mental reality to measurable aspects of conscious representations, Isserlin saw psychoanalysis going too far in looking for hidden meaning in every single mental event. Indeed, it was not the case that while some absurdities revealed themselves as cover ups for some repressed elements of psychical life, other elements remained meaningless and arbitrary; for Freud every psychical particle needed to be there for a reason. If one took Freud seriously, Isserlin confessed, 'all what is irrational in [mental] life disappears: neurosis, dreams, and madness only cover with a mask purpose and meaning (*Ziel und*

[130] My emphasis.

Sinn)' (1926 p. 103). Freud was, in Isserlin's eyes, shooting himself in the foot: the aim was to pay attention to the absurd and irrational, not to transform the absurd and the irrational in meaningful and rational.

But the pretensions of psychoanalysis, Isserlin explained, did not stop with redefining psychology and psychopathology. The process of uncovering purpose and meaning behind seemingly insignificant and chaotic representations and emotions had also a prescriptive moral undertone: it is only through analytic therapy that the ultimate purpose of life could be attained. For Isserlin, psychoanalysis claimed 'to have access to the ultimate purpose of the soul' as any other faith did (1910a p. 64). Isserlin observed that by mystifying psychopathology, Freud failed to recognise

> …that the clinical specificity of the complete mental disease – which always manifests itself in unique clinical pictures – falls, to a great extent, outside of the comprehension possibilities provided by psychological principles, and that we [psychiatrists] need to recognise that only objective, organic, and physiological foundations would ultimately explain the uniqueness of a syndrome and its particular trajectory (1926 p. 114).

In Isserlin's eyes, psychoanalysis seemed to have largely ignored the limits of any possible science of the mind. Experimental psychology, as introduced by Kraepelin and Isserlin in psychopathology, provided mere indications of some aspects of disease entities, mostly useful for diagnosis and comparison of cases over time for lineaments of course of illness. The nature of the psychopathological would never be directly accessible by psychological science, experimental or analytical.

Moreover, Isserlin argued that even if Freud's understanding of dreams and neuroses were ever to be appropriate, its extension to psychosis and other presumably organic mental illness would run against all the knowledge accumulated so far by academic psychiatrists. He considered indeed 'a gross mistake' to try and find meaning and rationality, not only in dreams and neurosis, but also in psychoses and delusions:

> Here we must constantly ascertain the incorrectness (*Verkehrtheit*) of the following knowledge aspirations: the mistaken identification of psychological determination (*psychologische Bedingtheit*) with meaningful and rational significance (*sinnvolle und zweckmässige Zusammenhang*); the senseless ambition to rationalise psychosis – the hopeless effort of seeking method in madness (1926 p. 122).[131]

[131] It is worth mentioning that Isserlin does not pay attention to Freud's thoughts on the psychoses there where the most extensive reflections on the subject were carried out, such as in for instance, 'The Schreiber Case' (1911).

Isserlin undoubtedly saw these aspirations as a threat to the progress that psychiatrists had made in defining and classifying mental illness as disease entities according to their course and outcome, as well as to their experimentally acquired quantitative data. Being able to talk about emotional disturbances as deprived of all meaning and intentionality had taken Germans over a century; madness was madness precisely because it was meaningless, arbitrary, and irrational. With the intellectualisation of the unconscious psychoanalysis was blurring the fundamental distinction between mental health and mental illness.

Furthermore, the intellectualisation of the unconscious was incompatible with the inescapable requisites of a 'normal intellectual performance'. According to Isserlin, Freud was required to demonstrate that the symbolic 'indicators' (*Kennzeichen*) manipulated by the analytic interpretation method carried with them the 'marks' (*Stigmata*) of normal intellectual performances (1926 p. 118). Isserlin explained that there were two required marks for normal intellectual performances. First, a 'conscious activity of the highest order', namely, apperception, necessary for things as simple as a 'consciousness of relation'. Second, 'an objective course' in time, which allowed the directionality and intentionality, proper of a meaningful and purposeful mental event, to unfold. Without these marks, no intellectual or intentional performance was possible. The problem, as Isserlin saw things, was that Freud was convinced that such marks could also be found in the unconscious. But complexes, by definition, were detached from the objective temporality of consciousness. How could, then, something possess directionality and intentionality and be timeless (*zeitlos*) at the same time? Isserlin concluded: 'it disturbs reason how big the pretensions of the hypothesis [of Freud] are; the indicators of high conscious performance are meant to manifest without consciousness; constant directionality and purposefulness [is] derived from a repository of complexes which finds itself outside of all timely events…' (1926 p. 119). Isserlin had a point. How, for example, could the purposefulness (*Zeilstrebigkeit*) of a symbolic event be deduced from a persistently timeless feature such as a repressed memory? How could the unconscious have an effect on consciousness without participating in the course of representations? How could the chaos of irrationality be explained rationally?

Free association and defence mechanisms

Freud had arrived at his notion of the unconscious by way of elaborating on the neuroses. By the beginning of the twentieth century, Freud also sought to support his theory of unconscious motivation with two other occurrences: dreams and slips (or 'parapraxes'). Dreams and slips became the subject matters of *The Interpretation of Dreams* (1900) and *The Psychopathology of Everyday Life* (1901) respectively. Freud pinpointed quite often back to the neuroses, dreams and slips whenever he needed

to evidence his claim regarding unconscious phenomena. One way in which unconscious mistakes and parapraxes were observable was provided by free association, either with Freud on the couch, or, with Jung and the Swiss in the experimental laboratory.

It was Isserlin's view that, firstly, there was a clear lack of scientific rigour when psychoanalysts inferred repression, determination and other defence mechanisms while conducting free associations with their patients. He claimed that '[w]hoever has a bit of experience with reproduction and association experiments will necessarily reject these affirmations [of Freud and followers]' (1910a p. 67) and that '[i]t is only evident that analysts work on associations with certain presuppositions and that the correlations that appear meaningful to them are read into the course of these [associations]' (1926 pp. 119-120).[132] Moreover, Isserlin categorically denied – in the light of his own experimental proficiency – Freud's assertion that 'whatever obstructs the continuation of the flow [of associations], constitutes a resistance' of repressed content.[133] He argued against Freud that 'resistance' (*Widerstand*) – such as prolonged reaction-time, inhibition and stagnation in associations, perseveration and repetition of stimulus word[134] – occurring alongside association processes could have many different causes, and it did not always require repressed conflicting material to explain such phenomena. Indeed, errors in verbal reproduction and memory, as well as many behavioural inhibitions could easily be brought about without the agency of the Freudian repression (1925a p. 275). In particular, he corroborated, firstly, that the prolonged reaction times in associations had indeed a relation to intensive emotions, but that these could be as much 'pleasant (*lustbetonte*) emotions' as they could be 'unpleasant' ones (*unlustbetonte*). Secondly, he saw that conscious concealment and dissimulation tendencies (*Verheimlichungstendenz*) were considerably down-played by Freud and Jung. Thirdly, he determined that stagnation in the flow of association could be simply the outcome of unresolved 'contradicting utterance-tendencies' that were produced by lowering of attention proper of neurological and mental disorders or of simply sudden loss of interest and apathy (1926 pp. 108-109). Finally, he was unable to rule out forgetting names and words associated with an unpleasant representation as being caused by an ordinary conscious effort to avoid discontentment (1926 p. 123). In addition, Isserlin argued that in reality 'defence is never the natural, normal cause of forgetting'. On the contrary, he had been convinced through therapeutic practice that unpleasant events were without a doubt the hardest to forget, that they presented a high level of conscious readiness, and that they were in average recalled in greater detail than pleasant events (1926 p. 110).[135]

[132] For a similar line in contemporary criticisms, see Cioffi (1998).
[133] For a contemporary rebuttal of Freudian defence mechanisms from a linguistic point of view, see Timpanaro (1976).
[134] See Isserlin's experiments in previous chapter.
[135] Perhaps Isserlin would have been less perplexed by this had he paid attention to Freud's later publications, which had a more explicit metapsychological take on the issue of repression, such as *Repression* (1915), *The Unconscious* (1915) and specially *Inhibition, Symptom and Fear*, published the same year as Isserlin's textbook (1926). Here, Freud talked about five other resistance mechanisms apart from repression, all of which could be

Moreover, Isserlin saw little merit in Freud's assumption that talking cures 'cured' precisely because they effectively managed – when used by trained analysts – to overcome resistance and repression in hysteric and neurotic patients (1910a p. 56). Isserlin had been able to observe at the Munich psychiatric clinic that a variety of factors played a role in any successful talking cure. For instance, he cited the fact that in any given talking cure, tacit suggestive elements and a subtle 'pedagogical aid' was provided by the therapist – probably unbeknownst to him – to the patient. The patient, on the other hand, experienced, even perhaps for the first time, the feeling of being taken seriously by an expert, or of not being judged as weak or lunatic. For Isserlin, Freud constantly downplayed 'the alleviation that the very possibility of speaking out about burdensome "complexes" provides'. In short, Isserlin also dismissed therapeutic success as evidence for the alleged ubiquity of the mechanisms of repression and resistance: '[t]here are many ways to reach therapeutic success – this is by itself…insufficient to substantiate Freud's claims' (1926 p. 110).[136] Accordingly, the idea that repression, resistance and other defence mechanisms were meant to explain not just neurosis and dreams, but ultimately all mental events – as well as cure mental illness – depended, as mentioned, on what Isserlin took to be an exaggerated intellectualisation of the unconscious, that is, the idea that emotional complexes developed into autonomous psychical entities; the belief that around the conscious 'I' stood other intentionally and affectively 'independent soul particles', or *Nebenseele*.

Finally, if for Isserlin Freud's assumptions and empirical claims regarding complexes and defence mechanisms were wrongheaded, his examples were 'ludicrous'. They all 'give an absurd impression and make things very easy to all his critics and adversaries' (1926 p. 112). Isserlin engaged in lengthy discussions of Freud's examples of how name-forgetting were defence mechanisms, but his commentary on Freud's first and perhaps best known example of parapraxis in his *Psychopathology of Everyday Life* suffices to illustrate his critique clearly (1910a pp. 71-73). Freud had forgotten the name of the author of some paintings exhibited at the gothic cathedral of Orvieto. Instead of Signorelli, he could only say 'Boticelli' or 'Boltraffio'. He went on to explain that this case was a paradigmatic example of repression, determination and overdetermination, thereby arguing *there were reasons* for his forgetting as well for the appearance of those two names instead. But Freud did not stop there: the case was meant to be also an example of repression of sexual thoughts and feelings of guilt. It happened that a person had passed away in the Italian town of Trafoi, where Freud was visiting. In a conversation there, someone told him 'Sir (*Signore*), what can I say, maybe you could have helped him [the diseased]'. Freud claimed that the expression, apart from making him feel guilty, must had been associated by him to a characteristic expression Turks used in relation to sexual impotence: ' Sir (*Herr*),

legitimately assigned as causing stagnation in the flow of thoughts during free association. In addition, Isserlin did not seem to acknowledge in his criticisms the genetical perspectives Freud also alluded to in these works.

[136] I discuss Isserlin's psychotherapy in chapter 6 of this thesis.

when it [the penis] stops working, life is not worth living', which he had heard during a trip in Bosnia, and had felt uncomfortable with. While in Trafoi, and before he forgot the name Signorelli, Freud had received news about a patient who had committed suicide after not resisting the anguish caused by the frenetic sexual compulsions from which she suffered. He felt guilty for not having been there for her. Freud claimed that this news, together with the memories of associations of expressions in Trafoi and Bosnia, made him repress the name 'Signorelli': 'Herr' ('sir' in German) was associated with both 'Signore' ('sir' in Italian) and '(Her)zegovina'. Moreover, '(Bo)-ticelli' had the '-elli' of 'Signorelli' as well as the 'Bo' of 'Bosnia', which allowed him to replace the repressed memory linked previously to 'Herr'; whilst 'Boltraffio', apart from the 'Bo' of 'Boticelli and Bosnia, contained also 'traffio', which sounded like 'Trafoi'. The memories of negative feelings unconsciously linked to the name 'Signorelli' were repressed and substituted by others; 'Boticelli' and 'Boltraffio' were uttered, and not others, and this in a series of purposeful and intentional, though unconscious acts.

According to Isserlin, this is how Freud explained determination and overdetermination, a proceeding he considered to be 'utterly nonsensical' (1926 pp. 112-113). After a lengthy exposition of the inconsistencies of a symbolism that worked both through sound and through content depending on the convenience (1910a pp. 70-74; 1926 pp. 117-119), Isserlin, returned to Freud's Trafoi example, and demolished it:

> In reality, we do not have [here] any arguments, but a network of assumptions. It is an assumption that there is something repressed (thoughts about sex and death); further, it is an assumption that something else (Signorelli) – which is in a supposedly associative relation with the first [repression] – is also repressed; it is finally an assumption that a third thing (Boticelli, Boltraffio), which is supposed to be in an associative relation with the first and second [repressions], emerges in consciousness as symbols for these (1926 p. 118).

Repression in cases of name-forgetting was supposed to be demonstrated as an empirical fact. However, Freud's repression of Signorelli was, according to Isserlin, a network of wild assumptions sustained upon a subjective interpretation of linguistic symbols (1910a p. 56). For Isserlin, even though these and other examples of Freud 'intended to show how repression, determination and over-determination can be detected' in reality only show that the association method was 'a game of gap-filling' (1910a p. 68).[137] Isserlin was correct in indicating that Freud's examples about dreams and slips failed to

[137] In *The Freudian Slip* (1976 pp. 63-81), Sebastiano Timparano provided a textual critique of Freud's analysis that exposed many of the assumptions uncovered by Isserlin in (1910a pp. 63-81).

recognize that their primary function had to be always an evidentiary one. The Signorelli case, more than an example of unconscious repression, was, for Isserlin, an example of pseudoscience.

V. Aftermath of Isserlin's Critique and Conclusions

We know that Freud read at least some of Isserlin's critiques and, surprisingly, he seemed not to have been too troubled by them. In fact, in a letter to Jung from 4 April 1910, he wrote that 'Isserlin seems to have some moments of clarity (*lichte Momente*)' and in a letter to Ferenczi a week later, he claimed that 'Isserlin's critique seems more decent (*manierlicher*)' and that Isserlin was 'perhaps not completely hopeless'. Still, he recommended his disciples 'not to engage' as the 'best way to proceed' regarding Isserlin (quoted in Peters 2002a p. 30). The attitude of Jung and Ferenczi towards Isserlin, in contrast, was not so convivial. For instance, Ferenczi wrote to Freud that in Hungary Isserlin's critique had 'made a considerable impact' on 'the ignorant adversaries' of psychoanalysis, who celebrate

> every time we get smashed…And yet, the critique does not include anything new nor anything significant; he pretends to provide "evidence" without searching for it there were it can only be found, that is, in the analytic practice. These people always forget that PsA [sic] is not a *hypothesis* but rather a sum of empirical experiences brought together into one theory (quoted in Peters 2002a p. 30).

Emma Jung, Carl's wife, financer, and 'intellectual editor', wrote to Freud in early March 1910 about a tense correspondence between her husband and Isserlin taking place earlier that year. As she explained, Isserlin had asked Jung if he could participate on the Second International Psychoanalytic Congress to be held in October that year in Nuremberg. Jung had refused, even when Isserlin asked again if he could be there only as a 'quiet listener' (Petersa 2002 p. 30).[138]Jung hated Isserlin. Understandably so, since the latter had become a real obstacle for the dissemination of psychoanalytic ideas and practice in Germany and beyond. Thus, for instance, in a letter to Freud from May 2, Jung himself referred to Isserlin as an 'animal' (*Getier*) and as a 'filthy individual' (*schmutziger Kerl*) who 'would ruin anyone's appetite' (quoted in Peters 2002a p. 31).

As I have shown in this chapter, Isserlin developed a comprehensive critical evaluation of psychoanalysis very much in tune with his commitment to empirical and anti-speculative methods in psychology. Unlike other critics of Freudian practices, he had experience with free association

[138] The Jung-Isserlin correspondence has not been published.

experiments, and thus, a degree of authority over some of the practices of which the analysts claimed to be the only experts. However, Isserlin's treatment of psychoanalysis formed also part of a major research agenda commanded by Kraepelin and other psychiatric clinic directors. As we have seen in previous chapters, Isserlin became a psychiatrist amidst a Wundtian and Kraepelinian ethos, where clinical and empirical methods were beginning to gain terrain over both the reductionism of cerebral pathology and the backward alienist orthodoxy. Psychoanalysis was attracting young medical students and psychologists, as well as seeing more and more patients with 'nervous' complaints, and was perceived as a threat to psychiatry by Isserlin and the establishment at the time.

In 1910, soon after Isserlin's piece on Freud, Bleuer published his own re-evaluation of psychoanalysis, which marked the beginning of his falling out with Freud. Bleuler supported many of his claims against psychoanalysis by agreeing with what Hoche, Isserlin, and a couple of other academic psychiatrists had been saying for at least five years. Moreover, in 1911, Bleuler discovered from Kraepelin the way Isserlin and other critics of psychoanalysis were being treated by Jung. He then wrote to Freud: '[i]n my opinion, saying "he who is not with us is against us"…is necessary for political parties and religious communities…but harmful for science…[Jung] finds [the policy of] closed doors justified, and I find it wrong' (quoted in Falzeder 2007 p. 362).

Isserlin carried on being the official voice of Munich against psychoanalysis until the mid-1920s, long after the Zurich group, including Jung,[139] had abandoned Freud. Negative comments about Isserlin – who Freud would never personally meet – kept coming from new high-rank disciples of Freud. In a letter of May 1918, the Jewish Berlin psychiatrist Karl Abraham told Freud he had 'met our critic Isserlin in a small congress in Würzburg. He sat opposite to me and paid tribute to psychoanalysis by raising his cup. Apart from that I found him really neurotic and I was astonished by the fact that someone like him could be a fellow Jew (*Rassengenose*)' (quoted in Peters 2002a p. 32).[140] Isserlin seemed to have been the only Jewish member of the Kraepelin group. This must have come across as odd, since the Munich psychiatric establishment was already heavily guided by ideas of biological degeneration, some of which had anti-Semitic undertones.[141] In Munich, the Research Institute of Psychiatry was created in 1917. There, as well as in the university, Isserlin collaborated with Rüdin, Ploetz, and others who were integral members of the Kraepelin group and future Nazis eugenicists. He was a conservative Jewish doctor, and thus, a unique young figure in the Munich psychiatric scene at the time.

[139] Jung eventually denied the primary sexual origin of neurosis and broke up with Freud in 1913. He turned to myths and legends in the 1920s, re-interpreting the unconscious in a more inter-subjective sense (Clark 1955 p. 609).

[140] The doctrinal character of the idea of resistance was still manifest during the 1920s; by then all critics were still being referred to as 'neurotics'.

[141] See chapters 5-7.

As this chapter has evidenced, Freud was clearly under constant, sometimes even clearly orchestrated attack from quite a few important academic psychiatrists. During the first decade of the twentieth century, and despite significant attempts at unbiased evaluation of Freud and Jung, Isserlin did what he could to devalue their work, something that made him an important young figure in the German psychiatric scene and beyond. When Isserlin is brought into the picture, sufficient reasons can be given for the claim that is it is indeed an overstatement to call a myth and a legend the statement that Freudian doctrines and intellectuals endured a hostile early reception in German psychiatric circles.

4. Isserlin's Military Hospital in the First World War (1914-1922)

Re-thinking brain-injury and war-neurosis in Germany

I. Introduction: The Challenges of War Trauma

Due to the intensity of the bombardment and the nature of trench warfare, an unprecedented number of German soldiers presented psychological trauma and neurotic symptoms during the First World War. Some had become helplessly disengaged, depressed and anxious; others had developed routine seizures, shakes or hysterical fits; there were also some who found themselves unable to reason, to sleep, to walk or to talk. These circumstances represented new challenges for the psychiatric profession in Europe.

In the twenty-first century, historians of medicine have become increasingly interested in the work carried out by German military psychiatrists during and after the First World War. Writers such as Paul Lerner (2000; 2003), Stephanie Neuner (2011), and more recently, Phillip Rauh and Livia Prüll (2015), among others, explain with great detail how, as a response to what looked like an 'epidemic' of 'war neurosis'[142], psychiatrists fashioned innovative approaches towards diagnosis, classification, and treatment in very challenging circumstances. Notably, these historians have focused their attention on the debates of the military psychiatric congresses of 1916, which, they explain, resulted in the official rejection of war neurosis as an organic disturbance or as nerve damage. Instead, psychiatrists decided that year that war neurosis – or 'traumatic neurosis' (*traumatische Neurose*), as Germans called it at that time – presented an a-somatic aetiology: war-induced neurotic symptoms did not result from structural damage to the nervous system or the brain. The established view after the congresses of 1916 was that war neurosis was rather a manifestation of mental degeneracy and evidence of an inherited pre-disposition to nervous disorders. According to this decision, which was not founded in research but rather more influenced by other factors, most of the soldiers who suffered from hysteria and epileptic fits did so because they were predisposed to these conditions due to their genetically weak make-up; the events in the trenches were only triggers for what lay dormant in the depths of their personality.

[142] The term was coined in Britain by psychologist Charles S. Myers in 1915 and was used in Germany only after the war as *Kriegsneurose.* During the war, different umbrella terms were instead used: *Kriegshysterie*, *traumatische Neurose*, *Nervenschock*, among others. For the purpose of the argument of this chapter, I use these terms interchangeably unless otherwise indicated.

Amongst this historical work, 'war neurosis' is presented as if it had been an umbrella term unproblematically applied by German psychiatrists and neurologists to *all* psychological and neurological disturbances occurring at the front line; whilst it is also suggested that *all* psychological injuries were explained away by degeneration theory. This was not the case, and moreover the outcome of the military congress of 1916 seems to have been much more nuanced than historians have presented. By focusing on the term 'war neurosis' and on specific events such as the military congresses, such scholars have seemingly neglected other important psychological and neurological conditions, as well as innovative methods of treatment present at military psychiatric hospitals in Germany during the First World War. Almost inevitably, authors have not yet realised the significance that the work of Max Isserlin has for understanding the history of German military psychiatry.

In his Munich military ward, some functional impairments, such as speech disturbances, loss of vocabulary, or problems with movement coordination, were emphatically distinguished from symptoms of war neurosis. This distinction saved the lives of many ex-servicemen, who otherwise would have been treated as degenerates with predisposition to mental disturbances. At the same time, following his mentors Sommer and Kraepelin, Isserlin was an advocate of degeneration theory and realised the urgency of prophylaxis and prevention of mental illness with the advent of the war. It is, therefore, not surprising that he broadly agreed with the established view on war neurosis. Nevertheless, he treated war neurotics only briefly early on in 1915. After that, he was almost exclusively responsible for 'brain-injured' patients (*Hirnverletzte*). These patients were conceptualised by him and his staff not as neurotics and degenerates, but as suffering from 'a focal brain impairment', which, with the right treatment, produced in the soldier only a transitory disability. Indeed, Isserlin's patients – many of whom had head injuries – seemed to be able to relearn or compensate their impairments, or at least to adapt to their new circumstances. This is why he constantly stressed that distinct from war neurotics, his patients were constitutionally normal and mentally healthy people, who had intact morals and a will to work towards the reconstruction of the nation after the defeat in the war. During the first years of the Weimar Republic, Isserlin created a welfare clinic where his brain-injured patients continued to re-learn, and to some extent regain their lost abilities and adapt to their new circumstances. Particularly important for Isserlin, as it was for most psychiatrists in the early 1920s, was that his patients were rehabilitated to re-join the work-force. The fact that many did, reinforced the perception of legitimacy towards Isserlin's differential diagnosis: brain-injured patients with focal brain damage were not neurotics nor were they feeble-minded.

In this chapter, by uncovering aspects of the work of Isserlin in military hospitals, I reassess and challenge the focus that historians have adopted while dealing with German military psychiatry in the period 1916-1922. I do this by exploring some of the events surrounding the creation and evolution of

the particular diagnosis of 'brain-injury' (*Hirnverletzung*) in Munich, as well as by explaining why Isserlin differentiated his 'brain-injured' patients from other types of war victims with psychological injuries. I substantiate and exemplify these distinctions by looking at Isserlin's publications on the subject, articles from one of his colleagues, and three different files of brain-injured soldiers who were in continuous treatment and evaluation by Isserlin for several years.[143] In addition, I make use of valuable biographical information collected by the psychotherapist Renate Jutz and the neurologist Hendrik Voss from the archives of the Ludwig Maximilian University in Munich.[144] Furthermore, I show how Isserlin's distinction between brain-injury and war neurosis – and arguably between brain and mind – helped him take advantage of the professional freedom given by the new socialist public health institutions of the 1920s. It is particularly telling that a Jewish psychiatrist could produce innovative therapeutic work within left-wing public structures while at the same time also serve the interests of the conservative and proto-fascist psychiatric elite of the time. I use secondary literature such as the works of historians Ruth Kloocke, Eric Engstrom, Deborah Cohen and Paul Weindling to situate Isserlin's work in the particular scientific, academic, social and political worlds which he and his colleagues navigated at the time.

In section II, I first expose the confusions that emerge when confronting existing accounts of – and references to – the work of Isserlin during the war in the available references to his life and work and I proceed to look into Isserlin's texts and pamphlets on brain-injury to identify the particular kind of patient that he treated. Then, in section III, I look into the military psychiatric congresses of 1916 held in Berlin and Munich, explaining what psychiatrists understood the cause of war neurosis to be and why it was so important, professionally, for Isserlin to differentiate his patients from war neurotics. In section IV, I consider examples in Isserlin's wartime-patients' histories, paying attention to how he differentiated the brain injured – who, despite their injury, possessed 'healthy minds' – from neurotics.[145] Finally in section V, I point first to some of the professional alternatives that German psychiatrists had with the outbreak of the revolution of 1918-1919 and the advent of the Weimar Republic; then I refer briefly to the creation of Kraepelin's Research Institute in Munich, in which Isserlin also worked; and ultimately I show how these events enabled Isserlin's military hospital to evolve into a welfare clinic for the exclusive rehabilitation of brain injury in the period 1919-1922, and how he managed to combine welfare activities informed by eugenic concerns with a particular therapeutic optimism.

[143] Although there is also potentially valuable information regarding therapy in these files, I deal here exclusively with the clinical and diagnostic aspects of the case histories.
[144] Unfortunately, these authors tell us virtually nothing about the world Isserlin had to navigate to institutionalise his new diagnosis and therapies.
[145] Isserlin's texts are located in (MS/1935: Box 9) and the patient files can be found in (MS/1935 Boxes 7&8).

An underlying goal of this chapter (and of the following) is to expose the fact that, even at a time when mental illness was established as brain disease caused by structural damage, it was still possible for psychiatrists to construct intellectual niches and further their professional careers by establishing relatively arbitrary diagnostic differentiations which allowed them to manipulate dichotomies such as those between mind and body, organic and functional, and nature versus nurture.

II. Brain Injuries and Isserlin's 'Lazaret' in Munich

Lazaret (*Reservenlazarett*) was the term used in Germany during the First and Second World Wars to refer to the improvised military emergency medical stations for injured soldiers. Located away from the combat zone, their goal was to restore soldiers' health, in particular, their fitness for work (*Erwerbsfähigkeit*), so that they could either return to the war-front or at least to their previous occupation (Lerner 2003; Kloocke et al 2005; Linden and Jones 2013).[146] During the First World War, there were two main kinds of lazarets. The field lazarets (*Feldlazarett*), which served as first aid stations and were located within a distance from the battlefield of no more than 15km; and the lazarets located in towns far from the war front, called war hospitals (*Kriegslazarett*), which took the form of barracks or temporary adaptations of buildings such as schools and churches (Zischek 2018 pp. 214-215). Some of these lazarets expanded through the years opening more branches (*Aussenstellen*) elsewhere in each city. As a consequence, sometimes doctors had under their care several hundred injured soldiers at a time (see figure 4.1).

[146] For an explanation of how military hospitals were generally organised in Germany during the war, see Zischek (2018).

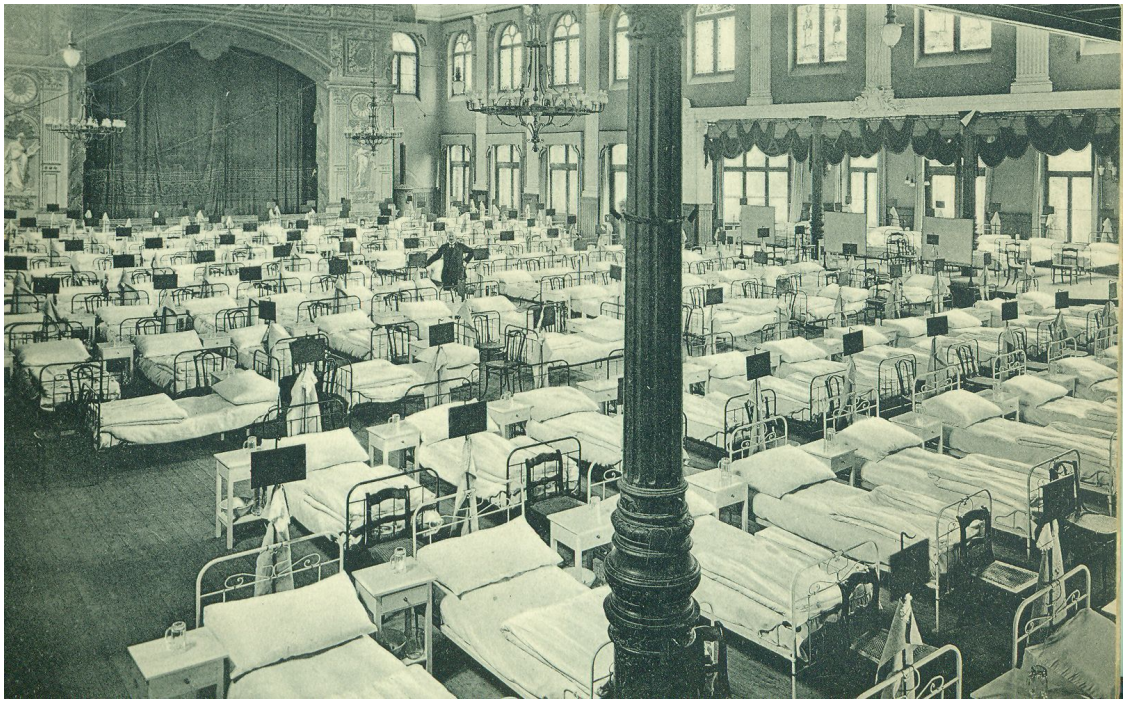


Figure 4.1: One of the first large lazarets in Herford (1914)
[Herford Municipal Archives, Collection D 14, L 8.16; Herford Municipal Archives, Herford City Archives, Coll.44]

In the city of Munich, the biggest general lazarets[147] were 'München A' and 'München B' with 1397 and 1218 beds respectively. München A's main centre was located at the old 'Militärkrankenhaus' on Lazarettstrasse, but also included the barrack section 'Oberwiesenfeld' and a section for mild injuries at the Lothstrasse, whilst München B was sited in a former school, the Marsschule. There were also more specialised lazarets in Munich. For instance, 'München D', which was improvised in rooms of the main customs office (*Hauptzollamt*) at the Landsbergerstrasse (see figure 4.2), focused on jaw and face surgery and had 875 beds, and included the dental surgery centre 'Königliche Zahnärztliche Institut' at the Pettenkoferstraße, with 78 beds.[148]

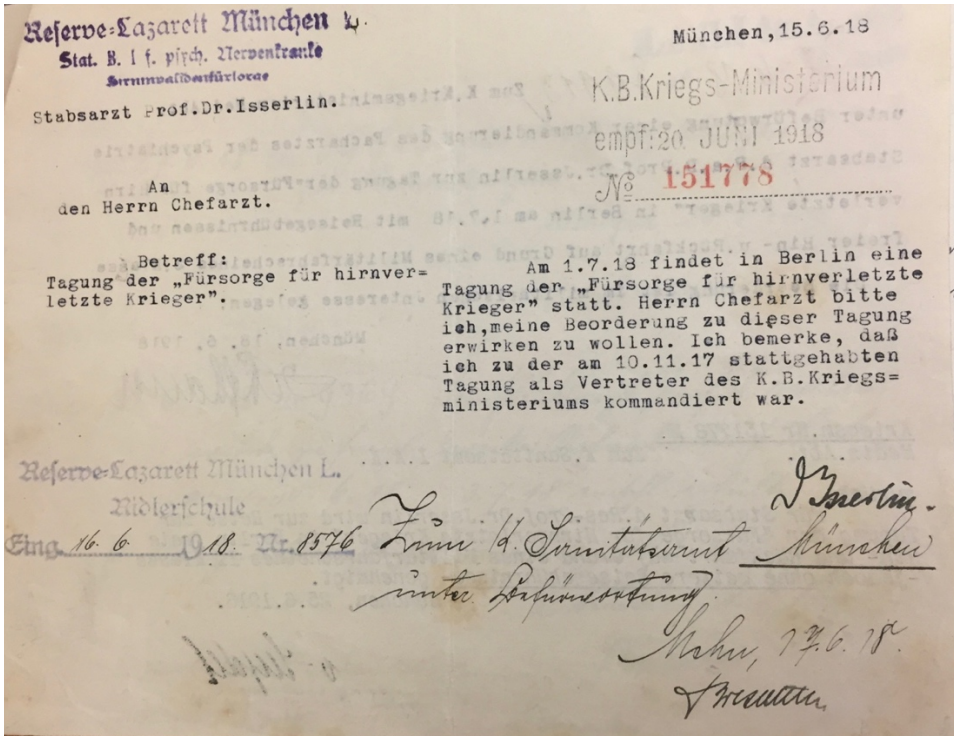
[147] I will use the term 'lazaret' to refer to the 'war lazarets' throughout the chapter.
[148] See 'Auf dem Notgleis ins Lazarett' from Südwestdeutsche Zeitung (2014).

Figure 4.2: Lazaret 'München D' photographed in 1916
[Front of postcard]

Specialised 'neurological' lazarets were first set up in Munich within these military hospitals. In 1914, one started operating at München A under the command of the neuropsychiatrist Walter Spielmeyer (1879-1935). Spielmeyer was a former student of the experimental physiologist Eduard Hitzig and of Gustav Aschaffenburg, and had originally been brought to Munich by Emil Kraepelin to work in the laboratory of Alois Alzheimer at the university psychiatric clinic (Hippius and Müller 2008 p. 10). The following year, this lazaret was relocated to the school 'Ridlerschule', acquiring the name 'München L' and splitting into two sections (see figure 4.3). One was directed by Spielmeyer and the other was assigned to Isserlin. Spielmeyer's section took care of injuries of the peripheral nerves, brain, and spinal cord, which led to paralysis, epilepsy, and many other organic disturbances (Schwarz 1926 pp. 65-66). Meanwhile, as Munich-based writers, including the neurologist Hendrik Voss (2015 p. 212), and psychotherapists Renate Jutz (1981 pp. 23-27) and Joest Martinius (n.d. p. 8) have all previously asserted, Isserlin 'treated the mentally ill (*psychisch Kranke*)', especially 'neurotics (*seelisch Nervöse*)' and those presenting 'nervous exhaustion' (*nervöse Erschöpfung*). Contrary to those treated by Spielmeyer, these conditions were not considered by the medical establishment to have been caused by a particular organic lesion: they were, rather, a 'personality', or 'constitutional' issue (Lerner 2003). Thus, for example, if a soldier, after being buried under the ground for hours or days with bombs being dropped around him, developed tremors and uncontrollable shaking, it seemed to military psychiatrists that there were only two possible explanations: either that the symptoms had been caused by organic damage to the nerves, or that the war experience had only triggered an underlying pre-disposition to nervous disturbances. According to this account, the soldier who fell within the first category was seen by Spielmeyer and the soldier who fell within the second, by Isserlin.

Figure 4.3: The school in Ridlerschule, where 'München L' operated in its beginnings
[Front of postcard]

If Voss, Jutz and Martinius are right about München L, it could be said that, in modern terms, Spielmeyer treated 'neurological' conditions while Isserlin treated 'psychiatric' patients. However, other authors referring to Isserlin's work in Munich are more ambiguous with regard to what took place there. For example, Uwe Peters (2002b p. 23) wrote about both 'war neuroses' and 'organic lesions' as being the focus of Isserlin's work at the lazaret. Even more puzzling, Paul Weindling, in his detailed historical accounts of German medicine and politics of the time made two passing references to Isserlin's work as simply 'neurological rehabilitation' of 'organic degeneration' (1991 p. 382; 1997 p. 152). Which leads us to ask: what conditions did Isserlin really treat during the First World War? (see figure 4.4).



Reserve-Lazarett München L.
Stat. B. f. psych. Nervenkranke
Hirninvalidenfürsorge

München, 15.6.18

Stabsarzt Prof.Dr.Isserlin.

An
den Herrn Chefarzt.

K.B.Kriegs-Ministerium
empf: 20 JUNI 1918
№ 151778

Betreff:
Tagung der „Fürsorge für hirnverletzte Krieger".

Am 1.7.18 findet in Berlin eine Tagung der „Fürsorge für hirnverletzte Krieger" statt. Herrn Chefarzt bitte ich, meine Beorderung zu dieser Tagung erwirken zu wollen. Ich bemerke, daß ich zu der am 10.11.17 stattgehabten Tagung als Vertreter des K.B.Kriegsministeriums kommandiert war.

Reserve-Lazarett München L.
Adlerschule
Eing. 16. 6. 1918. Nr. 8576

Dr. Isserlin.
München

Figure 4.4: Letter from Ministry of Defence to Isserlin in 1918.
In the sender's address, lazaret 'München L', it could be noted the term *f. psych. Nervenkranke*, (which could be translated as 'psychiatric nervous patient') and the term *Hirninvaliden* (literally 'brain disabled') and *Hirnverletze* ('brain injured') as describing the type of patient(s) of Isserlin's medical station.
[MS/1935: Box 6]

Dr. Kurt Schwarz (ca. 1920) – who would later collaborate with Isserlin in welfare institutions for war victims – provides some valuable indications as to what took place in Isserlin's lazaret station and a handful of other 'special lazarets' in Germany during the war. He explained that

> thanks to exercise therapy as well as to the willpower and patience of the patients, of doctors and of educators, a great and unanticipated success has been accomplished in the special lazarets for brain-injured (*besondere Lazarette für Hirnverletzte*). It is shocking to see these fine young men in the prime of their lives sitting on school desks, taking pains at re-learning how to spell, write, read, and calculate, so as to counterweight their speech and thought disturbances. The fact that their injuries also give rise to paralysis of one or more limbs (most of the time they are hemiplegics), to mental disturbances, and to recurring epileptic seizures, makes it extremely difficult for them to re-join the workforce. The tragic thing is that they are fully aware of their difficult circumstances, of their inability to speak and do what they want; that [terrible] feeling of wanting to do something but not being able to (Schwarz ca 1920).

Moreover, he described these lazarets as 'learning centres', not as psychiatric hospitals (Schwarz ca. 1920). According to Schwarz's descriptions, Isserlin's lazaret – and another five similar 'special'

stations in Bonn, Frankfurt, Halle, Leipzig and Berlin – treated soldiers who, as a consequence of brain damage, presented 'speech and thought disturbances'. He referred to 'mental disturbances' only as concomitant occurrences, which suggested that they were not treated as neurotic symptoms. It seems that 'brain injury' was a distinct diagnostic category altogether, a condition in itself, and the brain-injured, a special type of patient.

From Isserlin's texts of the 1920s, we can put together a picture of his lazaret patients that corroborates such reading of Schwarz's testimony.[149] First of all, there is nothing that suggests that his lazaret patients were war neurotics – who according to Isserlin suffered from a 'mild mental illness' – or that they had suffered injury to the peripheral nerves or spinal cord, or that they were 'feeble-minded or idiots'. The 'brain-injured', Isserlin explained, had suffered a 'focal', or 'localised' or 'circumscribed brain damage' (*umschriebener Hirnschade*), which had not – at least not directly – affected other mental capacities (intellectual or 'moral'). Rather, a focal damage to the brain manifested itself mostly in the form of 'central disturbances' (*zentrale Störungen*), by which Isserlin meant mostly specific performative dysfunctions. These dysfunctions – loosely referred to by him also as 'psychological disturbances' (*psychologische Störungen*)[150] – made the sufferer unlearn a particular mental, sensory or motor capacity such as, for example, producing certain forms of speech,[151] counting numbers, coordinating movement, or recognising objects, without thereby diminishing intelligence or affecting the individual personality (Isserlin 1928 p. 2).

Moreover, Isserlin generally agreed with the late-nineteenth century neuropsychiatric tradition which claimed that any loss of high-level mental functions, as in the case of motor and sensory aphasia, was brought about by damage of a potentially anatomically localisable area(s) of the cerebral cortex (Isserlin 1927 p.102; 1928 pp. 2-3). However, unlike the previous generation of German 'localisers', Isserlin was by no means an expert in histopathology; he did not look into post-mortem brains with the hope of finding structural anomalies which, by deploying theoretical models and heuristic diagrams, could be correlated to functional impairments. He argued that his clinical experience with brain-injured patients had demonstrated that regardless of the potential correlation that existed between structural damage of certain areas of the cortex and different impairments, it was possible to teach the injured soldiers he treated in Munich L to compensate the loss of function, at least to a certain degree. He inferred that this

[149] All in (MS/1935: Box 9).
[150] Isserlin distinguished between 'psychological' (*psychologische*) and 'mental' (*psychisch/geistig*) disturbances. The former were impairments regarding performative, semi-automatized mental capacities such as counting numbers and speaking; the latter term referred instead to the actual psychopathologies.
[151] Isserlin's fascination with aphasia and psycholinguistics started during the war. However, it will become its sole concern only in the 1930s – his most prolific period in terms of publications over his findings and theories on these matters. For this reason, his theories on language and his rationale for restitution of aphasics will be left for the last chapter of this thesis. In this chapter and the next I will focus my attention more on professional and institutional matters around the diagnosis of brain injury, of which aphasia was one very common effect.

was possible due to the brain's capacity to re-organise its connective systems (Isserlin 1922b, 1929, 1936). Furthermore, he argued that pedagogical tools – especially those which had been previously used to help deaf-mute children – seemed to work well for brains in need of such re-organisation (Isserlin 1928 p. 2).

Isserlin explained that 'central disturbances' were nothing like 'general disturbances' (*allgemeine Störungen*), such as epilepsy, psychosis, or mental retardation. General disturbances affected the whole of the personality and/or altered the mind as such (*seelische Krankheit*), either by diminishing intelligence, weakening the will, or degenerating the nervous system. 'Central' or 'psychological' disturbances, on the contrary, were circumscribed impairments, that is, they affected primarily an isolated function or performance of the individual, such as speech, calculation, or coordination (Isserlin 1924a p. 4; 1928 pp. 2-3). In other words, despite the fact that both general and focal disturbances could be ultimately caused by organic lesions (or at least could be presumed to be), focal disturbances were not really considered by Isserlin to represent organic illnesses, but, rather, *potentially transitory functional disabilities*, and ones with a relatively decent prognosis.[152] Hence, in a significant way, a soldier with central disturbances or focal impairments caused by brain injury was closer to a blind or amputee soldier than to a war neurotic or any other 'psychologically distressed' person. In addition, Isserlin explained that some central disturbances became manifest only months after the injury, even when the head-injury had fully healed. In fact, 'late consequences' (*Spätfolgen*) or 'late manifestations' (*Späterscheinungen*) of brain damage and not only early consequences (*Früherscheinungen*), became a powerful diagnostic tool for Isserlin in his distinction of brain-injury from other mental and nervous conditions (Isserlin 1924a p. 2; 1927 p. 102).

Isserlin discovered many more criteria for differential diagnosis of his lazaret patients during his time at München L. Just to give an example, another sign of 'brain injury' was given with the appearance of what Isserlin referred to as 'mental epilepsy' (*psychische Epilepsie*). This consisted in 'short-lived transitory breakdowns (*Anfälle*) suddenly affecting a certain mental field of activity…So for example, transitory paroxysms affecting visual cognition, speech, and speech comprehension [as well as] movement coordination and equilibrium' (Isserlin 1924a p. 3). Mental epilepsy was understood by Isserlin as a symptom of a focal disturbance, and therefore needed to be differentiated from a general disturbance such as the 'great general epilepsy' (*grosse allgemeine Epilepsie*) (Isserlin 1924a p. 3). Soldiers with 'great general epilepsy' were also treated by him in his lazaret, and nevertheless were

[152] From what I can gather, today's concept of disability (in the sense of 'Benachteiligung') is much more inclusive than the one implemented by Isserlin in his writings. By 'disability' (more like *spezifisches Unvermögen*) Isserlin referred to an inability to perform certain motor or sensory tasks. For example, a speech disorder, blindness, and amnesia were disabilities; feeble-mindedness and epilepsy were not; they were illnesses, or 'general disturbances'. Unless otherwise specified, I use 'disability' in Isserlin's sense.

emphatically distinguished by Isserlin from his patients suffering from aphasia, mental epilepsy, and other 'central disturbances' (See Isserlin 1924a, 1927, 1928, 1930).[153]These diagnostic differentiations served Isserlin to clear most of his patients suffering from aphasia from any association with mental illness and mental retardation. They were for him neither hysterics, nor slow. Indeed, even though, for example, 'it is quite common for these patients [the brain-injured] to go through transitory phases of depression and agitation, which go away as easily as they arrive' (Isserlin 1928 p.1), the brain injured were not war neurotics. Isserlin explained further that indeed

> way too often, due to lack of differentiations, consequences of brain injury are being exaggerated with regard to their impact on the whole of mental life (*Gesamtgeistesleben*). In particular, they have been unjustly associated with mental retardation and idiocy. [Moreover] these victims, who in reality are in full possession of their mental capacities (*Geisteskräfte*) as well as [in control of] the emotional and volitional aspects of their lives (*Gefühls- und Willensleben*), have been taken for mentally ill (*Geisteskranke*) by laymen as well as by doctors (Isserlin 1924 p. 2).

Isserlin needed to make sure his colleagues accepted these differentiations for the sake, not only of his patients, but also for all those unjustly diagnosed as having a general mental disturbance. In order to legitimise what he envisioned as a whole new specialised field for pedagogically-informed neuropsychiatric research and therapy, it was crucial that these patients were not classified as war neurotics either. At the time there was a consensus among psychiatrists (also 'nerve-doctors') that neurosis pointed to morally inferior minds and 'inherited psychopathic constitutions' (*Minderwertigkeit der Veranlagung*), and consequently, that it could not be cured. Treatment of inferior constitutions, like treatment of severe psychoses, was for the most part 'management of symptoms'.[154] In contrast, Isserlin's patients were not really ill but only temporarily disabled; they did not need to be cured (*Heilung*) but to be *rehabilitated* (*Restitution*). Isserlin would spend a decade clearing off the stigma of neurosis and moral and biological degeneracy from his 'disabled servicemen'.

Isserlin was not alone in this endeavour. His Austrian colleague Fritz Hartmann (1871-1937), had created a rehabilitation centre for brain injuries in Graz that became highly regarded in the German-speaking world. Isserlin admitted he was influenced by Hartmann's innovative use of exercise therapy in soldiers with focal brain damage (*Übungstherapie*; Isserlin 1928 p. 1). Moreover, Hugo Liepmann (1863-1925) was also raising awareness with regard to late consequences of brain injury. As he would report later in a letter from 1923 to the head of the Bavarian ministry of welfare, the brain-injured 'could get ill after apparent recovery. Be it in the form of epilepsy, abscess, or even due to chirurgical consequences, many people who seemed recovered at the time of their medical discharge are in urgent

[153] This indicates that Isserlin too treated organic illnesses at München L, and not only Spielmeyer, as Voss (2015) claims.
[154] In chapter 6 I deal with Isserlin's notion of 'psychopathic constitutions'.

need of supervision, treatment, and work counselling of the most varied forms' (quoted in Jutz 1981 p. 30). Together with Karl Bonhoeffer, Liepmann had been treating brain injuries in Berlin since 1917, and therefore was also becoming an authority on the subject (Schwarz 1926 p. 65).[155] As indicated above, there were two other institutions in Germany that started specialising in focal brain damage during the war. The best known started as a lazaret directed by Kurt Goldstein in Frankfurt. In the 1920s, The Frankfurt Centre included a residential hospital, a psychological evaluation unit and special workshops dedicated to the re-building and reinforcing of professional skills. Goldstein's research focused primarily in investigating disorders of language from a holistic and Gestaltist perspective. Also influential was Walther Poppelreuter's rehabilitation centre, or 'special lazaret', established in 1917 in Bonn and transferred to Düsseldorf in 1925. Poppelreuter dedicated most of his efforts towards visuospatial and visuoperceptual disorders and psychometric examinations of head injuries (Wilson 2017). These became sources of inspiration for Isserlin's neuro-rehab work during the 1920s and 30s. However, in Germany, the stigma of neurosis for soldiers with circumscribed brain damage did not go away throughout the Weimar period.

Isserlin's – as well as his colleagues' – differential diagnosis around localised brain injury and central disturbances points to a complex nosological and therapeutic armament. Yet, most historians of neuroscience have been generally quite ambiguous as to the diagnostic categories used in German military psychiatric hospitals. They have used the terms 'neurological patient' (*Nervenkranke*)[156] and 'war neurotic' interchangeably in their historical accounts. What is more, authors such as Lerner (2001 p. 41), Kloocke et al (2005 pp. 44ff), Holdorff (2011 pp. 468-469), Linden and Jones (2013 pp. 653; 657) and Rauh and Prüll (2015 pp. 1-2; 7-8) even suggest that German military psychiatry actually subsumed diverse and complex symptoms and conditions – such as phobias, nervousness, epilepsy, paralysis, hysterical deafness, muteness, paresis, speech disorders, altered vision, hemiplegia, uncontrollable shaking, and many more – under the categories of 'war neuroses'.[157] However, investigation into the work of the 'neurological' lazarets in Germany suggests that it was indeed not only possible but necessary for some military psychiatrists to distinguish between diseases of the mind, of the nerves, and focal brain damage. The conflation and generalisations present in the historical literature – even in recent years – appear to be unfounded ones.

[155] Later on, and thanks to their shared expertise on consequences of brain injury, both Liepmann and Bonhoeffer would afford Isserlin crucial support with his funding requests to the Rockefeller Foundation (see chapter 7).
[156] *Nervenkrank* did not refer to a mentally ill person as it does in modern-day German (also *psychisch Krank/Geisteskrank*), but rather to someone with nerve-disease.
[157] Also 'war hysteria' (*Kriegshysterie*), 'nerve shock' (*Nervenschock*) and sometimes 'neurasthenia' (*Neurasthenie*).

III. War-Neurosis as Manifestation of a Weak Constitution after 1916

Two years into the war, German military psychiatrists became deeply concerned with what seemed to be an epidemic of war neuroses among German troops. Consequently, they made war neurosis – or as they called it then, 'traumatic neurosis'(*traumatische Neurose*, henceforth tN) the subject of the military congresses (*Kriegstagungen*) of February and October 1916, in Berlin and Munich respectively (Kloocke et al 2005 pp. 50ff).[158] The majority of the attendants, Isserlin included, agreed that the war had unleashed an epidemic of nervous disorders and that immediate action was required.[159] They disagreed, however, on what was the cause of war-related nervous conditions. On one side was the neurologist Hermann Oppenheim (1857-1919), pretty much alone, claiming that tN was a disease with both organic and psychogenic components: the strenuous nature of the combat had provoked structural damage somewhere in the nervous system, which in turn brought about psychological and functional disturbances. On the other side were prominent neuropsychiatrists such as Robert Gaupp (1870-1953), Max Nonne (1861-1959) and Karl Bonhoeffer (1868-1948), who rejected Oppenheim's understanding of tN. They claimed instead that the symptomatology did not point toward a disease entity at all. Rather, neurotic symptoms were pure manifestations of weak mental constitutions. In other words, they argued that, when a soldier returning from the war front after a battle became, say, hysteric or prone to epileptic fits, combat was only the circumstance in which an already innate defective mental constitution manifested itself; there was nothing structural that had been damaged.[160] Their argument was questionably simple: the majority of soldiers who had endured the same excruciating experiences in 1914 and 1915 did not develop neurotic symptoms at all (Schmiedebach et al 2010 pp. 79; 81-82; Kloocke et al 2005 p. 45).

Oppenheim had explained in the late 1880s that some accidents – for instance breaking a leg in a factory or on a construction site – could induce concomitant structural changes in the nervous system, and hence, bring about 'accident-neurosis' (*Umfallneurose*). Oppenheim's thesis had had an impact on the availability of state benefits and welfare by the beginning of the twentieth century. At both military congresses in 1916 Oppenheim used the same arguments as he had regarding accident-neurosis: this time not accidents but war experiences were provoking undetectable organic changes in the brain or the nervous system which generated a variety of 'hysteric symptoms' (Rauh and Prüll 2015 pp. 3ff). At the congresses, Oppenheim pointed to his lazaret patients' histories as proof that neurotic symptoms were symptoms of an authentic disease entity (*Krankheitseinheit*), which should be treated by neurologists

[158] For comparisons with the state of affairs in Britain and France with regard to war neurosis, see Macleod (2018).
[159] For numbers and statistics on cases of war neuroses during the period 1914-1940, see Hilpert (1995) and Jones et al (2006).
[160] Unless, of course, there were eminent cerebral lesions.

like him, not by clinical psychiatrists.[161] In addition, he argued that other neurological symptoms such as seizures and paralysis were also concomitant to this organic trauma (Holdorff 2011 p. 467).

There is little doubt as to why Oppenheim's understanding of tN would be fiercely resisted. Psychiatrists working for state-run university clinics and depending upon state resources did not welcome a diagnosis with higher costs to public health. Psychiatrists claimed that workers could take (and indeed had been taking) advantage, for example, by demanding longer paid leave and welfare benefits following an accident. Some claimed to have been observing how insurance was, first, weakening the injured workers' will for work; second, nurturing a multitude of 'pension-neurotics' (*Rentenneurotikern*); and finally, debilitating the whole German workforce (Rauh and Prüll 2015 p. 4).[162] Psychiatrists in 1916 based their opposition to Oppenheim's organic model for tN on the same economic and social grounds that made them oppose welfare for 'rent-neurotics'. They thought that, instead of looking forward to re-joining their fellow combatants in the warfront, the injured soldiers would choose to immerse themselves in their distress and exploit state benefits (Linden and Jones 2013 p. 629; Rauh and Prüll 2015 p. 11).

There were also personal reasons for the rejection of Oppenheim's thesis. Oppenheim had worked as an internist at the Charité in Berlin – at the time Europe's largest and most sophisticated teaching hospital – before opening in 1891 a neurological private practice in the city, which became quite successful very rapidly. Some of Oppenheim's most vocal adversaries in 1916, such as Karl Bonhoeffer and Max Lewandowski (1876-1918), were occupying higher positions at the Charité and most likely looked with disdain at specialist dissenters who had become private practitioners. At the Berlin congress, they were first to explain away war neurosis as a (probably unconscious) unwillingness to keep fighting in the war, which created in the individual a coward compulsion to 'flee into illness'.[163] They claimed this to be a product of the combination of distressful stimuli and morbid hereditary predisposition (*krankhafte erbliche Belastung*) towards a weakness of character (*gemütslabile Konstitution*). Furthermore, they also claimed to have observed in the Berlin lazarets, contrary to Oppenheim's interpretation of data, no direct causal correlation between shocking war experiences and mental or nervous illness (Neuner 2011 pp. 59; 64-65).

[161] See Oppenheim (1916) in (MS/1935: Box 1).

[162] Among the general public, war neurotics were typically regarded not as victims of war but equated with Jews, communists, or anarchists, as being guilty of the German defeat by giving up and therefore 'stabbing the army in the back'. It was widely believed that a pension would be an award for betrayal (See Whalen 1984; Lerner 2000; Shephard 2000).

[163] For the analytical interpretation of the mechanism of 'flight into the illness' as the essence of war neurosis, see Freud (1919 pp. 3-5). There is no clarity as to the weight that cathartic therapy carried in the treatment of soldiers with psychological trauma by 1916 (Linden and Jones 2013 p. 649). There was certainly no psychoanalytic presence at the 1916 congresses. The previous chapter has explained why. However, according to some historians, the Freudian explanation of 'flight into illness' had definitely left some mark in the psychiatric understanding of neuroses for those present in these debates (see for example Roth 1987 pp. 19ff; 73).

In Munich, as as we can infer from Isserlin's diagnositic differentiations, psychiatrists also believed that most war neurotics had inferior and weak constitutions and inherited predispositions. He called Oppenheim's patients with alleged tN, 'neurasthenics'. For these, Isserlin argued, 'it is not the gravity of the psychogenic trauma that brings about the pathological manifestations; instead the cause is a defective capacity of resistance of the personality' (Isserlin 1926 p. 195). The war only made their weak constitution evident. Moreover, from his short experience in lazarets with war neurotics early on in the war, Isserlin thought of them as being primarily characterised by symptoms of exhaustion (*Erschöpfungssymptome*), such as lack of concentration, poor performance, intestinal disturbances, irritability, and low mood. What really distinguished a neurasthenic from other weak constitutions was that the symptoms seemed to display *during work*. Isserlin's lazaret and later welfare clinic did not treat neurasthenics or war-neurotics because the educational therapies – which were primarily directed towards restitution of labour capacity – could not be applied the same way in cases of inferior constitutions. Instead, according to Isserlin, the appropriate 'mental hygiene' (*psychische Hygiene*) for 'the management' of 'neurasthenic constitutions' was limited to hydrotherapy, sedatives, hypnosis, 'avoiding over-heating', 'plenty of sleep', and 'exercise to increase bodily strength' (Isserlin 1926 p. 195). In short: different to his brain injury patients, the war neurotic for Isserlin had, because of their constitutional predisposition, generally a poor prognosis.

Unlike the controversies around accident-neuroses in the 1880s and 90s, by the early twentieth century the established psychiatric discourse was plagued by racial hygiene and eugenic precepts which had evolved from degeneration theory in the late nineteenth century.[164] Psychiatrists were becoming more adamant in their claims that alcohol, venereal disease, prostitution, crime, and mental illness were deteriorating the German *Volk* as well as the gene pool. By the time the war began, both positive and negative methods of eugenics were deliberated upon in order to counteract the expansion of degeneracy. Ideas regarding financial incentives for the reproduction of the healthy, on the one hand; and segregation, marriage prohibition, and sterilisation of the constitutionally inferior, on the other, were already actively present in the minds of some of Oppenheim's adversaries (Caponi 2010; Weindling 1991; Lerner 2003). Consequently, they were seeing medicine as a double edged sword: it could heal injuries and reduce suffering, but it could also, especially if applied to degenerates, obstruct the course of natural selection and endanger the health of future generations. Thus, providing health care for war neurotics, would allow them to procreate, something that would clearly go against the interests of the German *Volk* (Neuner 2011; Rauh and Prüll 2015). It was therefore understandable that Oppenheim's

[164] Like most German psychiatrists at the time (Isserlin included) I use the terms racial hygiene and eugenics interchangeably throughout the thesis.

opponents would advocate for war neurosis to not be recognised as an organic illness that deserved public recognition as a war-related disability.

However, this did not mean that all psychiatrists who opposed tN as organic disease were therapeutic nihilists. There seemed to be basically two types of military psychiatrists opposing Oppenheim at the congresses: the pessimistic, who thought that mental and moral degeneration could not be stopped; and the innovative and therapeutically inclined. Both agreed on the fact that heredity played a major role in mental illness, that constitutional inferiority could be infectious, and that the neuroses were mostly reflections of a hereditary morbid predisposition of the personality. Contrary to the nihilists, the psychotherapeutically inclined believed that diagnosing and studying degeneracy in war neurotics was not the only responsibility that military psychiatrists had. They also were committed to treating them, or to put it more precisely, to treating their symptoms. Their rationale was: even though therapy could never cure the war neurotic because the morbid pre-disposition lay deep in the personality and hence far from the reach of any psychological or physical influencing, symptoms could be always alleviated. This, in turn, could made the war neurotics able to perform some kind of labour and able to achieve a degree of self-sufficiency.[165] In short, by opposing Oppenheim's tN as organic disease, therapeutically inclined psychiatrists were opening the doors for neurotic symptoms to be considered psychologically influenceable (See Linden and Jones 2013 p. 630; Neuner 2011 p. 55).

Thus, psychotherapeutically inclined psychiatrists did not oppose Oppenheim's traumatic neurosis during the congresses for the same reasons that other more reactionary and pessimistic racial hygienists did; or at least not only for those reasons. While the latter ascribed to both severe mental illness (psychoses) and neuroses a negative prognosis, the former – among them Robert Gaupp and Max Nonne – were trying to secure for themselves a market of people with treatable 'mild mental illness' that could be sustained after the war. It did not matter so much that they ultimately believed that some clients – not only accident- and war-neurotics but also hysteric women and depressed men – could have an inscrutable inferior mental or moral constitution. They still marketed their methods as treatment of 'nerves', not of mental illness.[166]

In the last decade of the nineteenth century, alienist psychiatrists in charge of rural asylums had gained a bad reputation after it was revealed to the public the inhumane treatment that the mentally insane were subjected to in the overcrowded asylums (Schmiedebach et al 2004). Psychiatry in Germany was in urgent need of destigmatising. However, neuropsychiatrists, with their microscopes and dissected brains working in the city, did not seem to be too bothered with the situation; they had long forgotten about the treatment of patients (see chapter 1). Psychotherapy, on the contrary, seemed to be the one

[165] See chapter 6 for more on therapy and neurosis.
[166] See Shorter (1997) for similar explanations in different contexts.

alternative to explore for many who wished to improve the reputation of their profession. But Oppenheim's promotion of tN as organic nerve disease would jeopardise that alternative: if war neurosis was a neurological condition, psychotherapy was of no real value. In other words: if Oppenheim was right, he would thereby rob psychotherapists of their clients and obstruct their attempts at improving the reputation of psychiatry. Treatment of war neurosis opened up a window for psychiatrists to gain prestige and escape the therapeutic nihilism of the previous decades.

It was commonly believed among German psychotherapists during the First World War that since the will to recover in war neurotics was weakened, these could be 'forced' into health by strengthening their will power. They generally referred to this approach as 'active treatment' and 'aversion treatment', since it was based on a manipulative conditioning of the personality. Some methods were quite severe.[167] For example, in Munich, one of the most controversial and at the same time intensively promoted was Fritz Kaufmann's (1875-1941) infamous 'electro-suggestive therapy'. Kaufmann electrocuted his neurotic patients with potent alternative currents in intervals that ranged from three to five minutes while at the same time subjecting them to suggestion through military-toned commands. The violent pain sensations associated with the military orders, Kaufmann claimed, would 'force the war-neurotic into health'. The idea behind these and other violent and painful methods was that, in order for the patient to overcome the shocking effects of his traumatic experiences, the therapist needed to make them go through an even bigger shock (Linden and Jones 2013 p. 641).[168]

Not surprisingly, Oppenheim lost the argument at the congresses. Whereas in France and England debates as to whether war neurosis was psychogenic, or organic, or even feigned, continued, in Germany war neurosis was instead established as a manifestation of a weak, inferior constitution for years to come (Linden and Jones 2013 p. 629).[169] The psychiatrists' dismissal of an organic component in war-induced neurosis was not really based on empirical science; it was indeed impossible to prove that a young, previously healthy soldier, had a genetic pre-disposition for suffering psychological trauma when exposed to extremely intense and terrifying events. Instead, the rejection of Oppenheim's thesis was, first and foremost, a professional statement: neurosis was meant to be studied within the framework of degeneration theory, by academic psychiatrists in university clinics. In addition, the rejection of the organicity of tN was also significantly shaped by more concrete professional interests. Many opponents of Oppenheim were, like Isserlin, considering neuropsychiatric lazarets as places of therapeutic experimentation. Even though cure of conditions brought about by inherited constitutional

[167] For detailed descriptions of the psychotherapeutic methods available during the First World War in Germany and elsewhere in Europe, see Roth (1987); Lembach (1998); Lerner (2003); Linden and Jones (2013); Macleod (2018).
[168] Otto Binswanger (1852-1929) and others relied on systematic deprivation, isolation, and punishment (See also Lerner 2003).
[169] War neurosis and traumatic neuroses were almost obsolete terms in German psychiatry during the Second World War, see Berger (1998 p. 112).

inferiority was not possible, sedatives, electricity, persuasion, hypnosis, punishment and many other new and old methods were tried out in large numbers for the first time with the exclusive purpose of alleviating neurotic symptoms.

The Great War was certainly a time when human misery brought about historical opportunities within the medical professions of the mind and brain. In particular, therapeutically-inclined psychiatrists knew that success in a method for the mitigation of neurotic symptoms in a lazaret could lead to the creation of professional niches for themselves – even lead to successful private practice – or could guarantee future funding (Shorter 1997 136ff; Kloocke et al 2005 p. 51). Some German psychiatrists – as I will show with the case of Isserlin's psychotherapy in chapter 6 – would manage to continuously stigmatise the neuroses during the next decade as manifestations of an irreversible constitutional inferiority, *while at the same time* seeing them as symptoms suitable for their therapeutic influencing.[170]

Isserlin's work during the war was not psychotherapeutic, and yet, he was also creating a niche of remedial practice from which to advance his medical career. As mentioned, Isserlin only treated war neurotics briefly in 1915. When he joined Spielmeyer in Munich L, Isserlin treated only brain-injured patients. These, unlike war neurotics, were treated neither with psychotherapy, nor with medication, nor with any form of active treatment. Instead, they attended classes and performed routine exercises, all tailored to their individual 'disability' (Isserlin 1924a; Schwarz 1926). Thus, in a way, Isserlin's patients were closer to orthopaedic patients than to mentally ill or neurotics: the same way an amputee could learn to use a prothesis to recover the function performed by one of his arms, the therapeutic method implemented in Isserlin's lazaret – called 'educational therapy' (*Heilpädagogik*) – was directed at restoring or compensating a lost sensory or motor performance. There was no illness or disease to be cured, but an unlearned function to be compensated or re-learnt. This is why Isserlin argued that the brain injured, unlike neurotics, had otherwise an 'intact mind and will' (Isserlin 1927 p. 3) and hence, there was indeed nothing wrong with their personality and mental constitution.

[170] Kloocke et al (2005 p. 54) talk about the 1916 debates as taking place 'between schools of psychiatry and psychotherapy'. As it should become more evident in the next chapter, the debates could be also legitimately read as a dispute between psychiatrists working on mental hygiene, and proto-neurologists such as Oppenheim.

IV. Brain Injury, not Neurosis – Isserlin's patient histories [171]

I now turn to a few examples of how Isserlin's brain-injured patients suffering from circumscribed or localised brain damage were distinguished by him from war neurotics. It will become evident that psychiatrists operated beyond the functional/organic dichotomy in diagnosing war victims that arrived in their care. In particular, it can be observed that Isserlin practiced his own unique differential diagnosis and prognosis that involved the dichotomies of focal/general damage and being capable/uncapable of learning. Hence, it could be said that some lazarets were not so much neurological hospitals but teaching centres and rehabilitation stations. These facts indicate that historians of German military psychiatry have not properly considered significant elements of the history of the German psychiatric lazarets; among these, a kind of psychological injury that did not fall under the umbrella term 'war neurosis', as well as important educational brain-therapies. These examples are taken from case files that covered several years of observation, diagnosis and experimentation. From the time of the war until the mid 1920s, these soldiers and officers were referred to and regularly examined by Isserlin, as well as treated by his team of 'special teachers' (*Hilfschullehrer/Heilpädagogen*), first in the military lazaret and later on in the Heckscher Clinic.[172] In the period 1916-1926, these patients were either rehabilitated to work, or acquired a disability status that made them eligible for social benefits. Furthermore, most of these brain injured servicemen were inadvertently saved by Isserlin from the possibility of being diagnosed as war neurotics and 'inferiors' and likely sterilised or killed by the Nazis a decade later (see figures 4.5-4.6).

[171] There are eight files of patients in (MS/1935): Boxes 7&8.
[172] The next chapter is dedicated to the construction and operation of the Heckscher Clinic. I discuss at length the history of the concept of *Heilpädagogik* in chapter 6.

Figures 4.5, 4.6: Brain injured patients of Isserlin
Together with some other twenty members of a union of war-disabled veterans, they included the portraits in Isserlin's 50th birthday present. Both their files are preserved in [MS/1935]

On 1 June 1918, patient Georg K arrived at 'München A' unconscious. The reports show that he presented a deep wound of '6cmx4cm in the parietal lobe' and a serious brain herniation (*Hirnverfall*). His life was saved after surgical intervention. However, he showed 'motor restlessness, hemiplegia, a fixated stare to the left', and 'a full speech disturbance'. In the following months, the patient showed many signs of partial recovery: the wound started to heal, the hemiplegia was receding, he had 'a better bladder control', he became lucid and recognised objects put in front of him. The only thing that did not improve was the speech disturbance: 'Cranial defects are better, but the condition is the same'. In October 1918, the patient went through a thorough re-examination, which included language tests and movement commands. It was established that the patient had a 'full motor aphasia', because 'while his speech understanding was conserved…his spontaneous speech is heavily impaired'. Accompanying the aphasia, the patient also showed signs of intellectual and motor dysfunctions, since he 'cannot count money' and 'cannot brush his teeth'. These dysfunctions were not previously noted in the reports of the previous months; they were 'late consequences' of brain injury.

Thus, in November 1918, 'since the wound was healing quickly…the patient was sent to be treated by Prof. Isserlin' in Munich L. Isserlin carried out extensive examinations on Georg K. Some of the headings on his detailed reports were 'praxis', 'writing', 'calculating', 'allegorical pictures', 'music',

'repeating', 'grammar', 'acoustics', 'motoric', 'content comprehension', 'spontaneous speech', and 'reading out loud'. After several days of examinations, Isserlin was able to identify even more precise and circumscribed impairments. For instance, he established that Georg K presented paraphasic speech ('some of his words are jumbled and some sentences are meaningless'). Moreover, the patient presented 'difficulties at greeting', 'could not sing military songs that he nevertheless still recognised', 'said frequently "yes" while shaking his head (…) knowing that he meant "no"', 'did not understand allegories' and yet, 'could recognise his mistakes and work on them'.

As the files show, once patients were deemed by Isserlin as 'capable of learning' (*bildungsfähig*), they would start visiting the *Invalidenunterricht*, or disability class. It can be seen in the case files that most of these 'pupil-patients' (*Heilzöglinge*) exhibited substantial recovery through the years. Aloys Schubeck[173] was one of the teachers that treated Georg K. In his reports, he persistently indicated that Georg K was recovering but also signposted sudden complications from time to time. For example, on an entry of 21 March 1921, he wrote that 'after visiting class, the patient can talk more fluently without assistance' and 'shows good grammar and orthography'. By September that year, the patient 'had attained better comprehension of the meaning of difficult words and could find words easier than before', although 'he still forgets some propositions' and 'shows the same difficulties at reading out loud as before'. Later on, in a report on Georg K. written by Isserlin's collaborator Erich Feuchtwanger in June 1924 (that is, after six years of educational therapy) it was indicated that the patient's wound was fully healed and that 'the patient is generally better'.

There were some symptoms, however, which did not get better. Indeed, back in November 1918, it was noted that the patient had 'intensive breakdowns' and in 1922, Isserlin wrote that Georg K. suffered 'more often from depression than before'. However, in the more than 35-page file of Georg K. – as well as in those of the other brain injured – references to neurotic conditions were rare, sporadic and inconsequential. Moreover, there is not a single trace of psychotherapy or of any other form of treatment apart from *Heilpädagogik* in any of the eight case files preserved in the Isserlin-papers (MS/1935). As Isserlin clearly explained elsewhere (1926 p. 194), psychotherapy was used to treat the neuroses, including war neurosis and neurasthenia, their relatively poor prognoses notwithstanding (Isserlin 1926 p. 194). Since the patients were not war neurotics, there are no indications of psychotherapeutic practice or any kind of active treatment in the otherwise comprehensive reports. Indeed, Isserlin understood psychotherapy as the influencing of an ill mind, as addressing a 'weak constitution', of which the neuroses were regular manifestations (1926. pp. 4-5; 185ff). In contrast –

[173] Schubeck and Göpfert were educational therapists and special needs teachers who later created with Isserlin the Society for Heilpädagogik. They instructed in Munich during the early years of the 1920s future 'educational therapists' (*Heilpädagogen*) for the treatment and formation of a wide range of mental and functional disabilities in children and adults (See chapter 6).

and despite their impairments or disabilities – he believed that the brain-injured were in possession of healthy minds and normal constitutions. The fact that terms such as neurasthenia, hysteria, or psychotherapy are nowhere to be found in these case files – nor in any publication with reference to the work in his lazaret – is indicative of the fact that Isserlin did not treat war neurotics after 1915.

Right at the beginning of the first page of every case file, indications of previous nervous and mental illness in the patients and their families were ruled out. For example, the very first entry in the case file of patient Otto P. – who suffered paralysis and motor aphasia as a consequence of a grenade explosion – stated that he 'does not register illnesses in the family, especially no nervous or mental illnesses' (p. 1). As with the case of Georg K, there are only a couple of references to Otto P's 'sometimes difficult mental behaviour (*psychisches Verhalten*) (p. 2)'. In the more than 30 pages in Otto P.'s file, we can see that the only things reported about such a problematic mental behaviour were that he was 'irritable and fatigued' in 1918, and in 1920 'calm; oriented; a bit irritable when he cannot carry out a task in class' and 'clumsy, confused but cheerful' (pp. 5-6).[174]

Furthermore, most of the time entries making reference to nervous complaints were accompanied by an emphasis on the good mental health or disposition of the patient. A common characteristic of the brain injured was their unscathed spirit to overcome their condition, particularly reflected on their will to work. For example, about patient Richard S., also suffering from motor aphasia, Isserlin wrote in 1919 that 'he falls often into tears' and that nevertheless 'the patient is conscientious, diligent and assiduous'. Later on, in 1920, Isserlin indicated that 'in spite of general nervous complaints, typical of the brain injured, [the patient] shows an extraordinary energy for work' and he was 'generally amicable, docile and laborious'. Indeed, Isserlin constantly emphasised that in his brain injury station, 'it has been proven…that once victims who seemed to have lost their intellectual abilities due to loss of language and related skills recovered to at least some degree, they demonstrated[o] intact intellect and the will to work' (1927, p. 103) and that they 'share a sense of will and high values, like morality, truth and religion', which, 'demonstrate how different these unfortunate individuals are [from neurotics or degenerates]' (Isserlin 1930 p. 2).

Thus, it seems that something is not quite right, when, for instance, Rauh and Prülll (2015 pp. 2-3; 7-8) talk about these lazarets simply as centres 'for the development of diagnosis, aetiology and restitution of war neurotics' and of 'mentally ill soldiers', or when Linden and Jones (2013 p. 627) refer to 'patients with neurological symptoms' as those treated in the special lazarets directed by German psychiatrists. These are unfounded generalisations. As we can see, Isserlin took care of soldiers with a 'psychological' disability, who nonetheless had not been impaired in their will to learn, work, and overcome their

[174] Some files have page numbers other do not.

condition (in contrast to neurotics). In his 1927 text 'Brain-Injury Welfare' (*Hirnverletztenfürsorge*), Isserlin denounced the general ignorance reflected in public opinion with regard to the conditions of his brain injury patients. He maintained that 'consequences of brain damage have been understood either too optimistically or to pessimistically, particularly those consequences that manifest in the domain of the mental (*geistig*)' (1927 p. 102). Too optimistically, because once the wounds were healed, some brain injured had been released and thought of as cured; too pessimistically, because many psychiatrists were taking aphasics for feeble-minded or hemiplegics for hysterics. Similarly, by, conflating all consequences of psychological trauma under the heading of war neurosis, historians of German psychiatry writing about this period have ignored other possibilities for German psychiatry in the First World War and its aftermath.

Ultimately, all this points to the fact that in München L the distinctions between the two sections of Spielmeyer and Isserlin related to a diagnostic and therapeutic differentiation that went beyond the organic-functional dichotomy. Moreover, for all practical purposes, central disturbances in Isserlin's lazaret amounted to unlearned fundamental skills. Isserlin's lazaret, in contrast to the neurological lazarets commonly referred to in the historical literature, was a centre dedicated to the minute psychological investigation of focal disturbances as well as to teaching the patients how to overcome the disability caused by them. Finally, as mentioned, there were brain injuries that caused general disturbances and un-teachable (*bildungsunfähige*) disabilities. However, Isserlin employed the label 'brain injured' (*Hirnverlezte*) throughout the 1920s to refer to those who could 'prove to be capable of learning' (*bildungsfähig*) and who could 'adapt to their new circumstances' (Isserlin 1924a; 1927; 1928). This is how Isserlin begun to construct his professional therapeutic niche in Munich. However, Isserlin needed to adapt to the scientific and political events of post-war Germany.

After the signing of the Treaty of Versailles, Germany was on the verge of collapse. As a reaction to the grave financial, social, and institutional crisis that emerged with the defeat, a socialist revolution broke out in 1918. By the following year, the revolution had provoked the breakdown of the German monarchy and traditional social hierarchies. These events allowed the creation of the Weimar Republic.[175] Among many significant changes, the new democracy instituted a complete transformation of the welfare system. Many of the homeless, the sick, the neglected, and invalids (including war victims) who had previously to rely on voluntarist, philanthropic, and insurance bodies, became an exclusive concern of a new central state (Cohen 2001). However, what started as a promising democratisation of welfare, ended up, soon after, as an all-pervasive technocracy that implemented mechanisms of surveillance and control of the population.

[175] For a comprehensive account of the rise of the Weimar state, see Peukert (1991). For alternative, more recent interpretations of the rise and fall of the Weimar state, see McElligott (2014); Schumann (2012); Ritschl (2013).

With the new republic, most lazarets were dissolved. München L seems to have been an exception. In 1919, it relocated to the 'Reisingerianum', a general policlinic in the Sonnenstrasse, becoming responsible for all brain injured soldiers in Bavaria (Jutz 1981 p.26; Schwarz 1926 p. 66). There, brain-injury continued to consolidate as a particular form of disability with a good prognosis, this time not within military structures, but within the new public welfare system, of which some psychiatrists, including Isserlin, took great professional advantage.

V. The Evolution of Isserlin's Lazaret in the Immediate Aftermath of the War: Rehabilitation as Prophylaxis

Eugenics and the socialisation of German psychiatry

For a proper understanding of how Isserlin managed to carry on with his work on the consequences of focal brain injury after the war, it is crucial to elucidate some of the socio-political circumstances and institutional developments that shaped his professional career after 1919. First of all, it is essential to recognise that even though concerns regarding degeneracy and Darwinian concepts of a culturally pessimistic and discontent German middle-class had been substantially informing psychiatric thinking in Germany already by the 1890s (Eghigian 2015; Weindling 1991), these concerns only began to guide psychiatric praxis in any systematic form in the interwar years. By then, psychiatrists like Kraepelin and Sommer had been finally succeeding in expanding the confines of the psychiatric clinic and their 'incisive gaze' so as to claim expertise on social reality; the aim of the new clinical psychiatry of prognosis, they thought, was ultimately social prophylaxis (Engstrom 1991; 2007; 2015; Engstrom et al 2016). These aspirations arose from the failure of some of these clinicians in finding cures and effective treatments for mental ailments. Indeed, when Kraepelin and Sommer were refining technologies of mass observation for scientific diagnosis and prognosis, their efforts had little to do with the health of individual sufferers. The motive behind clinical efforts of many psychiatrists at the time was rather an existential preoccupation with the future of the German middle-class – a concern exacerbated by the war – and the threat of degenerative social illnesses. Therefore, for the first time in modern German history, it was the infectious and hereditary character of mental illness and nervous disorders that were considered the official subject matter of psychiatry. In addition (Social) psychiatry now concerned itself with poverty, criminality, and all the other 'modern evils' that came along with

industrialisation, consumerism, urbanisation, and a mechanistic world view in the second half of the nineteenth century; they all fell – German psychiatrists[176] thought – under their expertise.

As a consequence of a self-promoted expertise that capitalised on the fears of an emergent but fragile educated middle-class, by the first decade of the twentieth century psychiatrists in Germany had begun to be taken more seriously outside the walls of mental hospitals and university laboratories. They already testified in court, were employed as expert witnesses by insurance companies and hired in corporations as consultants to increase productivity and labour economy. In the aftermath of the First World War, however, a selected number of psychiatrists also acquired an unprecedented amount of political and corporate power (Engstrom 1991; Engstrom et al 2016). This became possible because psychiatrists had succeeded during the war in reinterpreting bourgeois concerns – ignored by the ruling elites for decades – in technocratic terms. Among these concerns were not only 'epidemics' of nervous illnesses, crime and poverty, but also alcohol consumption, psychopathy, prostitution, education of special children, homelessness and idleness, syphilis, prison administration, youth crime, natality and demography, Jews and bolshevism, homosexuality and other 'perversions', workers' exhaustion and industrial efficiency, family and reproductive economy, among other things (Engstrom 1991; 2007; Engstrom et al 2016).[177] All these became matters of public concern and the object of medical science with the end of the war.

Nevertheless, the upgrading of professional status that some psychiatrists enjoyed with the end of the war was not the outcome of medical research. Rather, psychiatrists upgraded their status through a systematic infiltration into the new public health and education systems and by lobbying politicians and authorities throughout the 1920s (Engstrom 1991; Engstrom et al 2016, Weindling 1991). The new welfare system of the Weimar Republic facilitated the structures for such infiltration by expediting a huge, quick, and efficient assortment of detailed personal data from the German population, which, in turn, gave way to an unprecedented 'medical' implementation of mechanisms of surveillance and social control (Cohen 2001; Kloocke et al 2005; Weindling 1997). The welfare system of the Weimar Republic did not implement 'negative' eugenics (such as forced sterilisation) in any official form. Instead, it worked mostly along the lines of 'positive' eugenics, with an emphasis in rehabilitation for work and preventive education.[178] Still, registration, screening for diseases, evaluation of performance of the

[176] Although Munich would become the hub for German eugenics, social psychiatry gained momentum in the early twentieth century throughout the German lands, for example, in Breslau, Berlin, Heidelberg, Halle, Giessen, Hamburg, Leipzig, Tübingen, Jena, Bonn, Freiburg and Frankfurt.

[177] This was part of a broader and complex process referred to by historians as the *Verwissenschaftlichung des Sozialen*, or the taking over of social problems by science that has been unfolding since the nineteenth century (See Weindling 1991;1997, Raphael 1996, Kloocke et al 2005).

[178] Only a minority of medics officially welcomed fostering nature selection by exterminating cripples and weaklings during the first half of the 1920s.

population, and prevention of poverty by 'encouraging' families not to procreate were central tools of the system. For our purposes, it is essential to note that the basis of the system of public health and family welfare consisted of public clinics (*Fürsorgestellen/Versorgungsstellen*). Under the veil of public expert assistance, these clinics proliferated by the mid-1920s, becoming the main channels for state surveillance for hygienic and prophylactic purposes. Furthermore, eugenics, or the 'science' of 'being born well', became part of the curricula for medical students, pedagogues, and social workers (Weindling 1997 pp. 143ff). Whatever the political inclination, it had become undeniable that health and social conditions were inextricably related. With the end of the war, a generation of professionals were not only convinced that social upheavals had psychological and hereditarian causes, but they had also convinced official authorities, corporations, and the anxious educated middle class that they could produce the science and the politic to overcome the threats of degeneration (Weindling 1991; 1997). It could be argued that by the end of the war: the 'flip-side of the theory of degeneration' was 'social psychiatry writ as public psycho-hygiene' (Engstrom 2003 p. 176).

Moreover, as already discussed in previous sections, these psychiatrists were largely therapeutic pessimists with regard to individual cases of mental illness. Some of them considered psychological influencing useful to alleviate symptoms of neurosis and hysteria, but generally speaking, psychiatry was conceived to be considerably limited with regard to their effect on mental patients. On the other hand, however, it could be said they were optimists as to the new practical importance of their profession: they had effectively left behind frustrated attempts to relieve the sufferings of individual psychotic patients and moved to an enthusiasm for social prophylaxis and socio-biological education; therapy was taken now to be directly administered to the *Volkskörper* (Kraepelin 1916 pp. 4-6). The patients suffering from mental illness, the criminals, the syphilitic, the alcoholics and all the other modern degenerates became for social psychiatrists like Kraepelin mere epiphenomena of the real malady, which was to be found only in the large social body. In short: to be a psychiatric patient in Germany in the aftermath of the war ultimately meant to be part of psychiatrists' expanding prophylactic work.

In Munich, the German Research Institute of Psychiatry (DFP) created by Kraepelin in 1917 played a crucial role in the systematic infiltration by psychiatrists in public hygiene policy. Even though the institution was mostly privately funded, and its bio-political agenda was developed in secrecy by the psychiatric elite, it managed to exploit the resources of public welfare institutions by claiming sociobiological expertise (Engstrom 1991; Engstrom et al 2016). After the war Isserlin would become one of the intermediaries between welfare institutions and the DFP in Munich. As we shall see, this was how he succeeded at maintaining his psychiatric military lazaret for brain injuries after the war, in contrast to most other lazarets of the kind in the Germany, which shut between 1919-1920 for lack of institutional support.

Kraepelin and the German Research Institute of Psychiatry

Before the war, German psychiatrists had already infiltrated the judiciary and penal systems, convincing authorities that criminality, as much as mental illness, could be understood deterministically; that the behaviour of people who tended to act anti-socially was actually subject to natural laws as much as any other natural phenomenon studied by empirical science (Kraepelin 1916; Decker 2004 pp. 257-258). Kraepelin's social engagement began in Munich around 1903 with projects to prevent, intern and when possible rehabilitate offenders. At the time, Kraepelin and other socially-oriented psychiatrists had realised that, in terms of therapy, their work had not improved existing conditions in asylums and other institutions. Thus, prevention and neutralisation (internment) were seen by these social psychiatrists as promising alternative fields of practice (Roelcke 1999; Weber 2003).

By the end of the first decade of the twentieth century, Kraepelin became particularly preoccupied with the problems of alcohol and syphilis. He saw that these social diseases were not being addressed properly by medical officials and state authorities. The Munich group and their allies began regular discussions to coordinate expert solutions to these problems through a new research institution (Kraepelin 1916 pp. 1-3). Robert Sommer first proposed an institute in 1910 as a department fulfilling such a role within the Imperial Health Agency. The following year, Alois Alzheimer emphasised that the focus of the institute should be racial hygiene. Others suggested that within the institution the psychiatric elite should concentrate on the prophylaxis of mental illness (Engstrom 2016 p. 39). Kraepelin's plans for the institute incorporated all these suggestions (Kraepelin 1916). When the war broke out, the institution began to materialise.

Kraepelin saw the First World War as 'a battle for existence' (*Kampf um das Dasein*) not only against the Allies, but against the internal enemy of degeneration (Engstrom 1991 p. 127). By 1916, he understood that the internal enemy could only be beaten through an authoritarian technocracy. For the coordination and implementation of such technocracy, Kraepelin considered of the utmost importance that his research institute operate through lobbying and corporate structures. As Engstrom explains, Kraepelin's 'second right-wing' militancy became essential for his post-war social psychiatry. This political stance combined a distrust of democratic principles, and aversion to mass politics and European peace attempts, with the conviction that a technocratic government would meet the challenges

of modernity, especially regarding the question of Germany's '*völkisch* existence' (Decker 2004 p. 272; Engstrom 2016 p. 42).[179]

The German Research Institute of Psychiatry was finally created by Emil Kraepelin and the Munich psychiatric elite in 1917, becoming the world's first institution exclusively devoted to interdisciplinary psychiatric research (Jablensky 2007 p. 383). It had as its central aim the 'empirical genetic prognosis of nervous disorders' (Engstrom et al 2016 pp. 139ff). Funded privately by, among others, the magnate arms producer Gustav Krupp, the institute coordinated scientific research guided by hygienic concerns through six departments spread throughout the city of Munich (DFP 1921). There were two for histopathology (Nissl and Spielmeyer),[180] and one each for histotopography (Korbinian Brodmann), serology (Felix Plaut), genealogy and demography (Ernst Rüdin) and experimental psychology (Kraepelin, Johannes Lange, and Isserlin) (Hippius and Müller 2008). All these departments were accommodated throughout hospitals and in the university. All these neuropathologists and clinical psychiatrists were recruited by Kraepelin throughout the period 1903-1917, with others joining later, and also worked for the university psychiatric clinic (DFP 1921).[181] Methodological diversity was considered by Kraepelin to be a strength in clinical psychiatry.

The DFP became the model for twentieth-century research in psychiatry in Germany and beyond. Among the achievements and innovations of Kraepelin and his team by the mid-1920s were: the staining and microphotography of neurons and glia; the production of connecting microphotographic maps of the cortex; the development of a technique for determining the specific weight of certain brain structures; the elucidation of the principles of pedigree analysis in psychiatric genetics; and the use of cinematography as a documentation tool in psychiatry. Moreover, Kraepelin and Isserlin kept carrying out work in experimental psychology and pharmacology (see chapter 2). Finally, although not directly

[179] It is possible to argue, as Shepherd (1995) does, that Kraepelin's agenda was displaying overtones of proto-fascism at this point. According to Paul Hoff (2008 p. 12), however, even though 'Kraepelin accepted degeneration theory into debate on aetiology and pathogenesis of mental illness…it is not appropriate to draw a direct line from early versions of degeneration theory and the crimes of psychiatry during the rule of National Socialism'. Furthermore, eugenic ideals of the kind Kraepelin held were pretty much present in most of the countries at the time, where things never got to the point it did in Germany after 1933 (See also Engstrom 2007).

[180] Alzheimer was given the chair of psychiatry in 1912 in Breslau after Bonhoeffer's move to Berlin. As replacement for histopathological research, Alzheimer recommended Walther Spielmeyer, ex-assistant of Hoche in Freiburg and future Isserlin's lazaret partner (see next chapter). He would later replace Kraepelin after his death as head of the DFP, by then integrated to the Kaiser Wilhelm Society.

[181] For example, the psychiatrist Georg Stertz (1878-1959) joined Alzheimer's department in 1919. He had worked previously as Nonne's assistant in Hamburg and as Bonhoeffer's in Breslau and ended up as senior consultant of the DFP. The psychiatrist Eugen Kahn (1887-1973), ex-student of Kraepelin, joined Rüdin's department in 1921 to work in the genetics of schizoid types. In 1924 Kahn became provisional director of the DFP until 1926.

involved in population studies, Kraepelin and Rüdin conducted extensive community surveys (DFP 1921; 1925; Jablensky 2007; Roelcke 2018).

However, by the late 1920s, the DFP had also become Germany's main centre for racial hygiene, as psychiatry and eugenics had become parts of the same biopolitical enterprise (DFP 1927 pp. 352ff; Engstrom et al 2016; Eghigian 2015). The DFP worked officially outside state institutions, and yet the board of trustees represented both private and public interests. It was composed of philanthropists, the Bavarian minister of education and regional and local authorities, as well as lobbyists working for the German and Bavarian psychiatric associations and the medical faculty of the University of Munich. Thus, the DFP 'worked for the people but without the people' (Engstrom et al 2016 pp. 39-42). Indeed, as Engstrom et al (2016 pp. 38ff) have shown, the institution functioned in the 1920s through 'efforts at psychiatric governance' in the form of a '*völkish* corporatism': the DFP became a sophisticated centre for the concerted mobilisation and coordination of divergent interests of large social groups (such as university faculties, weapon manufacturers and the industrial sector, municipalities, state agencies, among others) by psychiatrists and their socio-political agenda.

The purpose behind these efforts was to save the German *Volkskörper* from the moral, cultural and biological decline into which it had fallen.[182] This, in turn, would secure the discipline with prestige in the eyes of the medical community, scientists, and the middle class. Kraepelin and the German educated elite (*Bildungsbürgertum*) became frustrated with the fall of the monarchy and revolutions of 1918/1919, as well as with the politics of mass society of the progressivist Weimar Republic. Kraepelin and the Munich psychiatric elite strongly believed that the rule of the best, not democracy, was the way out of the financial, social and cultural crisis in which the Germans had fallen. The revolution was seen by Kraepelin in fact as analogous to hysteria: the desperate hungry masses were holding back an already underdeveloped German culture and science, while the erratic actions of the leaders behind the politics of the Weimar Republic seemed to him to be no different to hysteric fits (Decker 2004 p. 272). At the second public meeting of the DFP on 24 May 1918, Kraepelin made sure his associates understood that the guiding question for public health was 'whether in the long run the destructive or invigorating forces of existence would gain the upper hand' in the German population. However, he also reminded them that in order to secure the latter, the DFP had to operate 'outside the limelight' and that 'the determined will of a few people sufficed', thus reaffirming the elitist and authoritarian nature of the institute and its bio-political agenda (quoted in Engstrom et al 2016 p. 42).

[182] For details on the political significance of the neo-romantic worldview of the Volk as *Kulturstaat* in early twentieth century Germany, see Mosse (1964).

Isserlin, like the rest of Kraepelin's assistants and DFP collaborators, was part of the psychiatric elite that facilitated the introduction of eugenic concerns based on degeneration theory into public policy. He carried on working in his lazaret after the war and the political and social reforms of 1919 and in 1922 transformed what still was a military lazaret into a public welfare rehabilitation clinic for brain injuries. Nevertheless, his collaboration with Kraepelin and other members of the Munich group indicates that the former lazaret had directly served the purposes of the DFP uninterruptedly throughout the period 1917-1922 (DFP 1921 p. 350).[183] In fact, Isserlin's welfare clinic became a cog in the racial hygiene machinery developing in Munich in the 1920s. This did not mean, however, that Isserlin was a dyed-in-the-wool eugenicist, unlike many of his Munich colleagues. Isserlin's welfare clinic, in common with others springing up in Germany during the 1920s (Weindling 1997), served both eugenic-prophylactic purposes as much as therapeutic ones. As the patient files can also testify. Isserlin managed to, once again, desegregate two at first glance mutually exclusive plans: on the one hand, he at least tolerated – if not actively supported – surveillance of the population (fit and unfit) for preventive, educative and hygienic measures; on the other, however, he ardently promoted his therapeutic-pedagogical methods for the restitution of brain-injured soldiers, who were still seen by most – despite Isserlin's efforts – as war neurotics and degenerates.

Brain-injury after the war: from lazaret to welfare clinic

From the start, as Paul Weindling (1997 pp. 134-135) has shown, the new welfare system presented insuperable problems: it was 'a ramshackle edifice' built 'on insecure financial foundations', and its benefits were provided unequally and selectively.[184] However, while the new welfare system did little in terms of alleviating post-war social upheavals and financial crisis, it did contribute greatly to the development of medical professions within public health institutions. With its extension to many aspects of private life, the new system brought about the rapid professionalisation and medicalisation of its workers. Indeed, in a period of just two and a half years, many bureaucrats (*Verwaltungsbeamte*) were replaced by scientific experts (*Fachbeamte*) in social policy, social biology, and eugenics.[185] For

[183] More on this collaboration in the following chapter.

[184] Weindling (1991;1997) has indeed demonstrated that the image of the Weimar Republic as having ever practiced democratic socialism is seriously misrepresentative. The same goes for the common belief about the Weimar welfare system not working only due to the provision of lavish benefits and the financial crisis of 1923.

[185] There was indeed a coalition of parties behind the programs of socialisation of education welfare, youth welfare, family welfare, public health and disability welfare, unemployment welfare and others. In the aftermath of the First World War, to leave the welfare sector to scientific expertise was a unanimous, non-partisan issue (Weindling 1991; 1997).

our purposes, it is important to elucidate the ways in which prophylactic precepts materialised in the welfare for war victims and veterans.

Once the war came to an end, more than three million lives had been severely affected in Germany. These included 1.5 million war disabled (*Kriegsbeschädigte*) and two million people left behind by the war (*Kriegshinterbliebene*), especially children and women (Neuner 2011 p. 68). Not surprisingly, eugenic-informed experts like Kraepelin and Isserlin saw the problem as one of the many post-war *völkisch* existential threats. Experts believed that the greater the number of people who did not contribute to the economy, the greater was the threat of losing the German fight against degeneration.[186] In fact, according to an edict of 1920, the aim of welfare for war victims and war disabled in Munich was

> …not just about compensating a momentary existing emergency, but is primarily about giving back to war victims their working life …Here it should not be forgotten the social and ethical significance of work. Not even the best care would replace for the war victims the blessing of labour. The war victims are, moreover, compelled by economic, social, and moral principles to aptly use their remaining capacities for labour.[187]

These kind of utilitarian explanations of welfare measures were at the bottom of most post-war reforms. The aim of welfare for the war disabled was not to ensure life-long benefits and increase the financial burdens on the state, but rather, to promote development of life skills and teach the ex-servicemen and their families to become self-sufficient and to re-insert themselves in the economy of national reconstruction (Wolters 2015 p. 152). Military lazarets were already equipped with workshops designed to revive interest in productive occupation. For instance, ex-servicemen with amputated limbs were taught to operate machinery. As the orthopaedist Konrad Biesalski (1868-1930), founder of the German Organization for the Care of Cripples stated during the war, '[w]hen we muster the iron will to overcome it [idleness], the era of cripples will finally be behind us'. In the factory the soldier who had been declared healed could heal still further and prove that 'he had shaken off his condition of idleness' (quoted in Cohen 2001 p. 156). For therapeutically-inclined psychiatrists, the aim was also to bring those psychologically and functionally damaged back to work (Kloocke et al 2005 p. 47). In Munich,

[186] Accordingly – and differently to both the British and the French – Germans did not develop any significant symbolic recognition for war victims, nor officials retained their ranks. Apparently, it was thought that such gestures would indulge them and slow down their integration to labour (Hoheisel 2017). Furthermore, gestures of recognition such as commemorative activities and benefits had been some of the channels through which philanthropic organisations and charities had collected funds during the war. When care for the war-disabled changed from voluntarism to centralised public welfare, such recognitions were not seen as productive. In fact, philanthropy was considered by state officials to be a threat to the authority of expertise (Cohen 2001 pp. 70-75).

[187] *Verhandlungen des Reichstages* (1919/20) Bd. 341, Nr. 2422, p. 2608, quoted in Geyer, M (1983).

as Schwarz indicated (1926 p. 67), public health experts understood work not just as a means of subsistence, but they thought it could give to psychologically-disabled victims 'a sense of purpose', which in turn could 'sustain them in a healthy relation with the body-politic'. In fact, as Cohen (2001 p. 155) puts it, it was thought to be 'the way to rebuild men'. It was through the welfare technocracy of the Weimar state that the values of labour and self-sufficiency were interpreted by psychiatrists as central weapons for the battle against degeneration.

In 1920, Isserlin's lazaret was still operating within military structures, by then with the name *Versorgungskrankenhaus für hirnverlezte Kriegsbeschädigte* (Hospital for the Care of the Brain-injured by War; Isserlin CV p. 3; Jutz 1981 p. 26). Due to the fact that other neurological lazarets shut, Isserlin's became responsible for the brain injured throughout Southern Germany. Later, in 1922, Isserlin managed to insert the brain injury station in the new welfare system and co-created the *Verein zur Fürsorge für Schwerstkriegsbeschädigte* ('Association for the Care of the Severely Disabled by War'). According to its statutes, it was meant to co-operate with the state-run main centre for welfare in Bavaria (*Bayerische Hauptfürsorgestelle*) in rehabilitating war victims for labour. Isserlin's specific rehabilitation interests were sometimes emphasised by referring to the association informally as *Hirnverletzenfürsorge* (brain-injury welfare), however, the welfare institution was in theory open to any war victim who could not support themselves (See Isserlin 1927, 1928, 1930; Jutz 1981 p. 31). Like any other welfare station, the central aim of Isserlin's was to increase self-sufficiency. Isserlin's social psychiatric task became, thus, the re-insertion of as many brain-injured as possible into the workforce and to reduce to a minimum the remaining financial burden that other in-patients and out-patients war disabled imposed on the state.

Isserlin's job with brain injured war victims did not necessarily become easier with these institutional developments, since the brain-injured were not viewed as sympathetically as others types of war disabled. As Schwarz explained, for example,

> [w]hereas the difficult situation of the blind is overall appreciated and awakens interest in all types of people, the brain-injured are misjudged and in many cases are put in the same sack with mentally-ill people and neurotics, or even treated as malingerers. For this reason, they still do not receive proper specialised medical care, which would bring them relief and improve their condition (Schwarz ca 1920).

Indeed, the signs of, for example, motor aphasia (forms of inarticulate speech), could be very subtle or not as immediately obvious as those of other war victims, such as the blind and the amputee. But perhaps the biggest obstacle facing Isserlin's war patients was the stigma of war neurosis. Schwarz and Isserlin

collaborated in the early years of the Weimar period intensively towards a mitigation of the stigma of psychological injury with regard to the brain injured. However, in accordance with their 'expert' judgement, war neuroses and hysterical-type disturbances were ultimately seen to be either caused by hereditarian weak pre-dispositions or simulated by lazy ex-servicemen. In either case, it was believed that they did not deserve any form of public assistance. Isserlin thus had a difficult job: like his colleagues, he perpetuated the stigma of war neurotics as degenerates; contrary to them, however, he claimed that his patients were not war-neurotics; rather, they had a circumscribed disability. Moreover, they were not mentally ill, nor feeble-minded. Finally, they could be in principle rehabilitated to re-join the workforce. Had Isserlin not integrated his patients within a welfare institution the way he did after the war, it is likely they would have been either sent to psychiatric asylums or not recognised as disabled at all (Schwarz 1926). Instead, it could be said that they were – to various degrees of success – 're-educated into health' by Isserlin and his group of special needs teachers.[188]Additionally, the integration of the brain-injury station into the welfare system came with a relocation. The station left the policlinic Reisingerianum at the Sonnenstrasse and relocated to a hospital in Schwabing, a suburb in Munich (Schwarz 1926 p. 66). This time, Isserlin had a team composed of several medical and non-medical professionals.[189]

Isserlin's welfare clinic achieved quite a high rate of therapeutic success: from the end of the war until April 1923, Isserlin had treated 1629 severely brain-injured soldiers; from them, 85% had been successfully integrated into the labour force. Moreover, we know that by the following year only 130 brain-injured were not able to do any type of work. Furthermore, from 473 brain injured who had an occupation based on manual labour before the war, only 155 managed to keep working with their hands and therefore many ended up as public employers thanks to the welfare association. There are indications that even the brain-injured began to be seen as genuinely disabled by mid-decade (Schwarz 1926 p. 67-68). However, as was the case with most welfare clinics, rehabilitation was not the only goal of Isserlin's welfare clinic. This worked also as a 'policlinic' (*Poliklinik*) and 'ambulatory clinic' (*Ambulanz*). Many war victims – not only the brain injured – passed, for one reason or another, through routine screenings and medical examinations recorded in great detail, and that data was probably used by all departments of the DFP. Moreover, distinct from mental asylums and other closed institutions, Isserlin's clinic could thus efficiently implement mechanisms of surveillance in respect of a considerable portion of the population, both fit and unfit. As some of the patient histories show, in

[188] Whereas Kaufmann and others 'forced' the neurotics 'into health'. More on Isserlin's pedagogical take on rehabilitation and psychotherapy in the next two chapters.
[189] Thanks to Renate Jutz (1981 pp. 36-40), we can know that among them were the Jewish psychiatrist and psychotherapist Wladimir Eliasberg (1887-1967), the psychoanalytically inclined neurologist Erich Feuchtwanger (1889-1935) the deaf-mute teachers Hans Göpfert (?) and Aloys Schubeck (?), the psychiatrists W. Gail (?) and S. May (?), and the children psycholinguist Maria Gräfin von Kuenburg (1883-1973). This will become part of the staff of the Heckscher Clinic three years later.

Isserlin's welfare clinic the unfit would then be further classified into 'general disturbance' or 'circumscribed brain damage', and afterwards into 'capable of learning' and 'not capable of learning'. If they had either general or circumscribed brain damage, they were not considered to possess any abnormal predisposition and had potential for re-learning the function they had lost; they were admitted into the clinic as inpatients and later monitored as outpatients. In cases of severe mental illness or mental-retardation, they were segregated from the rest and referred to a hospital, mental asylum, or care home.

During the early 1920s, Isserlin would continue to work with the agenda of the psychiatric establishment in Munich: support and rehabilitation of war victims were intermingled with the identification, surveillance, and further hygienic management of others who were thought to be degenerates and 'constitutionally inferior'. Isserlin managed to successfully implement a centre for the rehabilitation of brain injuries within structures that served the hygienic and prophylactic purposes of the psychiatric establishment of Munich.

VI. Conclusions

On 27 October 2014, the newspaper *Süddeutsche Zeitung* – one of the largest daily newspapers in Germany – published a short online article that made reference to the general and special lazarets that existed in Munich during the First World War, including the 'neurological' lazaret.[190] When it came to address this special hospital, the author(s) of the piece explained that

> [t]he reserve-lazaret München L in the Ridlerschule acquired a special function – there, psychiatry was brought in, and for the first time it occupied itself with consequences of war: many soldiers suffered from what is now known as PTSD, which became characterised by nightmares, insomnia, depression and uncontrollable trembling of hands

In the light of the evidence presented in this chapter, we can observe that such a description is both simplistic and inaccurate. There is no doubt that war neurosis was a major concern for many military psychiatrists, and they considered war neurotics and other nervous types as possessing an inferior mental constitution. Accordingly, these patients were not really considered to be victims of illness and

[190] Südwestdeutsche Zeitung (2014)

injury; nor were they considered to be curable: rather, they could only be dealt with, their symptoms managed, and their traits prevented from passing on to future generations. Historians have however neglected to account for the fact that not all patients in the neurological lazarets were war neurotics. Isserlin's patients in München L, and, after the war, patients of his brain-injury welfare clinic, although generally referred to at the time as suffering from 'nervous illness' (*Nervenkrankheit*), had in fact little in common with war neurotics or other nervous patients.

Moreover, it could be argued that for the adversaries of Oppenheim in 1916, the neuroses were manifestations of an *ill mind*. Neurotic symptoms were taken to be nothing but mere epiphenomena of a weak constitution, of a lack of volitional and emotional strength which lay dormant in the personality and could not be traced back to a particular organic disturbance; the neuroses were only indications and signs of innate and inherited degeneracy of character.[191] As a member of the psychiatric elite, Isserlin was complicit in perpetuating this viewpoint throughout the 1920s. At the same time, however, he showed that the psychological consequences of an *injured brain*, were something very different to neurotic symptoms. They did not show causal correlations with weakness of character, nor were they brought about as manifestation of an underlying pre-disposition to nervousness. The brain-injured were in fact in full possession of healthy mental constitutions, there was nothing wrong with their will to work and their personality; they deserved public sympathy as well as educational therapy provided by the state. Isserlin achieved this by demonstrating that considerable improvement of 'psychological' consequences of brain-injury was possible through specialised, individually tailored pedagogical treatment provided by welfare institutions, and that the brain-injured had the potential to be reintegrated into the work-force.

It is crucial to appreciate that at the time circumstances favoured Isserlin's work. Namely, conditions for Isserlin's development of the diagnostic category of brain-injury were optimised by the instability of nosological categories such as 'nervous disorder', '(mild) mental illness', 'nervousness' and 'psychological injury'. It was as possible to justify the treatment of a soldier with epileptic fits as mentally ill as it was to argue that a depressed soldier was suffering from brain trauma. German psychiatry had entered the First World War assuming that mental disturbances could be ultimately traced to the body, but completely insecure as to how to actually do it. On the other hand, Isserlin had the ability to combine degeneration theory, therapeutic innovation, and welfare resources so as to implement and legitimise a productive distinction between disturbances of the brain and disturbances of the mind. Isserlin's work at the time – largely ignored in historical accounts of military and Weimar psychiatry – made him gain considerable prestige during the early 1920s. As I show in the following

[191] Even if we acknowledge the fact that an inferior mental constitution was ultimately considered to be inherited nerve/brain disease.

chapter, this allowed him to create in 1925, out of his welfare clinic, a sui generis therapeutic and research institution, which, despite substantial changes, still operates today.

5. Isserlin and the Creation of the Heckscher Clinic (1922-1923)

Negotiating mind, brain and nerves in Munich during the 1920s

I. Introduction: A Clinic for 'Nerves'?

On July 10th 1925, in the Munich suburb of Schwabing, Isserlin opened the specialised sanatorium 'Heckscher Nervenheil- und Forschungsanstalt' (which literally translates as 'sanatorium for the treatment and research of nerves'; henceforth the 'Heckscher Clinic'). The name was given in honour of its financer, the New Yorker philanthropist August Heckscher. After almost a century from its inception, the institution operates today in the district of Obergiesing - some three miles from the city centre – as a modern psychiatric clinic that provides care and psychotherapy to children and adolescents (see figure 5.1)[192]. Although there is one detailed account of the growth and development of this institution from the 1940s onward (Jutz 1989), very little is known about its creation almost a century ago. In the early days, the clinic did not treat children. Rather, it was an institution that evolved from Isserlin's welfare rehabilitation centre for brain injuries, and – as I will argue here – though disguised as a clinic for 'nerves', it functioned as a cog in the machinery of the public mental hygiene agenda of the psychiatric establishment in Munich.

Figure 5.1: The Heckscher Klinikum's headquarters today
[Taken from Heckscher Klinikum's website]

[192] Now under the name 'Heckscher Klinikum'.

Throughout the 1920s, under the direction of Isserlin, the Heckscher Clinic developed into a sui generis institution in many ways. Firstly, it diagnosed and treated a relatively new kind of patient, 'the war brain injured' (*Kriegshirnverletzte*). In contrast with other institutions and practitioners at the time, Isserlin and his staff did not regard these patients as mentally ill or feeble-minded, nor hopelessly disabled. In fact, in its beginning the clinic did not accept – at least not officially – patients who were considered to fall in any of these categories. Secondly, the clinic was operated by a team composed of psychiatrists, neurologists, psychotherapists, special needs educators, social workers, nurses, and even a group of nuns. This type of multi-disciplinary approach was unusual at that time in Germany. Thirdly, the clinic carried on being a welfare clinic (*Fürsorgestelle*), with its prophylactic functions and at the service of the German Research Institute of Psychiatry, still directed by Kraepelin. Furthermore, the clinic was funded by two organisations, one private and the other public. Hence, it articulated different interests, including those of racial hygienists, and excluding those of the so called pure neurologists. Finally, by the end of the 1920s, the clinic successfully executed a transfer of clinical and therapeutic knowledge, when a department for children was incorporated. The knowledge acquired treating brain injured soldiers was applied to children with developmental disorders.

This chapter constitutes an attempt to explain how a psychiatrist like Isserlin could articulate – in this case with the new clinic – different scientific interests and follow divergent lines of thinking in an environment which, though obsessed with degeneration theory, pessimism and eugenics, was flexible enough to allow divergent approaches, including interdisciplinary research and therapeutics. The story of the origins of the Heckscher Clinic is built upon the developments and events discussed in the previous chapter: concerns about war neurosis as moral and biological degeneration; the development of a clinical psychiatry focused on observation, description, classification, and prognosis, as well as on prophylaxis and eugenics; the possibilities offered by the new welfare system and welfare clinics, as well as the rehabilitation of brain injured soldiers. For a cohesive account of the story of the Heckscher Clinic, however, it is necessary to refer in this chapter also to events that surrounded the debates over clinical neurology in Germany during the early twentieth century. In the first decades of the twentieth century, the central and peripheral nervous systems were, institutionally speaking, up for grabs. There were no chairs in neurology at universities and no clinics specialised in the treatment of nervous (as in neurological, not psychiatric) disorders. To be a neurologist in early twentieth century Germany meant to be an internist or a neuropsychiatrist with experience and particular interest in the treatment of nerves (*Nervenheilkunde*). In other words, neurology was not a medical specialty but an auxiliary set of techniques and concepts; at most, it had presence in hospital wards and military lazarets.

For the purposes of this chapter, it is crucial to turn our attention to Oppenheim's ex-assistant and Isserlin's collaborator, Eugen von Malaisé, who became his standard-bearer in Munich before the

outbreak of the First World War. In 1922, soon after the death of his mentor, von Malaisé envisaged the first specialised neurology clinic in Munich and got very close to its realisation.

The disciplinary and professional conflict over clinical neurology divided medical professionals into three groups: German academic psychiatrists, internists (*Internisten*), and 'pure' neurologists (*Nurneurologen*). Each group saw themselves as being the sole legitimate medical practitioners and the institutional bearers when it came to the study and treatment of the nervous system, ganglia, and spinal cord. Thus, when Oppenheim fought for the recognition of an organic element in tN in the congresses of 1916, he was arguing, firstly, that neurological disorders should not be studied by psychiatrists. It was his opinion that psychiatrists should limit themselves to the clinical study of the psychoses and to practice hypnosis and talking cures. Neurological disorders were seen by Oppenheim and his sympathisers as completely distinct and deserving of their own medical specialty, their own university chairs and their own therapeutic and research institutions. Secondly, Oppenheim was also fighting in the congresses for the uncoupling of his clinical practice from that of doctors in internal medicine, a title that he officially held. Oppenheim and other neurologists thought that for a proper study of the nervous system and its pathologies, it was of key importance that the doctors specialising in this area did not waste their time with the clinical assessment of internal organs and multisystem internal illnesses. The nervous system, they claimed, was a clinical world in itself, different from the rest of the body as well as from the psyche. In short, the pure-neurologists were seeking professional autonomy from both academic (neuro)psychiatrists as well as from doctors in internal medicine.

Like Oppenheim, von Malaisé ultimately failed in his institutional ambitions. In a sudden and unexpected turn of events, it would be Isserlin, a psychiatrist, who put together and directed a new clinic for 'nervous patients' (*Nervenkranke*) in Munich. Unfortunately for von Malaisé, and luckily for Isserlin, 'nervous patient' could mean pretty much anything in Germany in the inter-war years; it was a matter of seizing a good opportunity amidst professional uncertainty as to the meaning of the terms 'nerves' and 'clinic for the treatment of nerves'. As a consequence, and because of Isserlin, neurology did not achieve institutional autonomy in Munich.[193] Institutionally, Isserlin managed to find a medical niche that allowed him to operate within the different debates and professional disputes of his time and ultimately create his own sui generis clinic in 1925.

What follows is a new history of how a welfare rehab centre, a (children's) psychiatric clinic, and a centre for brain research came to being with a singular mission and make-up, and how, under the management and agenda of Isserlin, it evolved and adapted to its convoluted scientific, social, and

[193] I rely exclusively on a text of the Munich based neurologist Hendrik Voss (2015) for information on Von Malaisé, who, like Isserlin, has been forgotten by historians of German neuropsychiatry.

political environments in the 1920s. At the same time, the story adds important details to the history of the triangular dispute over clinical neurology in early twentieth century Germany, details which have not been accounted for by authors who have written on the matter, such as Pantel (1993) and Martin et al (2016). Finally, at a higher level – and especially when taken together with the arguments of the rest of the chapters in this thesis –, it should also become evident that distinctions between illnesses of the mind and pathologies of the body in early twentieth century Germany were sometimes the outcome of the politics rather than the science in German psychiatry.

The chapter has two parts. In the first (II), I provide an overview of the conflict that emerged around the turn of the twentieth century between pure-neurologists, psychiatrists and doctors in internal medicine, pointing to its significance as the framework for the historical understanding of the particular events that led to the creation of the Heckscher Clinic. Subsequently, I point to the emergence and significance, in the context of that conflict, of the 'Heckscher Trust' in Munich, which constituted the first step taken towards the creation of the clinic. In the second part (III), I identify the circumstances that allowed Isserlin to take over the project of the Heckscher Trust and transform it, thus finally creating the Heckscher Clinic as something different than it was originally conceived to be. I proceed then to pinpoint some of the features that made it a unique institution: it rehabilitated many brain-injured into self-sufficiency with classes and workshops, but also played the role of an appliance for the eugenic agenda of the psychiatric establishment led by Kraepelin and his group.

Inevitably, this story has many gaps and leaves many questions open. The psychotherapist Renate Jutz's account of the Heckscher Clinic from the 1980s, and the neurologist Hendrik Voss's piece on Eugen von Malaisé – both based in archival material collected in Germany – provided crucial facts with regard to the creation and operation of the institution. Some of this material has been of immense help in writing this story, which ultimately seeks to explain how Isserlin and the clinic navigated the world of psychiatry and politics of the time. The Nazis made sure Isserlin's work and achievements were forgotten. Apart from the sources mentioned, I had at my disposal previously unstudied short texts and pamphlets on brain injury from the 1920s, some copies and drafts of correspondence from the 1930s with references to events of the previous decade, a few pictures (all these materials are to be found in MS/1935), and passing references to Isserlin and the clinic from secondary histories of German psychiatry.

II. 'Pure Neurology' and the Establishment of the Heckscher Trust in Munich (1922-1923)

Clinical neurology in early twentieth century Germany: *between psychiatry and internal medicine*

In early nineteenth century Germany, as in most European countries, the treatment of the mentally insane was the remit of alienists (*Irrenärzte*). Broadly put, they conceived mental illness to be, on the one hand, a problem for theological and philosophical speculation, and on the other, a phenomenon only to be observed and dealt with within the confines of asylums. Furthermore, mental asylums (*Irrenanstalt*) were 'total institutions' located in rural areas, distant from industrial and academic life. Hence, for all practical proposes, psychiatry in the German Reich was not much more than applied knowledge of hospital and custodial administration until late in the nineteenth century (Engstrom 2003 p. 19).

In the 1840s and 1850s, however, some things began to change. Psychiatrists wanted to be recognised as legitimate scientists, not as asylum superintendents. In 1844, exploiting their new role in courts of law, psychiatrists founded the *Allgemeine Zeitschrift für Psychiatrie und psychisch gerechtliche Medizin,* the first journal where alienists could publish as brain scientists in the German lands. Then, in 1846, a psychiatry section was established within the 'Society of German Natural Scientists and Doctors' (*Gesellschaft Deutscher Naturforscher und Ärzte*), giving alienists presence for the first time in a medical organisation. Later on, in 1860, the Society of German Nerve-doctors was established (*Verein Deutscher Nervenärzte)*.[194]For the first time, an academic organisation pointed to psychiatrists' understanding of their object as somatic. These developments, among others,[195] allowed psychiatrists to set one foot in subdivisions (*Nebenabteilungen*) of internal medicine in hospital wards, while setting the other in asylums. The establishment of regional societies such as the *Berliner medizinische-psychologische Gesellschaft* (1867) and *der Südwestdeutsche psychiatrische Verein* (1868) followed rapidly (Pantel 1993 p. 145).

The first journal exclusively dedicated to mental *and* nervous conditions qua brain conditions was the 'Archive of Psychiatry and Nerve Diseases' (*Archiv für Psychiatrie und Nervenkrankheiten*),

[194] The term *Nervenarzt*, was used to refer to psychiatrists, not to neurologists, who did not really exists as such until well into the twentieth century (See Shorter 1997 pp. 118-120).
[195] See Engstrom (2003 pp. 51ff) and chapter 1 in this thesis.

established in 1868 by Wilhelm Griesinger. The Archive promoted neuropathological research under Griesinger's conclusive dictum 'all diseases of the mind are diseases of the brain'. This dictum was internalised by the overwhelming majority of academic and scientific psychiatrists during the second half of the nineteenth (see chapter 1). Building on the findings of Bell and Magandie on the laws of motor and sensory functions of the nerves, as well as on the interpretation of the reflex arc by Marshall Hall; Griesinger and his followers saw their science as being nothing less and nothing more than neuropsychiatry: reflex action – a material process – was the only mechanism present in any given psychic activity (Shterenshis 1999 p. 69). In 1864 at the Charité Hospital in Berlin, Griesinger held the 'professorial chair in internal diseases, neurology and psychiatry', the first of its kind. His influence expanded rapidly throughout the German lands, allowing him to teach and work in university clinics from Kiel to Zurich. He was highly successful in the promotion of chairs like his and the integration of neurological wards into psychiatric clinics, as well as in encouraging neurologists to publish in unified neuropsychiatric journals (Guenther 2014 p. 116).

The influence of Griesinger in Germany could be seen in changes to the language used to talk about madness throughout the nineteenth century. The psychiatric tradition of the early nineteenth century had distinguished neuroses from psychoses, using the former to talk about all diseases of nerve and muscle, while psychoses, in contrast, constituted a category of insanity, a mental disorder that affected the whole person and had little to do with nerves. In other words: neuroses were bodily disturbances (brain included); psychoses, or insanity, on the other hand, were the actual disturbances of the mind. By the end of the century, the objects to which these terms referred had swapped. Insanity was thought to have a distinct organic aetiology; the mind was reduced to nerves and brain.[196] On the other hand, neurosis was thought as either fully psychogenic (arising due to the mind's pathological interaction with the environment) or 'functional', meaning that, although presumably organic, its aetiology was unknown (Beer 1996; Shorter 1997).

From the 1870s onward, renowned neuropsychiatrists such as Carl Westphal (successor of Griesinger at the Charité), Theodor Meynert, Eduard Hitzig, Paul Fleichsig, Rudolf Wirchow, Hermann Munk and Karl Wernicke, spread what was later labelled Griesinger's 'Prussian model' of a unitary neuropsychiatry throughout the German Empire. They all became directors of the first generation of German (neuro-)psychiatric university clinics, thereby reshaping the psychiatric profession. Nevertheless, they still had to convince the medical community and the public that psychiatrists were

[196] Other examples: in 1845, Feuchterleben talked about convulsions as examples of neuroses, and Flemming in 1859 spoke of neuralgias, cramps and palsies as 'peripheral neuroses'. In contrast, by 1910, Alzheimer – like most psychiatrists in early twentieth century Germany –, would speak of the psychoses as 'diseases of the cerebral cortex', and of nervous diseases as those of the medulla oblongata, spinal cord and peripheral nerves (See Beer 1996 pp. 234ff).

no longer 'alienist artisans' (*Irrenheilkünstler*). Psychiatry was meant to be seen instead as a medical discipline of the mind and brain, and they as psychopathologists qua 'cerebral pathologists' (*Hirnpathologen*) (Engstrom 2003 p. 99; Guenther 2015 pp. 116-117). Griesinger's ex-pupils established new university psychiatric clinics as 'Psychiatrische *und* Nervenkliniken', where their new techniques in experimental neurophysiology and pathological anatomy were intensively developed. The study of the nerves was thereby officially claimed by psychiatrists, initially with seemingly little resistance from general practitioners. Because of this institutional move, there would not be any establishment for the remainder of the century in which clinical and therapeutic work on (as well as teaching about) the nervous system and the brain was carried out without the lead of psychiatrists, who still had a foot in traditional mental asylums. As a consequence of this expansionism of German neuropsychiatrists, the most diverse pathologies – for example, thyroid deficiency and mania – could be seen under the roof of one, all-encompassing 'psychiatry and nerve' clinic. The first proper neurological institution was only created in Hamburg University in 1896 and remained an exception for decades to come.[197]

By the late 1880s, however, some doctors in internal medicine had become wary of the psychiatrists' appropriation of the study of the central nervous system and the peripheral nerves.[198] The first formal denunciation of the fusion of psychiatry and neuropathology came with the foundation of the Journal of Neurology (*Zeitschrift für Nervenheilkunde*) in 1891 by Wilhelm Erb (1840-1921), Friedrich Schultze (1848-1934), Ludwig Lichtheim (1845-1928) and Adolph Strümpfell (1853-1925). These doctors in internal medicine were claiming back the clinical study of the nervous system (Holdorff 2004). Erb asked: 'How can psychiatry expect to cover all peripheral diseases, diseases of the spinal cord, vasomotor neuroses, not to mention the more common apoplexies, softening, irritation, and tumours in the brain?' (quoted in Pantel 1993 p. 147). Erb argued, firstly, that the field that occupied itself with nerve diseases and mental illness related to them had become too vast to be covered by a psychiatrist. Accordingly, he suggested that the field of neuropsychiatry created by Griesinger needed to be divided in two, namely: psychopathology for the disturbances of the brain/mind, which included, apart from the psychoses, all forms of psychological distress and psychopathy; and neuropathology, for nerve diseases exclusively, such as tabes dorsalis, ataxia and many other clearly organic conditions. And secondly, he contended clinical medicine as a whole was responsible for neuropathology, not only in research and teaching, but also in treatment. Indeed, for him, there was 'no doubt that the work that a doctor has to permanently seek in order to gain knowledge about the pathology of the nervous system

[197] Things were different in Britain. Whereas in the Medical Congress held in London in 1881, topics such as Jacksonian epilepsy, tabes dorsalis, tendon reflexes and nerve stretching in loco-motor ataxy were all discussed in the 'section of medicine', those same topics were discussed in the section of 'neurology and psychiatry' in the 1890 International Medical Congress in Berlin (Shterenshis 1999).

[198] On the study of the nervous system by doctors in internal medicine in Germany and elsewhere in Europe in the first half of the nineteenth century, see Spillane (1981) especially pp. 273ff.

and its treatment, corresponds first and foremost to clinical medicine' (quoted in Martin et al 2016 p. 5).[199]

In 1906, another important manoeuvre towards the separation of neurology from psychiatry was undertaken by these 'internally-oriented neurologists' (*internistisch orieentierte Neurologen*). Erb and his group recruited more like-minded doctors and founded the 'Society of German Nerve-Doctors' (*Gesellschaft Deutscher Nervenärzte* henceforth GDNÄ), which at its inaugural meeting hosted 137 nerve-specialists and not a single psychiatrist (Martin et al 2016 p. 6). Their aim was, on the one hand, to cut psychiatrists' ties with internal medicine and send it back into isolation in the rural asylum (Pantel 1993 p. 148) and on the other, to create autonomy in teaching with *Ordinariate*, as well as institutionally, with departments in all university clinics (Martin et al 2016 p. 9).

Among these like-minded doctors was Hermann Oppenheim, who became the first president of the GDNÄ. At their second meeting, he regretted the fact that, even though Germany was indeed ahead of France, Great Britain and the USA in matters concerning neurological research, institutionally speaking, they were one generation behind (Martin et al 2016 p. 8). Oppenheim believed that Erb's vision was not radical enough. Neurology needed not only to be rescued from neuropsychiatrists, but also needed to be removed from internal medicine itself, since 'nerve patients are not meant to be studied and treated together with patients suffering from lung or hearts diseases' (quoted in Pantel 1993 p. 148). The new generation of promoters of an autonomous clinical neurology such as Oppenheim, Foerster, Nonne, and Lewandowsky, started to refer to themselves as 'pure neurologists' so as to differentiate themselves from Erb and other internists at the time (Pantel 1993 p. 148).

There were inevitably critics of this approach. One of the most fierce opponents of the pure neurologists by the turn of the century was Karl Bonhoeffer, who would also firmly stand against Oppenheim's conception of traumatic neurosis during the war. He argued that since 80% of the cases seen by 'a neurologist' were functional neurotic conditions and psychopathies, psychiatrists had the prerogative of educating future nerve clinicians (Pantel 1993 p. 149). Moreover, he also maintained that the neurologists could not really build a specialty since they did not possess any consolidated therapeutic technique; in contrast with otology, laryngology and orthopaedics, where therapy was key in the formation of a specialty; and if anything, neurosurgery had better chances of autonomy than clinical neurology (Pantel 1993 p. 150; Guenther 2014 p. 118; 2015 p. 121). Furthermore, it was far less expensive for the state to keep psychiatry and neurology united (Martin et al 2016 p. 8).

[199] More than two decades later, in 1914, in a paper entitled 'What We Strive' (*Was wir erstreben*), Erb lamented that little had change: 'Sadly enough, a quick look around shows us that there is not yet one single completely autonomous neurology clinic that could more or less bear the demands of teaching and research on the field' (quoted in Voss 2015 p. 10).

There were indeed a handful of instances in the early twentieth century when neurologists held a certain degree of autonomy as a product of the efforts of the GDNÄ and the Journal of Neurology: Nonne in Hamburg, Foerster in Breslau and von Weizsäcker in Heidelberg (Dichgans 2013 pp. 1114-1115, Guenther 2014 p. 117). However, when the war broke out, Griesinger's model was still the official model for all practical purposes pretty much everywhere in Germany. As shown in the previous chapter, it would not be the only time that Oppenheim lost in opposition to the psychiatric establishment.[200] Thereafter, the ideal of an autonomous neurology as a medical specialty would remain generally underrepresented in Germany; it would only become a medical specialty in the 1960s, and only in 1971 neurology would acquire a university chair (Voss 2015 p. 210; Martin et al 2016 pp. 7-8).

The Heckscher Trust in Munich

Throughout the 1910s in Munich, research on, teaching about, and treatment of the nervous system had remained the provenance of either psychiatrists in the university psychiatric clinic directed by Kraepelin, or of internists in the subsections or 'sub-wards' (*Nebenabteilungen*) in policlinics and general hospitals.[201] Munich's psychiatric university clinic was also renamed 'psychiatry and nerve' clinic, and the German Research Institute of Psychiatry (DFP) worked under the premises of the 'Prussian model'.[202] Furthermore, as we have seen, the continuation of the so called 'neurological' lazaret during the 1920s did not respond to the disciplinary agenda of any 'pure neurologist' but to that of Isserlin, a psychiatrist with little direct interest in abnormalities of the medulla oblongata or in thyroid deficiency. Instead, like many other social psychiatrists, he was concerned with work rehabilitation and the prophylaxis of degeneracy, a completely different program. According to Oswald Bumke (1877-1950) – who by 1924 had replaced Kraepelin as director of the university psychiatric clinic in Munich – with the death of Oppenheim and Erb, the battle between psychiatrists and internists over clinical neurology had become 'very quiet'. In fact, some important promoters of an independent neurology had even changed their minds (quoted in Pantel 1993 p. 150).[203] The year prior to Bumke's

[200] His fight for traumatic neurosis (see previous chapter) must then be seen also as part of the same conflict.
[201] According to Guenther (2015), the few instances where clinical neurologists enjoyed some degree of autonomy in the German lands were those where it abandoned the struggles with internal medicine and psychiatry, adopted some form of therapy at their core, and created their own niches, for example, 'on the couch' (Freud) or in a clinic where gymnastics were used to treat neurological conditions (Foerster).
[202] For the history of the psychiatry university clinic of Munich as one guided by concerns regarding social biology and racial hygiene, see Kroth (2010 pp. 8-31). Pretty much every assistant of Kraepelin in the DFP taught medical students and performed clinical work on patients in the university clinic.
[203] Strümpell, co-founder of the *Journal of Neurology*, claimed, against his previous convictions, the unity of the nervous system, the mind, and the brain with the following analogy: to separate them would be like telling a musician to play his violin only on the D and G strings, because the rest had been tuned up for another musician (Pantel 1993 p. 150).

remark, however, a series of events unfolded around Oppenheim's ex-assistant, giving 'pure neurology' its last chance in Munich.

Eugen von Malaisé (1875-1923, see figure 5.2) – who had also worked in München L with Isserlin – was an internist who became a 'pure neurologist' while working for Oppenheim in Berlin.[204] He had been rebelling throughout the 1910s in Munich against both academic psychiatrists and internists for what in his eyes was an 'usurpation' and illegitimate appropriation of neurological research, treatment, and instruction (Voss 2015 p. 211).[205] He thought that the best way to respond to such contravention was to build a specialised clinic for neurological conditions, which, in his words, 'should not take care of the brain injured, since those [patients] were already being taken care by Isserlin elsewhere', nor war neurotics and other psychiatric patients (quoted in Voss 2015 p. 212). Like Erb and Oppenheim, he was interested in diseases of the peripheral nerves, ganglia and spinal cord, especially those related to war and accidents; in his eyes, disturbances of the brain, including consequences of brain injury, were not neurology's affair. By the end of the war, von Malaisé had turned to Bayern's nobility looking for sponsors for his project. He caught the attention of Princess Maria del Pilar of Bavaria (1891-1987), who turned to German industrialists as well as to the German-American Society, seeking support. After more than two years of searching, they finally garnered the interest of the German-born New Yorker August Heckscher (1848-1941, see figure 5.3), a wealthy philanthropist who was persuaded of the necessity of establishing a financial trust to protect Bavaria 'from an epidemic of neurological disease' (quoted in Jutz 1981 pp. 31-32).[206]

[204] Von Malaisé is a forgotten figure in the history of German neurology. Thanks to Hendrik Voss (2015), we can know a little about his impressive trajectory. After working for Oppenheim in Berlin 1904-1906, he moved to Paris, where he obtained further instruction in neurology under Josef Babinski (1857-1932) and Pierre Marie (1953-1940). He then relocated to Munich and worked in Alois Alzheimer's laboratory. In 1910, he became professor of internal medicine with 'special mention in neurology', thus becoming the first to receive that title from the medical faculty of Munich. In 1913, he was appointed director of the university's outpatient policlinic, a position he would hold until his death.

[206] Starting in the mining industry in Germany and expanding later into real estate, Heckscher had built a fortune. Since the turn of the century, he had been involved in philanthropic projects in the United States, and Von Malaisé's project seemed a pertinent occasion to aid his native country, to which he remained actively connected through his mother and sisters (Voss 2015 p. 213).

Figure 5.2: Von Malaisé; Figure 5.3: Heckscher
[Taken from Voss 2015 p. 210]**;** [Online resource from the Heckscher Foundation]

On 4 May 1922, the 'Heckscher Nervenheilanstalt' (henceforth Heckscher Trust)[207] was originally created for the construction of specialised institutions in Bavaria for the treatment of war-induced 'nerve' disturbances. It would take the Trust over three years to fully materialise as an actual institution. According to its provisions, the Heckscher Trust was originally committed to:

> the establishment and operation of sanatoria (*Heilstätte*) for nervous patients (*Nervenkranke und Nervensieche*), especially for those who have been victims of war. Patients from everywhere in the German Empire shall be admitted. The institution should run in agreement with the Bavarian welfare office for war victims (*Kriegsbeschädigtefürsorge*). It shall also become a task of the trust the promotion of research in the field of neurology (*Nervenheilkunde*)' (quoted in Voss 2015 p. 213).[208]

These terms were more vague than they seem at first glance. Even though von Malaisé had specified to Heckscher that the sanatoria should exclude neurotics and the brain injured, the vague nature of the provisions of the trust allowed a less restricted interpretation of the spectrum of patients it was meant to treat. As indicated in previous chapters, before the war, many German psychiatrists had left the overcrowded, therapeutically nihilist mental institutions in the countryside, and moved into 'urban asylums', where, according to Shorter (1997 pp. 114ff) they disguised some mild or 'functional' forms of mental illness as 'nerves' for an expanding middle-class struggling with the anxieties of modernity. By the time the trust was created, psychiatrists were thus also practitioners in *Nervenheilkunde* ('nerve

[207] Not to be confused with the actual Heckscher Clinic which started operating in 1925.
[208] The Heckscher trust had August Heckscher as protectorate. Two business partners of his from the Rheinland's Zinc industry, Georg Grillo and Hugo Reinhard, became chairman and treasurer respectively. The trust's patrimony was close to 200.000 Goldmark (Jutz 1981 p.32).

treatment'). It is therefore difficult to find any consistency with regard to the kinds of patients to which this and also terms like *Nervenkrankheit* and *Nervenkranke* referred. This is why, in this context, the terms were certainly interpreted by von Malaisé and the pure neurologists respectively as 'neurology', 'neurological disease', and 'neurological patient'. However, these terms were also used by psychiatrists to indicate 'nerves' and 'nervous patient'. These, in turn, were terms which could be associated with an 'inferior constitution' (*Minderwertige Konstitution*) and hereditary disease (Beer 1996; Linden and Jones 2013; Holdorff 2011), or not: for example, Isserlin's brain-injured patients were referred to by many, including Isserlin and his staff, as *Nervenkranke*. In short, the disciplinary instability, as well as the blurring of boundaries between what was organic and what was not, left the provisions open to interpretation with regard to what type of clinic(s) the Heckscher Trust intended to finance. In hindsight, and in spite of von Malaisé's intentions, it seems that the board of Heckscher Trust and Heckscher himself had no real interest in pursuing institutional autonomy for neurologists. At the time, however, the plans of the Heckscher Trust were still being seen with suspicion in Munich, especially by internists and most psychiatrists – although favoured by Kraepelin himself – who opposed von Malaisé's plans for an autonomous neurology clinic in Munich.

III. The Construction of the Heckscher Clinic: from Neurology to Rehabilitation and Mental Hygiene (1923-1928)

Bringing together the Heckscher Trust and brain-injury welfare

On July 11th 1922, a meeting took place in the offices of the Bavarian Ministry of Education and Culture to discuss von Malaisé's project. Present at the meeting were – apart from von Malaisé and state and municipal officials – Emil Kraepelin (director of the psychiatric university clinic), Ferdinand Sauerbruch (dean of the medical faculty), and Max Isserlin (by then also teaching about brain injury and psychotherapy at the Ludwig Maximilian University) (Voss 2015 p. 216). Isserlin was there to support his ex-co-worker at 'München L'. This marked the beginning of the latter's involvement in the Heckscher project.

Sauerbuch, adopting the usual posture of doctors in internal medicine regarding the position of clinical neurology, considered that any new nerve sanatoria should be attached to general hospitals. He argued, firstly, that a disjointed neurological department would obstruct the involvement of medical students in clinical training and secondly, that neurology was not a field that required a special financial investment,

much less a 'fancy styled building' (quoted in Voss 2015 p. 213). von Malaisé explained that such independent physical space was in fact the only way by which the rich and abundant clinical data accumulated in München L could be used effectively. For this very same reason, Isserlin backed von Malaisé's plans, although by then it must have been clear that what the two men considered to be valuable clinical material differed in some important respects. Kraepelin was also on their side; he had been since at least 1904 a sympathiser for the institutional autonomy of neurology, quite a rare position among clinical psychiatrists. In fact, Kraepelin already had a verbal agreement with von Malaisé for a future cooperation between the German Psychiatric Research Institute and the future neurology clinic.[209] Despite all the support he enjoyed, von Malaisé did not convince the ministry. The Heckscher Trust received permission from the city only for the establishment of a new neurology section within a general hospital (Voss 2015 p. 214). von Malaisé accepted the offer but was not done yet.

Only a few months earlier, in April 1922, Isserlin's brain-injured patients left the Reisingerianum, which, being a policlinic, could not afford to host them any longer. Through the agency of their union, the brain-injured were relocated to the Schwabing Hospital. Later on, in February 1923, while von Malaisé was opening the new neurology section financed by the Heckscher Trust at the Hospital Rechts der Isar (henceforth RDI), the Association for the Care of the Severely War Disabled, upon request of Isserlin, bought one property in the vicinity of the Schwabing hospital and started the construction of another home for war-invalids, especially for the brain-injured. The first property comprised an old villa and a block of flats located at the corner of Parzivalplatz and Leopoldstrasse. The construction of the new home started only a couple of houses away, at Parzivalplatz 2a (Schwarz 1926 p. 66).

In 1923 von Malaisé and Isserlin were working on completely different medical and institutional projects. Whilst the former was trying to develop an autonomous neurology in Munich through the recently established Heckscher Trust, Isserlin was mobilising municipal state resources to acquire and build properties in order to host and treat more brain-injured war victims. The issue was pressing, with ca. 3000 brain-injured ex-servicemen in Bavaria, most without any type of professional care (Schwarz 1926 p. 65). Only a few months later, however, on 10 October 1923, von Malaisé unexpectedly died from a brain haemorrhage (Voss 2015 p. 215). The Heckscher project lost its ideologue at a critical moment. Isserlin took over the project and redirected it according to his medical and professional concerns. He established direct contact with August Heckscher and placed the Heckscher Trust at the service of brain-injury welfare, at the expense of the project initiated by von Malaisé at RDI.[210] Isserlin explained later the re-orientation as follows:

[209] For some allusions to this agreement, see DFP (1921); Engstrom et al (2016 p. 263); Engstrom (2003 p. 125); Pantel (1993 p. 146).

[210] Due to its now private character, the department RDI was in principle beyond the reach of internists. Georg Sittmann (1865-1937), director of RDI, argued that to maintain the department after Von Malaisé's death would

> the development of brain injury welfare has shown that occupational welfare (*Berufsfürsorge*) must be brought in intimate connection with the [Heckscher] institution…The main institution [meaning the future clinic] should become also a consultant institution (*beratendes Organ*) for all the welfare centres in Bavaria, and work with the state-run main centre for welfare (*Bayerische Hauptfürsorgestelle*) as well as with the Association for the Severely Disabled by War (Isserlin 1928 p. 3)[211]

'Brain injury welfare' was, institutionally and disciplinarily speaking, not neurology. As we have seen, it had become, through Isserlin's work on occupational therapy, a particular clinical subspecialty of social psychiatry. Isserlin and von Malaisé had indeed been very different clinicians. Isserlin was not a 'pure neurologist' and there are no indications of him having interest in the professional struggles in which the latter had been immersed. Rather, as we have seen, he had been occupied since the time of the war with the diagnosis, institutionalisation, destigmatisation and rehabilitation of certain functional disabilities caused by brain injuries, and this within a general framework of mental hygiene. von Malaisé, in contrast, had been primarily engaged with neurological consequences of diseases such as thyroid deficiency, beriberi, stroke, and kidney failure, which, as Oppenheim taught him, amounted to an autonomous medical specialty. However, none of the channels of 'pure neurology' would have ever made clinical neurology an autonomous specialty in Munich; internists and psychiatrists had all these consequences covered in that city.[212] Furthermore, as a final blow to the attempts of pure-neurologists, in 1924 Oswald Bumke – who had just replaced Kraepelin as director of the psychiatry university clinic and did not subscribe to his ex-boss' early agreement with von Malaisé –, changed the name of the university clinic from 'psychiatric clinic' to 'clinic of psychiatry and nerves', thus reaffirming the establishment's unitarian, anti-specialist position in the debates. Bumke had also envisaged the closing of Isserlin's welfare clinic and the transfer of its patients to the university psychiatric clinic (Voss 2015 p. 215), though without success. Isserlin not only retained autonomy over his patients, but also managed to insert the money of the Heckscher Trust in the properties and activities of war-disabled and brain-injury welfare (Isserlin 1924a p. 13). As a result, the Heckscher Clinic emerged as something quite different from that which von Malaisé had originally intended.

It took almost two years to finalise the construction and mobilisations. *The Heckscher Nervenheil- und Forschungsanstalt*, or Heckscher Clinic, celebrated its opening on July 10 1925 (Schwarz 1926 p. 66).

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be 'superfluous' and a luxury at the cost of resources coming from 'warm-hearted' foreigners. For his part, Hermann Herschensteiner (1873-1937), director of the Schwabing Hospital, saw Isserlin's taking over of the Heckscher project as a 'source for continuous friction and conflict' (quoted in Voss 2015 p. 215).

[211] Other medical officials backed Isserlin's plans. Along the same lines, Schwarz (1926 p. 67) also explained that in Munich, 'experience has shown that medical treatment should be combined with occupational welfare, vocational training and special needs education'.

[212] It is perhaps a bit more than anecdotical that Von Malaisé spent the last decade of his life as responsible of the outpatient neurology ward in the university of Munich never succeeding at re-naming it 'policlinic for neurology patients' (Voss 2015 p. 215).

In spite of its name, the properties belonged to the state, not to the Heckscher Trust. Moreover, brain-injury welfare operated with a great deal of interdisciplinarity work. Certainly, it had become clear for Isserlin and his staff that consequences of brain injury could not be researched upon nor treated only by neurologists or internists. As Isserlin put it in a letter to a colleague years later, he created the Heckscher Clinic with the intention of having 'one big home, hospital, and work station, sufficient in itself' (Isserlin to Ibrahim 20/11/1932).[213] In short, the Heckscher Clinic was a 'psychiatry and neurology' clinic, that is, an institutional development within the line of Griesinger's nineteenth century 'urban asylum' and thus, did not respond to any disciplinary attempt of a pure neurology.

The new house on Parzivalplatz 2a (see figure 5.4) consisted of three departments on three different floors. The ground floor was the infirmary (*Krankenabteilung*), treating mostly organic diseases (including – but not restricted to – the consequences of nerve damage which Spielmeyer and von Malaisé had treated during the war): it was ready to receive up to 30 patients. The first floor served as a home (*Heim*), providing '40 beds for brain-injury welfare patients and some chronically ill'. Among the latter were the patients described in the previous chapter as suffering 'general disturbances', such as epileptics and patients with degenerative nervous conditions and dementia. The home would host an ever increasing variety of patients during its first seven years. Finally, the basement was equipped with workshops for education therapy (*Heilpädagogische Abteilung*). While the infirmary was entirely financed by the Heckscher Trust,[214] the home and therapeutic stations were financed by the state of Bavaria and the Ministry of Interior. Thus, even though the three departments were administered together and shared the same budget (Isserlin 1928 p. 3; Schwarz 1926 p. 66), the clinic was in reality an institution that coordinated distinct private and public institutional interests.

[213] All of Isserlin's correspondence used in this thesis can be found in MS/1935: Boxes 3&4.
[214] The Heckscher Trust apparently established a total budget of 100.000 dollars for the infirmary (Jutz 1981 p. 32).

Figure 5.4: Postcard image of the Heckscher Clinic in 1932
[Taken from Feller (1935)]

By 1926, in the words of Schwarz (1926 p.70), the institution was 'a unique combination of sanatorium, workshops, and asylum'.[215] In the following years, the Heckscher Clinic would in fact carry out a double function: on the one hand, it rehabilitated brain-injured patients; on the other, it answered to prophylactic concerns proper of the psychiatric establishment to which it belonged. Indeed, apart from fulfilling custodial roles as other mental asylums in Munich did, Isserlin's clinic implemented ambulatory welfare centres (*Ambulanzen*) throughout the city of Munich (Jutz 1981 pp. 53-54). This allowed the clinic to take over tasks of screening and surveillance of the whole population, not only of ill and disabled people (See Weindling 1997 p. 152). These activities, in turn, served the racial hygiene agenda of the Munich psychiatric establishment.

The fact that there is evidence that Isserlin and his team had practiced a genuinely heart-felt humanitarianism should not deceive us.[216] Firstly, disabled patients were treated there so that they could re-join the workforce, not primarily for their sake, but for the sake of the nations' economic and moral restoration. Secondly, those considered constitutionally inferior and mentally ill were segregated and there is no evidence whatsoever that they were subjected to any therapeutics inside the institution. Thus,

[215] Isserlin claimed that with the new war-disabled rehabilitation centres, Munich had become the city with the most comprehensive social care organization (1924; 1927; 1928). Furthermore, he was convinced that institutions for the care of the brain injured could only show their full potential when working in tandem with mental hospitals and asylums: 'it is in the conjoined worked of these that the social institution of welfare of the Weimar Republic will be optimised'. Moreover, mental hospitals and asylums must follow the example of brain-injured hospitals in incorporating work stations (*Werkstätten*) that provided at least some form of occupation to those who could not be reincorporated into the labour market (1927 p. 104).

[216] Perhaps because of the alleged kindness and personalised care with which the medical staff treated their patients, the staff was accused at some point of 'spoiling' the brain-injured. For instance, not everyone saw with good eyes when the Heckscher Trust acquired a rest-house in Harling, located at the stunning and peaceful Starnberger lake, nor when patients were sent to a spa in Bad Aibling (Jutz 1981).

apart from serving as referrals for total institutions such as asylums or hospitals through its ambulatory centres, the Heckscher Clinic also fulfilled custodial roles at their own facilities, preventing certain types of personalities from 'infecting' the rest of the population.

Special classes and workshops

Despite its double function as a hygienic and therapeutic institution, Isserlin made sure that the Heckscher Clinic became known for the latter. Accordingly, in his brain injury welfare texts, he repeatedly advertised the potential of the pedagogico-therapeutic approach for other forms of welfare. Indeed, almost every text on the subject includes statements such as 'experience has shown that special needs education (*Heilpädagogik*) had effectively expanded from treating deaf-mute and slow children to include not only other disabilities and mental disturbances in children, but also in brain-injured soldiers'. As a consequence, Heilpädagogik had acquired 'a greater societal value as a form of welfare' (Isserlin 1924a p. 6). Isserlin explained this with the following analogy:

> For the same reason that we cannot expect that children will eventually learn what they need in the streets but only in school, patients with apraxia, agnosia and aphasia […] cannot be expected to regain their capacities by reinserting them into society and the workforce as if nothing happened. Patients with circumscribed brain damage need medical care informed by *Heilpädagogik* as much as a normal child needs to be educated in school; and society needs *Heilpädagogik* as much as it needs primary and secondary schools (Isserlin 1924 p. 11)

Heilpädagogik was continued in the new house through tailored classes and exercises focused on compensating particular cases of functional deficiencies in victims of brain injury. This time, however, the application of pedagogical practices for rehabilitation of consequences of focal brain damage was combined with occupational therapy. Accordingly, the workshops located in the basement did not only have room for special needs-type classes but also for actual work stations, for those patients who could not find a job outside the institution as well as for those who were living with their relatives in the city. These workshops included metalwork, locksmith, carpentry, painting, a printing press and workshops for graphic design, a bookbinding shop, as well as gardening. Dr. Schwarz revealed that 'the brain-injured particularly enjoyed producing toys' for children. What was manufactured at the work stations was sold in markets and shops around the city. Some patients etched pictures and maps of the city that even created a demand in the public (Schwarz 1926 pp. 67-68; Isserlin 1928 p. 3). All brain-injured working inside and outside the clinic were provided with their own 'index card', where their diagnosis

and progress was referenced. Additionally, all the workshops were classified with different difficulty levels 'so that even the most severe brain-injured could work' (Isserlin 1928 p. 3). Furthermore, in some cases where the brain-injured showed no chance of being able to work in the foreseeable future, the workshops managed to 'employ' the wives or their children instead (Schwarz 1926 p. 69).

Among Isserlin's co-workers at the clinic were Erich Feuchtwanger, Maria Weber, and Maria Graaf von Kuenburg (see figure 5.5). Feuchtwanger had been an army doctor, and had been injured himself, receiving a shot to the head. He soon became Isserlin's 'right hand man'. Apart from being a neurologist, he was a psychoanalytically inclined therapist, which might seem surprising due to Isserlin antipathy for Freud's theories. Feuchtwanger was in charge of consequences of brain-injuries caused by damage to the frontal lobe (*Stirnhirnverletzungen*), which affected, among other things, the equilibrium and movement coordination systems as well as the vascular system. Thanks to him, Isserlin confessed in 1927, he was able to confirm that 'nervous damage' (*Nervenschädigung*) did not have a constitutional basis, which contributed greatly to substantiate the diagnosis 'brain injury': not all 'Nervenkranke' had inferior constitutions (1928 p. 2). Next, following a recommendation from Feuchtwanger, the neurologist Maria Weber joined the clinic as medical assistant in February 1926. She had worked in Munich's special needs school and was teacher and social worker at a school for women. Together with Feuchtwanger and Maria Graaf von Kuenburg – a language therapist who had worked with Karl Bühler on issues such as intelligence development and psycholinguistics in children –, she managed the ambulatory stations (*Ambulanzen*) of the Heckscher Clinic (Jutz 1981 pp. 54-55).

By the end of 1926, the block of flats was adapted for 40 members of nursing staff and care assistants, both as living quarters and also for workshops and teaching facilities (Isserlin 1928). Up to that point Isserlin had not been very satisfied with the nursing staff of the clinic. Then, thanks to his friend Dr. Pfeilschifter who lived around the block, Isserlin became acquainted with the foster sisters from the Ursberger St. Josef congregation. He was immediately impressed by their work with children with disabilities and persuaded some of them to work with him treating brain injured patients. On March 1927, some of the sisters moved into the property They were accommodated transitorily in wooden barracks put on top of a cement foundation block (Isserlin to O'Brien 1/3/1933). Isserlin was stunned by the 'infinite, angelical and patient love' as well as by the 'fine understanding and tact' with which they carried out their work with the brain injured (quoted in Jutz 1981 p. 38). Later on that year, Isserlin reported that 'the partially new activities carried out in the brain injury facilities have provided satisfactory, even surprising solutions, especially in the cases of speech and language disturbances' (Isserlin 1927 p. 102). By the end of the 1920s the Heckscher Clinic had indeed made a name for itself throughout Europe as a successful therapeutic institution for functional consequences of brain injuries, especially for aphasia and related disorders of speech. However, rehabilitation did not mean cure. Success in rehabilitation was measured according to the number of patients who had re-joined the

workforce. Heilpädagogik was not really implemented to help cure patients; at least not as its ultimate goal. Rather, rehabilitation meant rehabilitation *for labour*; *Heilpädagogik* was first and foremost a hygienic measure.[217]

Figure 5.5: Von Kuenburg and M.Winfreida Rittler- the principal sister of the clinic in the 1960s
[Keirmaier (1992); MS/1935]

The Heckscher Clinic in the late 1920s: from soldiers to children

By 1921, due to the catastrophic impact of the war on the economy, the orientation of the psychological department of the DFP shifted to industrial psychology, thus committing itself to the study and measurement of mental ability, fatigue, and concentration during work, especially in factories and large scale manufacturing. Isserlin's work at the brain injury station – at the time still functioning in the Reisingerianum polyclinic – served the purposes of the DFP in this regard. Moreover, the relocation of Isserlin's lazaret to the Schwabing Hospital in 1922 was achieved through the expansion of the hospital facilities with money from the DFP (See Engstrom 2016 et al p. 140). The collaboration continued once the Heckscher Clinic was established in 1925.

In 1926, Kraepelin died and Walther Spielmeyer – Isserlin's old lazaret partner who at the time was directing one of the institute's histopathological departments – replaced him both as director of the DFP as well as on the board of trustees of the Heckscher Trust. The original collaboration established by Kraepelin and von Malaisé in 1922 only intensified with Spielmeyer and Isserlin in 1926. Moreover,

[217] In chapter 6 I deal in detail with Isserlin's practice of Heilpädagogik.

both institutions were physically very close to each other. This made everything easier in terms of collaboration. For instance, some fresh post-mortem brains for scientific evaluation at the DFP came directly from patients who had just died at the Heckscher Clinic. In addition, the genealogical department of the DFP carried out analysis of the kinship of the many patients of the Heckscher Clinic. Moreover, one year positions were made available at the DFP for staff members of the Heckscher Clinic (Voss 2015 p. 216; Jutz 1981 pp. 50ff).[218]

This collaboration, amongst other things, contributed to the Rockefeller Foundation's funding of the DFP in 1927.[219] Spielmeyer reported to the Heckscher Trust:

> There is a close work community with Prof. Isserlin, even a friendly cooperation. The name of the Heckscher Clinic has acquired a positive reputation in Europe and beyond. It is striking how many foreign visitors ask about the relationship between the Heckscher Clinic and the DFP. The DFP has acquired even more prestige as a consequence of this collaboration, thus facilitating the funds from the Rockefeller Foundation.' (quoted in Voss 2015 p. 216).

Behind the collaboration there was an ideological commitment between Isserlin and the psychiatric establishment of Munich regarding racial hygiene that dated back to the war years. Isserlin had been collaborating with Kraepelin in the experimental psychology department of the DFP ever since its foundation. In 1927, he was still contributing with experiments on work psychology, in particular with regard to tiredness, perseverance and motivation (Hippius and Müller 2008).

For Isserlin, the success achieved with the use of educational therapy in war victims presenting consequences of focal brain damage called for its application to children with analogous deficiencies. For, if it had been demonstrated by implementing *Heilpädagogik* during the war that many symptoms presented by wounded soldiers were not neurotic symptoms – that, for example, a patient with aphasia and epileptic fits did not have an inferior constitution and a predisposition to nervous disorders –, why not then use the same pedagogical techniques in order to distinguish children with analogous disturbances from 'feeble-minded' children? By then, educational therapy had been limited to the treatment of deaf-mute children; why not, Isserlin asked, extend it to children with developmental disorders caused by focal brain damage? (Isserlin 1927 pp. 103-104). Indeed, children could have developed from birth a focal brain damage which impeded them to produce or understand speech, which did not mean that they were less intelligent children or otherwise disturbed.

[218] A library cooperation was also implemented and staff of one institution would be regularly seen studying in the other. Moreover, the DFP provided the Heckscher Clinic with some instruments for psychological and linguistic research. Finally, that year, and because of the close partnership of both institutions, the Heckscher Clinic begun receiving 3.400 RM yearly from the German Science Emergency Association (Jutz 1981 p. 51).

[219] By then part of the Kaiser Wilhelm Society.

In 1927 August Heckscher visited for the first time the Munich Clinic he had been financing. Isserlin seized the opportunity to persuade the benefactor of the need for a special department for children with focal impairments (Isserlin to Heckscher 11/07/1927). Isserlin must have explained to Heckscher – as he did in his 1927 piece 'On the Evaluation of the Experiences with War Brain Injured Soldiers for Questions Regarding Welfare and Educational Therapy' – that 'it would be detrimental to the clinic's own interest to limit the experience gained with brain-injuries to one demographic' (Isserlin 1927 p. 104). Heckscher, a cautious businessman, was wary about the risks involved in the construction of a new department at a time when the American economy was in recession. At first, he suggested that Isserlin approach the Rockefeller Foundation – which had already funded the DFP – and ask them if they could provide for the care of these children in their facilities. Isserlin followed Heckscher's advice but did not succeed in his application. Following this refusal Isserlin looked for alternatives in the public sector, managing to convince the Ministry of Interior in the early months of 1928. He received 60.000 RM for the construction of the new department for children (Jutz 1989 p. 25). However, it was not enough money to complete the project. In a letter of 25 September 1928, Isserlin tried again with Heckscher. He explained to him, once again, that if children in Munich with performative disorders (*Leistungstörungen*) continued to be considered 'feeble-minded' (*Schwachsinnig*) or 'mentally ill' (*Geisteskrank*), they would suffer irreparable damage. In addition, he argued that the continuous lack of differential diagnosis of children would have as a consequence the overcrowding of public juvenile institutions and public asylums.

In a letter to Isserlin on the 15th October 1928, Heckscher stated that he was unsure as to what would make the work carried out in a new department different from that which was already taking place in German 'special schools'. He had a point. For, if children with developmental disorders could benefit from special needs education, why not implement the knowledge gained in already existing special needs schools? Heckscher's reluctance appears to have been due to Isserlin's inexperience in treating children. Isserlin replied (?/1928) explaining that the transfer of clinical knowledge from war veterans to children could only be effected by medical practitioners in the same settings that the brain injured had been treated and examined. The staff of the clinic were the only ones 'capable of establishing the differences and correlations between general disturbances and focal impairments'. In spite of his reservations, Heckscher finally agreed to co-finance the new department. Thus, in 1928, in a piece entitled *Hirnverletzenfürsorge* ('Brain Injury Welfare'), Isserlin was able to write:

> [I]t is clear that [educational therapy] also benefits brain-damaged children. In these circumstances, one must resolutely support and stand by an institution that is at once a sanatorium, a special education centre, and a welfare organisation, since such arrangement has proven continuously successful for over a decade now. Although such arrangement has served to face some particular challenges brought about by the war, it should be valued and considered for many other different types of crisis. Thanks to the Heckscher Trust, a new department for children is being constructed. That way, even after the pressing issues of the war, the knowledge gained then will still be applied so as to extend its huge societal value (Isserlin 1928 p. 4).

A year later, on 4th November 1929, the new department opened its doors and the transfer of clinical and pedagogic-therapeutic knowledge was initiated. Isserlin named it *Heckscher Heil- und Forschungsanstalt für Kinder und Jugendliche.*[220] The house had a total of 40 beds. At the inauguration were present, among many important personalities of Bavaria, prince Ferdinand of Bavaria and princess Maria del Pilar. The Heckscher Trust established a yearly budget of 10,000 RM for its operation. Immediately thereafter, Isserlin made room for women in the new department, until then generally excluded from Isserlin's care (Isserlin 1930 pp. 1-2; Schwarz 1926).

The new house was organised as follows:

The ground floor had a day centre, dining rooms, classrooms, outpatient rooms, baths for physical therapy, and an 'isolation room'. The first floor was entirely dedicated to the female patients.[221] The second floor had the doctors' offices, the children's bedrooms, the psychological laboratory and the library. The attic had a bedroom for the doctor on call as well as bedrooms for the Ursberger sisters (it was possible for them to look into the children's rooms in the second floor at any time). Finally, the basement was composed of offices and enough space for the one-to-one practice of educational therapy with groups of up to twenty children (Isserlin 1930 pp. 3-4; Jutz 1989 p. 30).[222]

The professional pre-conditions and skills for the new department were already present and developed by the staff. Most of Isserlin's co-workers at the clinic had had local and in some cases international experience in special needs education. For instance, apart from having gathered expertise as a language therapist, von Kuenburg had also worked with Karl Bühler on issues such as intelligence development and psycholinguistics in children; Maria Weber had also accumulated a great deal of experience in the

[220] 'Heckscher clinic and research institution for children and teenagers'.
[221] These women would have otherwise been placed in psychiatric asylums. It remains unclear who these women were, which criteria were used to take them in, or from what particular conditions they suffered.
[222] Renate Jutz (Jutz 1989 p. 32) also mentioned that the original plans included the construction of a playground. This was discarded, however, because that could potentially disturb older patients in the adjacent house. Instead, arrangements were made so that the children could use the public playground around the corner for an hour every day.

clinic's outpatient facilities and was also doctor in a special needs school.[223] Finally, by then, the nuns had already applied their practical expertise with special children to war veterans in the *Heilpädagogik* stations at the brain-injury station in the other facilities (Isserlin 1928 p. 4; Jutz 1981 p. 54).[224]

Furthermore, Isserlin appointed the neuropathologist Fritz Lotmar (1878-1964) – who had been working in Bern – as principal doctor (*Oberarzt*) of the children's house. He became a neurologist under the supervision of Dejerine in Paris and of Oppenheim and Cassirer in Berlin. Like Isserlin, Lotmar had been an assistant of Kraepelin and had also worked in neurological lazarets during the war. In addition, Lotmar had worked with Alzheimer in Munich before settling in Bern. There, he made important contributions in histological research on neurological conditions such as encephalitis and the pathology of base ganglia. Soon after, the Bavarian Ministry of Interior established a cooperation between the university policlinic for children and the new department. The helpdesk and information centre (*Beratungstselle*) became the same for both institutions. Moreover, some doctors simultaneously worked in both institutions by the early 1930s; Lotmar and Frau. Dr. Ullrich, director of the children's policlinic, individually carried out advisory supervisions in and reporting on each other's establishment (Jutz 1981 pp. 56-57).

Meanwhile, the Heckscher Clinic established more ambulatory centres. These consolidated what Feuchtwanger called a 'a Heilpädagogik work community' in Munich.[225] As mentioned, however, the ambulatory centres would conduct prophylactic activities. For instance, one new ambulatory centre was dedicated to the 'advice' and 'support' of the families of 'problematic children' from around the city, who would attend by 'recommendation of school teachers' (Jutz 1981; Voss 2015). However, due to the collaboration with the DFP, it must have unquestionably been the case that, for example, parents were checked for congenital diseases and used to compilate genealogical data. Isserlin certainly kept his discourse in tune with the increasingly radicalised eugenicist environment in which he worked. Thus, in a piece of 1930, Isserlin claimed that the patients at the clinic 'did not impose a threat' to public health because 'they possessed healthy minds'; in fact, all shared 'a sense of will and of high values, like morality, truth and religion', which, 'demonstrates how different these unfortunate individuals are from any neuropath or psychopath' (Isserlin 1930 p. 2).[226] Like the brain-injury department, the new

[223] Isserlin sent her to Vienna for six months to develop her skills further under Prof. Lazar, who was a regular speaker at the congresses for *Heilpädagogik* co-organised by Isserlin and others between 1922 to 1927 (see chapter 6).
[224] Some of the sisters became professionally recognised elsewhere in Germany. For example, sister Jovina Gruber won herself a study place in Essen (Isserlin to O'Brien 3/12/1934).
[225] Feuchtwanger went on to suggest that such community of teachers, doctors, psychiatrists, social workers and parents was working even better than the American Child Guidance Institute, which was one of the leading psychiatric institutions for children worldwide (Jutz 1981 p. 53).
[226] As I will show in chapter 6, neuropaths and psychopaths were terms used indistinctively by Isserlin during the 1920s to refer to constitutionally inferior people with neurotic or maladaptive tendencies.

department for children was officially bound to treat those who were able to compensate their deficiencies, those capable of learning (*bildungsfähig*), and exclude 'feeble-minded' children, neurotics, and severely mentally ill.

However, things seem to have been different with regard to the type of patients the clinic (both old and new houses) hosted at the beginning of the 1930s. In a draft letter to an unknown recipient (21/3/1933 p. 4), Isserlin explained that the Heckscher institution 'treated nervous patients of all types (*Nervenkranke jeder art*)'. Moreover as Jutz (1989 p. 36) has shown, from all the children who by 1930 were living in the new house, only five presented speech disturbances due to focal brain damage. The rest were 'children with seizures (7); with spastic paralysis (2); with encephalitis lethargica (3); children victims of neglect (2); psychopaths, neurotics and hysterics (including both those with 'constitutional lability' and those with 'psychogenic disturbances', 15); with cerebral syphilis ('lues cerebri', 2); and with severe mental retardation (10)' (see figure 5.6). Similarly, the main home had clearly become by 1930 more than a sanatorium for victims of war. According to Isserlin himself, it also took in patients with organic and functional disorders: 'as long as they did not require treatment in an asylum' (21/3/1933 p. 5). And yet again, if we look at what Jutz (1989 p. 36) tells us, in 1930 at the old house there were psychotics (5), psychogenic depressed (3), epileptics (6), hysterics (14), patients with multiple sclerosis (3) and patients with arteriosclerosis (3).

Figure 5.6: Some of the children of the Heckscher Clinic ca. 1933
[MS/1935: Box 11]

Isserlin did not talk about his psychiatric patients, nor about those with 'general organic disturbances', nor did he refer to any psychotherapeutic methods being implemented in the institution to treat hysterics, no less psychotics.[227] This was because Isserlin saw himself as a modern, urban, scientific psychiatrist; he did not want to be associated with psychiatric illnesses and institutional settings identified with the old alienist psychiatry (which still existed at that time). Therefore, it is understandable that Isselin did not openly refer to his stigmatised patients: that could compromise his professional identity in the public eye and with his peers. Additionally, it is highly likely that Isserlin was trying to protect the mentally ill and chronic patients in his care. Indeed, by 1930 negative eugenic measures such as sterilisation had become part of mainstream medical discourse and not far from becoming public policy, especially in Munich (Weindling 1991 pp. 441ff).

IV. Conclusions

This chapter has evidenced that, in Munich, Isserlin was able to articulate somewhat contradictory principles for the advancement of his scientific and professional interests. His intellectual and practical interests as an individual (and as clinic director) appended just in the right occasions with otherwise incompatible institutional and political mechanisms of the broader research agendas of Kraepelin and his group. Some of them had already become public supporters of the idea of replacing costly therapeutic and rehabilitation procedures with negative eugenic measures.

Isserlin could advance his therapeutic interests in an age of therapeutic nihilism and unsuccess vis-à-vis 'real' psychiatric conditions. Psychotic and degenerative conditions populated asylums, hospitals and prisons, and yet, as this chapter has shown, therapeutic advances were possible because Isserlin knew how to combine and negotiate those seemingly divergent directions. Firstly, Isserlin was with the mainstream on the fact that *Nervenkranke*, be it brain injured, neurotics or neurological patients, were the jurisdiction of the *neuro-psychiatric* academic ethos, which, despite all twists and turns, dated back to Griesinger. Secondly, if one were to work in therapeutics of the mind and brain, one ought to acknowledge that the primary aim was the health of the collective, which was optimised when unemployment was reduced to the minimum; and also be able to recognise that cure and good prognosis was in fact the exception: most mentally ill and mentally disabled, most neurological patients and neurotics were offered little hope.

[227] It is telling that, for instance, in his psychotherapy textbook of 1926, he did not make a single reference to patients of the Heckscher Clinic (see chapter 6).

However, due to the collaboration with the DFP, it must have unquestionably been the case that, for example, parents were checked for congenital diseases and used to compilate genealogical data. Isserlin certainly kept his discourse in tune with the increasingly radicalised eugenicist environment in which he worked. Thus, in a piece of 1930, Isserlin claimed that the patients at the clinic 'did not impose a threat' to public health because 'they possessed healthy minds'; in fact, all shared 'a sense of will and of high values, like morality, truth and religion', which, 'demonstrates how different these unfortunate individuals are from any neuropath or psychopath' (Isserlin 1930 p. 2).[228] Like the brain-injury department, the new department for children was officially bound to treat those who were able to compensate their deficiencies, those capable of learning (*bildungsfähig*), and excluded 'feeble-minded' children, neurotics, and severely mentally ill. However, things seem to have been different with regard to the type of patients the clinic (both old and new houses) hosted at the beginning of the 1930s.

By the end of the 1920s the Heckscher Clinic had indeed made a name for itself throughout Europe as a successful therapeutic institution for functional consequences of brain injuries, especially for aphasia and related disorders of speech. There, occupational therapy, special needs schooling and individually tailored mental hygienic measures were combined with clinical rigour. However, as we have seen, rehabilitation did not mean cure. Success in rehabilitation was measured according to the number of patients who had re-joined the workforce. *Heilpädagogik* was not really implemented to help cure patients; at least not as its ultimate goal. Rather, rehabilitation meant rehabilitation *for labour*; *Heilpädagogik* was first and foremost a socio-hygienic measure. Unfortunately for von Malaisé, and luckily for Isserlin, 'nervous patient' could mean pretty much anything in Germany in the inter-war years; it was a matter of seizing a good opportunity amidst professional uncertainty as to the meaning of the terms 'nerves' and 'clinic for the treatment of nerves'. As a consequence, and because of Isserlin, neurology did not achieve institutional autonomy in Munich, and instead, this unique neuro-psychiatric research and rehabilitation centre, outreach hygienic ambulatory, special school and mental asylum came to being. Medical science, but also politics, disciplinary instability and an unexpected death allowed Isserlin's institutions to thrive, though not for long.

[228] As I will show in chapter 6, neuropaths and psychopaths were terms used indistinctively by Isserlin during the 1920s to refer to constitutionally inferior people with neurotic or maladaptive tendencies.

Chapter 6. Isserlin and the Disciplinary Manufacturing of 'Inferior People' in Germany (1900-1933)

On the history of the diagnosis psychopathy and its related medico-pedagogic disciplines

I. Introduction: Medicalising the Borderline

As we have seen in previous chapters, defeat in the First World War gave momentum to the narrative of biological and moral degeneration within German psychiatry. As part of their ongoing quest for academic legitimacy and public recognition, many psychiatrists saw themselves as leaders in the project of rebuilding Germany's morale, social fabric, and industrial productivity. For them, guaranteeing prosperity for the body politic started to have pre-eminence vis-à-vis the health of individual patients in the discipline's rationale. Accordingly, more than ever before, psychiatry understood itself as 'mental' and 'racial hygiene' in the broadest sense of the terms.[229] How exactly psychiatrists articulated racial hygiene with their professional activities in the pre-Nazi era remains an understudied subject. By tracing Isserlin's professional development as a brain injury expert back to the 'neurological lazarets', we have so far been able to determine that certain military and welfare structures provided means of securing professional niches in the brain sciences around the project of mental hygiene. By the mid 1920s, the public and private support Isserlin had gained was being successfully invested in the restitution of the employability of brain-injured patients in the Heckscher Clinic. This activity constituted a key hygienic measure: work and self-sufficiency sustained individuals in a healthy relation to society. However, brain injured soldiers were not Isserlin's only hygienic concern. Even though he did not treat war neurotics in the institutions he directed – at least not officially –, he taught courses in psychotherapy at the Ludwig Maximilian University based on his experience with neurotic, hysteric, and neurasthenic patients at the university clinic and at the German Research Institute of Psychiatry (DFP). Moreover, his preoccupation with the treatment of children did not began with the construction

[229] In pre-Nazi Germany, the term racial hygiene (*Rassenhygiene*) was synonymous with eugenics (*Eugenik*). Some psychiatrists, like Isserlin and Kraepelin, also used the term 'mental hygiene' (*psyschische Hygiene*) to refer to the same general sanitary concern. However, they also used mental hygiene to refer to a more specific set of measures, which included keeping a structured day, taking breaks during work, exercising, and other healthy habits. Furthermore, although by the turn of the century many psychiatrists already talked about racial hygiene in purely hereditarian terms, a 'racist' perspective was not yet part of mainstream psychiatry, nor of social policy. This obviously changed in the 1930s. Therefore, I will use the terms eugenics, racial hygiene, and mental hygiene interchangeably unless otherwise indicated.

of the new department of the Heckscher Clinic in 1929. Already by 1922, Isserlin was engaged, together with psychiatrists and pedagogues, in the formation of a new disciplinary structure for the exclusive hygienic management of 'new types' of 'abnormal children'. The department at the Heckscher Clinic resulted from his participation and collaboration in this endeavour. This chapter explores how Isserlin and his colleagues navigated the world of Weimar racial hygiene when it came to 'neurotics' and 'difficult children'.

Throughout the period 1900-1933, groups of psychiatrists and pedagogues, especially in Berlin and Munich, worked on different ways to best integrate certain pedagogical practices – used mostly with deaf-mute and other sense-organ disabled children – with certain psychiatric concepts in order to understand and better educate anti-social, maladaptive, or otherwise abnormal children. Isserlin's efforts resulted in the promotion of *Heilpädagogik* ('educational therapy') as a medico-pedagogic interdisciplinary platform for the advancement of educational and therapeutic methods, professional societies, and specialised institutions.

The concept that served as bridge between psychiatry and pedagogy in early twentieth century Germany was that of 'psychopathic inferiority' (*psychopathische Minderwertigkeit*). This term – also 'psychopathic pre-disposition' (*psychopathische Veranlagung*) or sometimes simply 'inferiority' (*Minderwertigkeit*)[230] – originated in the late nineteenth century for unclassifiable problematic people. By the early 1900s, it became an umbrella concept that denoted a wide range of psychological abnormalities, disabilities, and deviant behaviours in children and teenagers who appeared to be situated on the border between mental health and mental illness. As we will see, the 'psychopathic inferior' was 'ill' only in the sense that their actions deviated from conventional and accepted norms of conduct, thus becoming a threat for the community's optimal organic development. In other words, the psychopathic inferior amounted to a *social ill*. Isserlin and his colleagues refined this problematic and implemented pedagogical and psychotherapeutic methods around them during the 1920s. In this way, Isserlin and his professional colleagues played a significant role in the history of the diagnosis psychopathy.

In early twentieth century Germany, psychopathy was understood to mean something quite different than it is today. We now commonly associate the term with the image of someone with no conscience, no empathy, no remorse; or we think of a sadist serial killer. By contrast – as the work of Isserlin and other psychiatrists of the time show –, around the time of the First World War a psychopath came to be someone with a weak, we could say, 'anaemic' mental constitution; someone with an inborn heteronomous personality. The popular and clinical notion of psychopath we have today would be only one of the many forms a 'psychopathic constitution' would manifest itself in early twentieth century

[230] I use the terms interchangeably.

Germany. In fact, the overwhelming majority of those labelled 'psychopaths' in Isserlin's time would have never shown any signs of perversity or wickedness. A psychopath could be anyone who, as a consequence of bad genes or irreversible nurture damage, lacked either self-discipline and self-control, will power, intelligence, ethical behaviour, autonomy of action, or emotional balance. Due to the wide scope of the concept, there were disagreements in the medical and pedagogical communities about the classification and treatment of the different outcomes of psychopathic inferiorities. Someone with psychopathic personality was prone to some or all of the following types of abnormal mental behaviour: neurosis, hysteria, compulsions, epilepsy, petty crime, speech disorders, sexual perversions and homosexuality, obsessions and social anxiety, tics, spasms and involuntary movements, learning difficulties, idiocy and feeblemindedness, exhaustion and fatigue, laziness and neurasthenia, selfish and unethical behaviour, onanism, melancholia and mood disorders, and even gastrointestinal syndromes; the list went on and on. Depending on the psychiatrist, special needs teacher, or 'educational therapist', a person (not only children) with a psychopathic inferiority would manifest some of these 'abnormalities' or 'defects' in their lifetime. Isserlin's involvement in these developments is arresting. As I will show, he believed that some cases of 'psychoneuroses'[231] were products of a psychopathic inferiority. Accordingly, it was also crucial to consider *psychotherapeutic methods* as an appropriate treatment for them. In contrast, he thought that *Heilpädagogik* – although beneficial for the treatment of sense-defects and other mental deficiencies and disabilities in children and adults – did not remove psychopathological phenomena caused by psychopathic predispositions. Nevertheless, in Isserlin's psychiatry both *Heilpädagogik* and psychotherapy became general overlapping and complementary measures of racial hygiene. In turn, Isserlin's racial hygiene was centred around the (re)establishment of the employability and social utility of people.

Unfortunately, the historical process that placed *Heilpädagogik* behind the dissemination and impact of the diagnosis 'psychopathic inferiority' has been obscured by historians of special needs education (*Sonderpädagogik*) (henceforth SNE) in Germany. Authors such as Göppel (1989) and Ellen-Rüttgard (2019) have articulated some aspects of *Heilpädagogik* only within a *longue durée* perspective. By doing so, they project a linear and positive development of their discipline. Indeed, they assume that, all changes notwithstanding, the *Heilpädagogik* of the years 1900-1933 was the predecessor of their discipline.[232] I intend to present a more complex picture by placing at the centre of the narrative the interactions that *Heilpädagogik* had with the notion of psychopathic inferiority from the late nineteenth century until the late 1920s.

[231] Psychoneuroses and neuroses are used interchangeably.
[232] Möckel (2007) and Moser (2012) point to richer and more mosaic-like historical interpretations.

In the first section of the chapter I explain, first, how the categories 'psychopathic inferiority' and 'child deficiencies' began to gain momentum during the 1890s as conceptual solutions to epistemological and institutional strains in German psychiatry. Then, I show how these categories became ever more capacious as the decades passed, to the extent that any child (and adult) could be ultimately considered to be a psychopath. In section II I turn my attention to the Munich scene in the 1920s, where Isserlin was a protagonist. I show that he not only promoted *Heilpädagogik*[233] as a fundamental form of mental hygiene, but that he also almost succeeded at making of it a health profession in its own right. In section III I explain how Isserlin's understanding of a medico-pedagogic collaboration diverged from that of many of his colleagues. In contrast to some other promoters of mental hygiene, Isserlin carefully combined *Heilpädagogik* with psychotherapeutic measures in order to contain the threats of degeneration. Psychopathic inferiorities manifested themselves commonly in *psychoneurotic symptoms*, which could be treated even in some cases of constitutional inferiority. Specifically, I draw on some examples of Isserlin's psychotherapeutic prescriptions and considerations, which evidenced the influence of particular psycho-pedagogic approaches of the time.[234]

To discover what Isserlin had to say on *Heilpädagogik* as a medico-pedagogic specialty, I use the papers he presented to the Society of Heilpädagogik in 1922 and 1924. Then, in order to make sense of Isserlin's concepts of psychopathic inferiority, psychoneuroses, as well as of his psychotherapeutic methods, I have carried out a selective interpretation of Isserlin's 1926 psychotherapy textbook.[235] For the discussion of Isserlin's predecessors in the field of *Heilpädagogik* I have made use of a few primary sources but relied mostly on historical accounts of German special needs educators interested in the history of their field, particularly useful were the writings of Vera Moser (2000; 2012), Dagmar Hänsel (2014), Petra Fuchs and Wolfgang Rose (2017) and Sieglind L. Ellger-Rüttgardt (2019). Finally, for historical accounts on psychopathy and German eugenics, I have resorted to Paul Weindling (1991; 1997) and Greg Eghigian (2015), among others.

[233] Throughout the nineteenth century, the term *Heilpädagogik* was used to refer to the activities of German special needs teachers (*Hilfschullehrer*). In historical surveys, *Heilpädagogik* – translated into English as 'medical pedagogy', 'remedial teaching', 'orthopedagogy', 'curative pedagogy', 'educational therapy' and 'therapeutic education' has not been integrated by scholars into the study of the history of the mind and brain sciences.

[234] In this regard, this should also be read as a continuation of Isserlin's discussion of war neurosis and neurosis in general addressed in previous chapters.

[235] Excluding the part on psychoanalysis, already discussed in chapter 3.

II. Heilpädagogik and the Construction of the Psychopath (1890-1920)

The origins of 'pathological pedagogy' in the 1890s

By the turn of the twentieth century, medical expertise had acquired great significance in the configuration of German society. As has been pointed out in previous chapters, historians Paul Weindling (1991) and Volker Roelcke (1999) have shown that this took place as a consequence of the new status that health professionals started to enjoy in the late nineteenth century. Young doctors leading a new and fragile 'educated middle-class' (*Bildungsbürgertum*) – notably psychiatrists indoctrinated in Social Darwinism and the theory of degeneration – perceived themselves as having the moral and political duty of solving the nation's problems, particularly those caused by industrial modernity. These developments have been explained by historians as part of a long process of *Verwissenschaftlichung des Sozialen*, or the taking over of social problems by science and medicine.[236] It is within this process that psychiatrists started to pay serious attention to the work of special needs educators. Like any other aspect of social reality, children presenting inadequacies were meant to be re-conceptualised in medical terms.[237] Yet, by the late nineteenth century, no German psychiatrist had attempted any systematic and special approach towards child psychopathology. Throughout the second part of the nineteenth century, *Heilpädagogik* remained an activity exclusively concerned with pedagogical principles (Fuchs and Rose 2017 p. 191).[238]

The historian of special needs education Ellen-Rüttgardt (2019 pp. 141) has recently pointed out that in 1859 a statutory order was already implemented in Prussia which stated that all institutions dealing with special needs and disabled children had to be directed by a health professional. This new law, he argues, critically disrupted the autonomy that pedagogues had vis-à-vis doctors. However, it was only during the 1890s, that the former began to encourage special school teachers to qualify as health professionals. These circumstances are best reflected in the pedagogue Ludwig Strümpell's (1812-1899) publication in 1892 of *The Pedagogical Pathology or the Doctrine of Child Deficiencies* ('Die pädagogische Pathologie oder die Lehre von den Fehlern der Kinder'). There, for the first time, pedagogical principles

[236] See also Raphael (1996) for more details.
[237] In this chapter I only deal with the late nineteenth century use of the term. For a detailed historical discussion of the heterogeneity of objects of Heilpädagogik in the nineteenth century (and in some cases earlier) see Solorová (1983).
[238] In 1887, Hermann Emminghaus recognised in his monography 'The Psychological Disturbances in Infancy' that psychiatrists had begun to acknowledge the particularities of psychopathology in children. However, the idea of having children as a special group of psychiatric patients did not have much resonance among Emminghaus' colleagues, who still believed that psychological abnormalities in children were pedagogical problems by definition (See Fuchs and Rose 2017 p. 191).

were meshed with the style of thinking and vocabulary of medicine, especially with a rationale based on the dichotomy health-illness (Göppel 2019 pp. 430ff).[239]

In his book, Strümpell embarked on a painstaking alphabetical enumeration of various behaviours, attitudes, comportments, and manners of children which were beginning to be understood by the medically persuaded middle-class as defects, deficiencies, and morbid tendencies produced by mass society, urbanisation, industrialisation, and moral degeneration. The list was long and included seemingly natural, infantile attitudes and ordinary interpersonal behavioural mechanisms. For example, he qualified gossiping, shyness, secretiveness, insolence, and cheekiness, as 'abnormalities' and 'potential defects' (Strümpell 1892 pp. 19ff). Many of these had not been previously thought as even bordering the pathological. Strümpell and other pedagogues were opening up an aspect of reality which had not yet been problematised in terms of mental health. Strümpell called this new area of study 'pathological pedagogy'.[240]

As he explained,

> …pathological pedagogy is the doctrine that covers all those conditions and manners which empirically appear to the pedagogue as [being] deficient, problematic or disruptive for the purpose of educating a child…We call such defects pedagogical defects (Strümpell 1892 pp. 16-17).

What Strümpell and other medically-informed pedagogues were doing was reducing the capacity of the concept of a normal child as much as possible – no matter how arbitrarily – so that previously unnoticed personalities, seemingly irrelevant and unquestionable behaviours, and natural coping mechanisms in children, could become noticed and 'pathologised'. It seems that the only criteria with which 'pathological pedagogues' like Strümpell needed to comply were, first, that the trait or behaviour at hand made children more difficult to educate in normal schools; and second, that that the behaviour or trait could be thought of as potentially problematic for the future development of a healthy and well-adjusted body politic (Fuchs and Rose 2017).

The search for potential 'pathologising' aspects of the behaviour of children was ratified with the creation of the journal 'Children Defects' (*Die Kinderfehler*) in 1896. In 1901, the year that followed Strümpell's death, the journal acquired a more scientific name: *Zeitschrift für Kinderforschung* (Journal for Children Research). Yet, this was still a pedagogical field. Two decades later, Isserlin would become

[239] For similar developments elsewhere in Europe, see Dekker (2000).
[240] For a more detailed discussion of Strümpell's ideas on these matters, see Göppel (2019).

one of its editors and the journal would represent the publication organ for *Heilpädagogik* throughout the country during the 1920s.

Meanwhile, two years prior to Strümpell's list of children defects, J. L. August Koch (1840-1908), coined the term 'psychopathic inferiority' to refer to some of the very same problematic phenomena listed by Strümpell. Perhaps the difference was that Koch also discussed defects and deficiencies in adults. Heavily inspired by Cesare Lombroso, Koch published in 1891 his monography 'Psychopathic Inferiorities' (*Psychopathische Minderwertigkeiten*). According to Koch, the term psychopathic inferiority subsumed

> those mental abnormalities affecting a human being in his personal life – be it endogenous or exogenous – which, even in severe cases, do not represent a mental illness, yet appear to leave the stricken person, even in the most favourable instances, lacking in full possession of mental normality and ability (Koch 1891 p. 1).

Koch made psychopathic inferiority a borderline category for all ages, something between illness and health. As historians Paul Weindling (1991 pp. 381ff) and Greg Eghigian (2015 p. 288) have explained, this borderline category became useful for eugenically inclined psychiatrists for the classification – and colonisation – of all types of old and new 'unclassifiable run-offs'. By the last decade of the nineteenth century, there seems to have been a void with regard to medical terms for the categorisation of traits and behaviours considered to be incompatible with the values of the new educated middle class (*Bildungsbürgertum*), values such as productivity, discipline and resilience, self-control and autonomy of action.

Koch and Strümpell had regularly referred to each other's work throughout the 1890s and built on what the other said (Fuchs and Rose 2017 p. 193). There was really nothing radically original in what they were claiming. It can all be traced back to the writings of Benedict-August Morel. Koch and Strümpell were arguing, first, that phenomena such as urbanisation, industrialisation, alcohol consumption, venereal disease and homosexuality were causing children to be born with a 'degenerate predisposition' (*entartete Veranlagung*); second, that these phenomena threatened the social fabric of the *Volk*, and third, that hygienic measures should be implemented to counteract them.[241] Nonetheless, this collaboration did set the start for eugenics to be seriously considered by German doctors and pedagogues. Thus, from the start, the concept of psychopathic inferiority was essentially intertwined

[241] The latter term would be also commonly used to refer to adults showing the same abnormal characteristics (Fuchs and Rose 2017 p. 190).

with prophylaxis and eugenics. Koch became one of the first of a long list of psychiatrists (including most of the members of the Munich group) who argued for special facilities for children and adults presenting psychopathic inferiority. The idea behind such special facilities was to prevent future criminals and antisocial elements from coming into being in the first place. Different institutions should be provided taking into account personality, degree of (un)corrigibility, and estimated public threat (Eghigian 2015 pp. 285-288; Fuchs and Rose 2017 pp. 192-193).

In his article *A Drifting Concept for an Unruly Menace: A History of Psychopathy in Germany*, Greg Eghigian (2015 p. 288) argues that the diagnosis 'psychopathic inferiority' emerged in the late nineteenth century as a response to 'epistemological and institutional quandaries brought on by the instability of categories and the movement of prison and asylum populations'.[242] However, Eghigian does not acknowledge the fact that once the 'pathologising' of children that started with Strümpell's collaboration with Koch took off within the medical and academic communities, the quandaries regarding the instability of categories referred not only to populations in prison and psychiatric asylums, but also increasingly to children in schools and welfare institutions. Indeed, the history of psychopathy in Germany is inextricably entangled with the history of 'the defective child', and thus, with the interdisciplinary collaboration between doctors and pedagogues. In addition – and perhaps more importantly – Eghigian and other historians of German psychiatry do not commonly identify that the work carried out around the concept of psychopathic inferiority was not just about classification and institutionalisation, but also a move towards the *rehabilitation* of psychopathic children. Even though there was certain level of consensus among psychiatrists over the negative (psycho)therapeutic and pedagogical prognosis of the psychopathic inferior around the turn of the century,[243] there were important attempts to rehabilitate young psychopaths in welfare and other institutions, albeit, primarily for the sake of the public and future generations.

[242] By the 1890s, as German Berrios (2004) indicated, psychiatry was as concerned with taxonomy of mental diseases as it was with brain anatomy and physiology. In the same lines, Eric Engstrom (2009) points out that the considerable ambiguities in classification of deviant anti-social behaviour had brought about an ineffective use of institutional resources. Germans assimilated this concern from the Italian criminologist and scientific racist Cesare Lombroso (1835-1908), who maintained that there was a need to implement a science-based system for crime management that allowed early identification and institutionalisation of those inborn psychologically corrupted and prone to break the law (See also Becker and Wetzell 2006).

[243] Most believed, as psychiatrist Karl Birnbaum (1878-1950) explained, that the psychopath was an 'unfit object' for therapy, because he had 'an inherited reduced congenital predisposition' (*angeborene Minderwertigkeit der Veranlagung*) which made him incapable of resisting anti-social tendencies (Eghigian 2015 p. 90).

Heilpädagogik and its growing 'clientele'

The classification of some children as psychopathically inferior allowed German psychiatrists to infiltrate the profession of special needs teachers. Even though pedagogues could deal with disabled children, psychopathy, psychiatrists argued, could only be dealt with by their expertise. These developments occurred within the framework of what began to be loosely referred to as *Heilpädagogik*, a new jargon in psychopathology. New experts on child psychopathology were borrowing a term that was previously used exclusively to describe the work of special needs educators. Nevertheless, the medico-pedagogic practices were intended to reach beyond sense-organ disability and feeblemindedness to include everything that fell under the umbrella concept of psychopathic inferiority. One of the most prominent promoters of this 'pathologising' of *Heilpädagogik* before the First World War was the Austrian psychologist Theodor Heller (1869-1935). He played a crucial role in the proliferation and stabilisation of the categories of children in need of educational therapy and was, like Koch, a fervent promoter of specialized institutions for different types of children abnormalities (Eghigian 2015 p. 293). In 1904, Heller published his 'Outline of Education Therapy' (*Grundriss der Heilpädagogik*). There, on the one hand, he scorned the lessons of his mentor Johann Friedrich Herbart (1776–1841) – founder of pedagogy as a discipline –, who had limited pedagogy to 'normal children'; and on the other, rejected the interpretation of *Heilpädagogik* as a discipline that was fully dependent on pedagogical principles (Heller 1904 p. Vff). In addition, he criticized pedagogues – especially those working in Berlin – who understood *Heilpädagogik* as social pedagogy (*Sozialpädagogik*) and not close enough to medicine (Moser 2012 pp. 181-182).[244] For Heller, educational therapy needed to be rooted not in pedagogy, nor in social welfare, but in psychology and psychopathology.

Heller praised Kraepelin on the first page of the preface of his 'Outline', claiming that 'suddenly the work of a great doctor changed things'. Heller was particularly captivated by Kraepelin's work on the experimental measures of fatigue in school students and his consequent development of the work-curve, which 'made the way for pedagogy to become scientific' (Heller 1904 p. V).[245] With the extension of psychopathological methods to pedagogy, he maintained, pedagogues had started to realise, first, that in children 'abnormality is the norm' (Heller 1904 VI) and, second, that children manifested their own particular kinds of neurotic and hysteric symptoms, which he also considered to be linked with the possession of an inherited psychopathic inferiority (Heller 1904 pp. 4-5). Accordingly, Heilpädagogik for Heller should be a different discipline than teaching the blind or the deaf-mute. These had already their own very specific methods and goals; nor was *Heilpädagogik* to be restricted to the teaching of

[244] For a thorough discussion of social pedagogy, see Moser (2012).

the feeble-minded and special needs children. Rather, the field needed to extend beyond 'the constrains of the classroom to all those children who present mental anomalies (*Anormitäten*) of whom, provided they are given a suitable, individually tailored educational environment, an adjustment can be expected' (Heller 1904 p. 3). When we consider the list of conditions of children that were considered by Heller to be the objects of *Heilpädagogik* and the generalized therapeutic pessimism of the time in which it was published, this was an incredibly optimistic outlook. The list did not include deafness and blindness (as in the nineteenth century) but instead 'idiotism, imbecility, physical weakness, moral degeneration, epilepsy, chorea, tics, masturbation, speech disorders, infantilism, cretinism, mongolism, psychopathic constitution, hysteria, and many other conditions (Heller 1904 Index; Moser 2012 p. 182).[246]

However, Heller was ultimately ambivalent with regard to the disciplinary grounds on which *Heilpädagogik* should develop. At times, he presented it at as a collaborative activity carried out by special needs teachers *guided by doctors*, because in theory it 'was meant to occupy itself with morbid conditions of mental life' (Heller 1904 VII). Accordingly, in practice, it was 'socially applied psychopathology' (Heller 1904 p. VII).[247] In other instances, however, he claimed that the task of this new role of the educational therapist was no different than that of the educator. For example, he argued that *Heilpädagogik* was 'not about providing more and more knowledge' to the pupil, but about 'awakening that mental spontaneity…[which allows] them to think for themselves, and to direct their will and actions through moral principles' (Heller 1904 p. 4). Thus, pedagogy as such, *Heilpädagogik* included, was also moral prophylaxis. For teachers in normal schools, the task of *Heilpädagogen* was laid out by Heller in terms of the 'reduction of the economic burden' that 'the unproductive' were bringing upon their countrymen (Heller 1904 quoted in Moser 2000 pp. 181-183). Fittingly, he considered it necessary that the discipline be informed by research on social economy and population politics (Moser 2000 p. 181).

It was not on scientific or academic grounds that the discipline expanded throughout the second decade of the twentieth century. Moser (2012 p. 266) explains that for promoters of the new *Heilpädagogik* such as Heller, 'a clientele determination' – not actual scientific evidence or practical success – 'was at the center of disciplinary formation'. Beyond discrepancies on where to ground and institutionalise it, the capacious client of educational therapists had been established: cretins and feeble-minded on the

[246] The object of *Heilpädagogik* included for Heller abnormalities such as neuroses, which he understood as being rooted in pathological changes in emotional life which in time degenerated the mind.
[247] Among the adversaries of Heller's medicalization of special education was another important promoter of *Heilpädaogik,* Ernst Von During (1858-1944), originally a dermatologist and expert in venereal disease. Von During intended to give pedagogy back some of the ground lost through the 'medical colonisation' to which the discipline was being subjected at the beginning of the century. *Heilpädagogik* was for him above all, an educative endeavour. Yet, like everyone involved in the promotion of the discipline, Von During also argued strongly from within the narrative of moral and biological degeneration (Moser 2000 p. 183).

one hand, young psychopaths and inadequate types on the other. The clients were not mentally ill in the strict sense of the term. Rather, they were suspected of becoming a potential social harm: future criminals, alcoholics, prostitutes or vagabonds; they were seen as 'defective' in this sense.

Evidently, it was no easy task to fit in practical terms the heterogeneous clientele of abnormal children and young adults into one uniform disciplinary formation. There were big unresolved issues: who instructed the new educational therapists? The medical faculties, the philosophical faculties, or did it need a proper university chair? Did special needs pedagogues require a medical degree? What was the collaboration between psychiatrists, psychologists, social workers, school teachers and special educators meant to look like? Yet, an ongoing 'pathologising' of children and thus a formation of a wider clientele was still possible with the promotion the term *Heilzögling*, or the 'schooling-patient'. The term served the purpose of securing the diversity of problematic and inadequate children whilst at the same time distinguishing it from otherwise strictly medical patients and school children. These developments became possible after the promoters of *Heilpädagogik* infiltrated public education and health in in the first decade of the twentieth century. By 1914, many working in youth welfare (*Jugendfürsorge*) would perceive themselves as educational therapists (*Heilpädagogen*).

Public policy informed by racial hygiene was starting to consolidate in Germany a decade prior to the outbreak of the war with the establishment of eugenic societies. The Racial Hygiene Society, founded in 1905 in Berlin, was the first of its kind in Germany. Its architect was the psychiatrist and eugenicist Alfred Ploetz (1869-1940) – also the first to coin the term 'racial hygiene' and responsible for articulating it within Nazi ideology in 1937. Ploetz tried for years to reconcile the perspectives of Pan-German Aryan ideologues with those of rehabilitation-inclined social hygienists by arguing for the formation of an intellectual racial elite or 'a biological aristocracy' which could lead the regeneration of the German *Volk* on scientific grounds (Weindling 1991 pp. 146; 319). In 1907, Ploetz moved to Munich, where his ideas were better received, thus prompting the creation of eugenic societies there (the Munich Society of Racial Hygiene and the Munich Anthropological Society). All these societies held regular meetings where psychiatrists, psychologists, educators, geneticists, anthropologists and social scientists from everywhere in the German speaking countries discussed a variety of controversial issues related to public health, such as mental degeneration, inherited diseases, youth crime, prostitution, alcohol, social anthropology, family research, demography, genetics, and even breast feeding (Weindling 1991 p. 144). Moreover, these societies developed an active collaboration with Kraepelin and his group at the university clinic and at the German Research Institute of Psychiatry

(DFP).[248]As a consequence, during the war, Munich became the German hub for racial hygiene (Weindling 1991 pp. 143-145).[249]

In Berlin, by contrast, *Heilpädagogik* would develop closer to ideas on welfare and social pedagogy rather than to explicit eugenic principles, especially through the creation of welfare for psychopaths. Some special needs teachers, such as the director of the Sophienhöhe in Jena, Johannes Trüper (1855-1921), had already in the 1890's begun to implement *Heilpädagogik* to educate/treat difficult children within a dialectical process of individual assistance and population policing. By 1907, Trüper had made Koch's and Strümpell's concepts of psychopathic inferiority and defective children the subject matter of a state-run welfare organization for special needs education in Jena (Ellen Rüttgardt 2019). In the following decades, Trüper's pioneering work in merging *Heilpädagogik* with welfare would have considerable impact on the way others promoted the hybrid discipline in the German speaking world.[250]

Post-war psychopathy in Berlin and Munich

By the second decade of the twentieth century, Heller, Trüper and other academics developing the ideas of Koch and Strümpell had managed to establish consensus over the fact that the *Hilfschullehrer* was no longer dedicated exclusively to special needs children, but that instead, as *Heilpädagoge*, they had a variety of abnormal children as schooling-patients. For any given promoter of *Heilpädagogik*, the *Heilzögling* could be either deaf mute, obsessive-compulsive, feeble-minded, antisocial – or all of them. Moreover, with the increasingly common medicalization of the term *Verwahrlosung* (literarily 'neglect'), *Heilpädagogik* in the form of youth welfare became suitable for orphans and children with problematic family environments.[251] The Munich psychiatrist Hans Walter Grühle (1880-1958) explained 'neglect' in terms very similar to those used by psychiatrists to explain psychopathy, that is as a

[248] Curiously, already by 1919, that is, two years after its creation, the institute had departments dedicated exclusively to study each of those topics discussed by the eugenic societies (See chapter 4).
[249] The canonical work of yet another future Nazi 'child psychiatrist' Kurt Schneider published through DFP in 1923 stabilised the capacious concept of psychopathy (See Eghigian 2015 pp. 295-296 for details).
[250] Trüper would continue to defend the primacy of pedagogy over psychiatry in the institutional implementation of *Heilpädagogik* during the following decade (Fuchs and Rose 2017 p. 194).
[251] For early arguments against the pathology-laden discourse for the 'neglected child', see Göppel (1989 p. 243; 255ff).

> condition of hopelessness regarding education…which is determined by the child not meeting the minimal requirement for schooling due to their pre-disposition. It becomes evident also that the neglected (*verwarlohste*) child lacks the normal moral maturity necessary and therefore imposes a danger for other groups and the general [public] (quoted in Fuchs and Rose 2017 p. 190)

For Grühle, foster children, illegitimate children, or children growing up in a single parent family were prone to develop psychopathic traits; they would inevitably find it hard to stick to conventions and norms. In the best case scenario, the future behavior of neglected children would fall short of criminal. The problem of child neglect considerably intensified during the war. Once the war came to an end, the social pedagogue Ruth von der Leyen (1888-1935) and the psychiatrist Franz Kramer (1878-1967) became part of a younger generation of progressive Weimar reformers who intended to make the recently established new forms of abnormalities, deviance, and neglect in children the reason for the construction of a welfare exclusively dedicated to them. In contrast to Heller and the Munich pedagogues, they understood psychopathy in children more as a *Sozialpädagogik* than a medical endeavour.

Von der Leyen and Kramer had built their work on a cooperation established earlier on between private welfare and psychiatric clinics in Prussia, which had been led by the jurist and social pedagogue Frieda Deunsing (1864-1921) and the head of the psychiatric and nerve clinic of the Charité hospital, Theodor Ziehen (1862-1950). Ziehen – once Trüper's most important collaborator in Jena – taught von der Leyen and Kramer that psychopathy in children was a field of study in its own right, but that segregation of psychopaths from the feeble-minded was the first crucial step to take. For, whereas feeble-minded children experienced a defective intellect, the psychopathic child, including the neglected, evidenced 'numerous morbid mental appearances predominately at the level of emotional life' as well as a 'weakness of the will, abrupt mood changes and incontrollable emotions' (quoted in Fuchs and Rose 2017 p. 195). Thus, in contrast to Heller's approach, special needs education for feeble-minded children was not to be the job of specialists in children psychopathy. From these considerations, von der Leyen and Kramer founded the 'German Welfare Association for Young Psychopaths' (*Deutscher Verein zur Fürsorge für jugendliche Psychopathen*; henceforth WYP), which quickly became influential inside and outside of Germany as a model for social reform and as exemplar for ambulatory care of children (Eghigian 2015 p. 291).[252] Three years into their project, the WYP built within the Charité an observation station (*Beobachtungsstation*) for psychopaths, which also served as a home. Kramer became head physician and focused on research over the aetiology of psychopathy, while von der Leyen carried forward therapeutic and educational activities.[253] This station at the Charité became the most

[252] The WYP articulated in original fashion intensive work with research in the Berlin area. This resulted in scientific publications, promotion of specialised instruction in the emerging field of social pedagogy as well as syndicate and political activities (See Shepker et al 2017 p. 37).
[253] For details on the configuration of the WYP see Von der Leyen (1931 pp. 625ff).

important laboratory for the study of psychopathic constitutions in children in Germany during the 1920s. Only a few months after its creation, Kramer and von der Leyen argued that experience at the station had shown that the concept of psychopathy should be no more than 'a frame of reference'. von der Leyen went on to claim that in reality, '*the* psychopath did not exist' (quoted in Fuchs and Rose 2017 p. 196). Work around the idea of a 'psychopathic child' had allowed them to 'navigate at the frontier between the normal and the pathological' and that therefore classification of abnormal children was always 'a bit arbitrary' (quoted in Fuchs and Rose 2017 p. 196). Accordingly, the Berliners urged social pedagogues (as well as doctors) not to 'exaggerate the influence of constitution' in the evaluation of children and teenagers and to focus instead on the individual personality. Briefly put, the Berlin pedagogues believed that, even though the pre-disposition to crime and forms of anti-social behaviour was evident in some cases, it was *the milieu* and environmental circumstances that really led to unwanted behaviour in a child.

Meanwhile, in 1922, some pedagogues who were more influenced by Koch and Heller than by Trüper, formed with Max Isserlin the 'Society of Heilpädagogik' (*Gesellschaft für Heilpädagogik*) in Munich, which, contrary to the Berlin pedagogues, generally saw youth welfare in a much more pessimistic and fatalistic light when it came to rehabilitation. The director was Rupert Egenberger (1877-1958) and Isserlin became chairman. Egenberger estimated that one in four children were psychopaths with hereditary weak constitutions, thus putting more emphasis on segregation and prophylaxis than on individual care. Due to the strong links with the Kraepelin group, the society had, according to historian Paul Weindling, 'an organic approach towards psychopathy that was at odds with a more progressive and educationally oriented Berlin group' (Weindling 1991 pp. 381-382).[254]

However, the Berlin-Munich contrasts seemed not to have been as great as Weindling indicates. First, both the Society of Heilpädagogik and the WYP arranged medical surveillance of psychological development within community care. Second, in Munich as much as in Berlin, segregation and rehabilitation were interwoven with prophylactic measures for dealing with the threat of psychopathy and degeneration (Eghigian 2015 p. 292). Third, the WYP and the Society used the same journal for publications, namely the *Journal for Children Research* (Fuchs and Rose 2017). Furthermore, at both locations the perceived threat of psychopathy was clearly articulated in economic terms. Thus, for example, already in 1912, Egenberger defended the idea of 'colonies' for 'retarded children' (*Schwachbegabte*) in Munich and throughout the German speaking world, since

[254] Which also included the socialist reformers Walter Friedländer and Friederich W. Siegmund-Schultze.

> [i]t must be asked whether it is at all desirable to place the inferior in the middle of the battle of life (*Kampf des Lebens*); whether it is advisable not to make things harder for them in occupying civil professions (*bürgerliche Berufe*). It is not just about the welfare of the inferiors; it is our duty to protect the health and capability (*Tüchtigkeit*) of the race…It should be for us a sacred law to halt the multiplication of inferiors (Egenberger 1912 p. 243)

Egenberger clearly promoted negative eugenic measures to deal with inferior constitutions. In Berlin, social hygiene and racial hygiene were already united in 1907 when the Central Office for Welfare appointed the eugenicist Ignaz Kaup (1870-1944). Kaup also conveyed psychopathy in economic terms, something that the Berliners in the 1920s – regardless of their progressivism – would carry on doing. With the outbreak of the First World War, the psychopath became increasingly identified with anyone who could be seen as 'a societal and economic burden' (Brill 2011 pp. 25ff).

Further evidence of the high degree of consensus throughout the German speaking world on the problem posed by psychopathy is given by the fact that institutions that practiced *Heilpädagogik* and/or social pedagogy were finally implemented on a large scale in the aftermath of the war. Clinics and sanatoria began working in tandem with youth welfare offices, school nurses, doctors, and families of children to coordinate solutions for the increasing number of children and adolescents being classified as psychopaths. Between 1920 and 1927, fifty-eight homes and advisory clinics for young psychopaths were established throughout the new Republic (Weindling 1991 pp. 298ff; 312ff; 317).[255] Thus, what Koch suggested by the end of the century, and later what pedagogues like Trüper promoted in the early 1900's, was finally materialising in a systematic way during the Weimar period.

As Vera Moser (2000, pp. 183-184; 187) suggests, regardless of the differences between the orientations of Munich and Berlin, and the differences between the interpretations of pedagogues on the one hand (Strümpell, Trüper, von Düring), and psychiatrists on the other (Koch, and the Munich eugenicists), attempts at setting up disciplines to deal with the new 'problem child' were all contributing to the construction of an ever larger clientele of children, as well as adults. As we will see, Isserlin's work towards an autonomous discipline of *Heilpädagogik*, as well as his understanding and treatment of psychopathy, reveal peculiar forms of articulating many of the different approaches presented so far, including those of future Nazi doctors in Munich and those of the more progressive Berlin reformers.

[255] Among these were the Heckscher Clinic, which had both *Heilpädagogik* workshops for brain injured and later also for children with mental and developmental disturbances (see previous chapter).

III. *Heilpädagogik* as a Medico-Pedagogic Specialty in Munich in the Early 1920s

Whereas the Berlin pedagogues had oriented child psychopathology towards social pedagogy within welfare and had made no efforts to decouple *Heilpädagogik* from general pedagogy, in Munich the intentions were to expand *Heilpädagogik* beyond welfare and special needs classrooms to create an applied medical discipline. At the head of these plans and negotiations were the special needs teacher Rupert Egenberger and the psychiatrist Max Isserlin. They demanded a *Professur* for the discipline and an autonomous curricula, as well as appropriate specialised infrastructure for practice and instruction. Although they ultimately failed to create a new discipline, they did manage to launch a unique study program for *Heilpädagogik* within higher education. This would be the first and only time an attempt at creating a medico-pedagogic discipline around child deviance and child psychopathology was attempted in Germany prior the 1970s, when special needs education finally became a profession in its own right. Back in 1902, Egenberger had become the first special needs teacher in Munich. Later, like many other special needs teachers, he collaborated intensively with Isserlin in the restitution of soldiers with head-wounds during the war. By the end of the war he established the Bavarian Association of Special Needs Teachers. There, echoing Heller, Egenberger was determined to expand *Heilpädagogik* beyond traditional special needs education and beyond the welfare classroom. These were not just professional aspirations. He strongly believed that fighting off moral and biological degeneration depended on the formation of a new discipline (Hänsel 2014 pp. 40ff; Martinius 2011 pp. 69-71).[256]

Egenberger's arguments were fully substantiated by the precepts and concerns of late nineteenth century and early twentieth century racial hygiene. Thus, he considered that only through *Heilpädagogik* an answer to the fundamental question 'of whether the *Volk* is still bodily and mentally healthy' or whether 'it had already fallen victim of degeneration' (quoted in Hänsel 2014 p. 43) could be answered. Evidently, for him *Heilpädagogik* had very little to do with concerns over education for the sake of the future of individual children and their families. Rather, it was for the sake of the collective that *Heilpädagogik* acquired significance:

> When already hundreds of thousand degenerates and inferiors are among our people, it is so that, since the inferiors *could not be just simply removed*[257] there is only left the possibility of fighting off the consequences of their infestation through educational-therapeutic measures (quoted in Hänsel 2014 p. 46).

[256] At the same time, the special needs teacher Arno Fuchs was developing plans to institutionalise Heilpädagogik in Berlin. His conception of Heilpädaogik, contrary to that of Egenberger and Isserlin, was based on socio-pedagogic, not medical principles (see Hänsel 2014 pp. 51ff).
[257] My italics.

Isserlin agreed with Egenberger on the fact that psychopathic inferiority and constitutional deviance were incurable and that prophylaxis was of the outmost importance. However, contrary to Egenberger (increasingly in the 1920s), he never promoted negative eugenic ideals. Moreover, among the 'inferiors' who a *Heilpädagogik* needed to first identify were for Egenberger 'the bodily, mentally and morally disabled, the feeble-minded, the lazy, the antisocial and criminal, as well as the neurotic and the mentally ill' (quoted in Hänsel 2014 pp. 43-44), whereas for Isserlin the school-patient had a much narrower profile. Yet, generally speaking, Munich educational therapists and psychiatrists approach to *Heilpädagogik* – contrary to the social pedagogy of Berlin – was meant to 'cover the whole spectrum of human anomaly and deviance' (Hänsel 2014 p. 45). According to both Egenberger and Isserlin – and this was the ultimate motivation behind their institutional aspirations – research in *Heilpädagogik* needed to focus first on creating a system of classification which could help distinguish people with inherited inferiority from cases of acquired degeneracy. Only after a reliable system of classification had been achieved, they argued, could educational measures be correctly applied to individuals. Isserlin had been managing to apply *Heilpädagogik* to brain-injured patients precisely because 'central disturbances' had been to some detail sufficiently differentiated. This was largely missing with defective children and inferior people.

After failing to convince the Bavarian Ministry of Culture and the Munich Association of Special Needs Teachers of their plans, Egenberger created with Isserlin the Society for Heilpädagogik in 1922 with the purpose of finding ways to materialise the expansion of the medico-pedagogic discipline (Hänsel 2014 p. 43). However, Isserlin had substantial disagreements with Egenberger and other Munich eugenicists who participated enthusiastically in the five congresses organised by the Society during the 1920s. Perhaps the most significant difference was that Isserlin did not consider all mentally disabled (including neurotics) to be degenerates. Among those who disagreed with him on this were future Nazi consultants such as Rüdin, Werner Villinger, Paul Schröder, and Hans Heinze. Yet, on the other hand, important rehabilitation-oriented special needs educators such as Heinrich Hanselmann and Gustav Lesenmann were also actively engaged in the meetings of the Society, thus providing certain diversity and balance of approaches that allowed Isserlin to establish his own route.

Isserlin was in charge of the inaugural speeches at the first (1922) and second (1924) congresses of the society. He started the first speech by stating that '[t]here is no need for lengthy discussions on the fact that we are in need of close collaboration between psychiatry and *Heilpädagogik* and that both need each other in theory as well as in practice' (1922a p. 1).[258] There was no question in the mind of any attendee that psychiatry, psychotherapy and *Heilpädagogik* were subdisciplines of the major enterprise of Weimar racial hygiene. Nevertheless, Isserlin was convinced that the psychiatrist, not the pedagogue,

[258] For the remainder of this chapter, I will spare us Isserlin's name in the reference.

needed to indicate when a given abnormality should be treated with *Heilpädagogik* since 'it was only the psychiatrist's incumbency (*Obliegen*) to prescribe in what ways are pedagogical measures going to help the particular individuality [of the pupil]' (1922a pp. 5; 10). In other words, Heilpädagogik was in a very significant way – and echoing Heller –, 'applied psychopathology' (1922a p. 5; 1924b p. 365). Thus, contrary to pathological pedagogues such as Strümpell and Trüper, Isserlin could not conceive a *Heilpädagogik* that was not rooted in medicine. It was 'a danger', he claimed, 'to agree with the explanations of Strümpell' in this regard. *Heilpädagogik* was a pedagogic discipline only in the form of a 'medically interstratified pedagogy' (*eine von Medizin durchsetzte Pädagogik*) (1924b p. 369).

Moreover, Isserlin explained that in no way did he pretend to 'absorb' in his broad concept of *Heilpädagogik* all the knowledge gained by special needs teachers. For example, the teacher of the deaf-mute would retain autonomy with regard to their expertise, which was applicable only to the deaf-mute. Isserlin wanted 'a disciplinary platform for collaboration' for the increasing variety of special needs cases, not the complete standardisation of the latter. In order to substantiate his claims at the congresses, Isserlin made reference to the important transfers of knowledge that he and his team were carrying out at their welfare clinic (soon to be Heckscher Clinic). The application of techniques used by special needs teachers to the rehabilitation of brain injured soldiers with circumscribed brain damage had begun to prove successful by 1922. This experience had clearly suggested that also the education of psychopaths, of moderate feeble-mindedness, of deaf-mute and of many other types of deviance and deficiencies should not carry on without a basic 'shared proficiency in psychopathology' (Isserlin 1922a p. 6; 1924b p. 365). Thus, Isserlin conceived *Heilpädagogik* not as a concrete method or therapy, but as collaborative academic platform supervised by psychiatrists.

Immediately following the first congress, Egenberger and Isserlin initiated a degree program of Heilpädagogik in Germany ,'which consisted in a first attempt to show the way forward' in the institutional implementation of such collaboration (1924b p. 370). Their goal was to achieve a standardised nation-wide instruction of educational therapists within higher education As Hänsel (2014 p. 46) explains, this was also meant to replace the current on-the-job training for special needs that only lasted a few weeks. Isserlin and Egenberger claimed to have modelled the instruction on programs which had been recently implemented in Russia and Switzerland. The program lasted three years, and the student took 'modules with concentric courses, so that while never losing connection with the common principles, they could always learn from special cases'. Those common principles came from psychopathology. The modules were led by psychiatrists, special needs teachers (most working with Isserlin on restitution of brain injury) and experts on mental hygiene from the Society of Heilpädagogik. Among the module leaders were Isserlin and the special needs teachers that had worked alongside him in the rehabilitation of head injuries during and after the war, such as Hans Göpfert and Aloys Schubeck, but also eugenicists like Rüdin (Hänsel 2014 pp. 41; 47), which shows that Isserlin, contrary to his

relative autonomy in the welfare clinic for war victims, had to make concessions in his institutional aspirations with *Heilpädagogik*. Moreover, the courses took place in the philosophical and medical faculties of the university, in schools, and in welfare centres. It was also established that the *Heilpädagogik* apprentice received, after completion of the first year of study, the degree of 'practical educator'; after the second, the title 'educator of defective children'; and after the final year, that of 'supervisor and instructor of specialised institutions for defective children' (1924b p. 372). At the beginning, the prerequisites for eligibility to the program had been a title in education and experience teaching in primary school (*Volksschule*). In 1922, the students who enrolled were thus mainly pedagogues. The program of study seemed to have had some success only a year after its inauguration. For example, one of the students of the course explained in one report that 'it has been of great educational and scientific value to have understood the psychological disturbances and deficits in the brain injured, many of which are essentially related to special needs children' (quoted in Hänsel 2014 p. 47).

There were also courses on normal psychology, because 'normal psychology is as indispensable for *Heilpädagogik* as physiology is for medicine of the body'. Doctors and psychologists could not simply transition into *Heilpädagogik*, 'the same way there could not be a direct transition from chemistry, physiology, etc, to the patient's bed (*Krankbett*)' (Isserlin 1924b p. 366). In other words, doctors and psychologists could not practice *Heilpädagogik* without receiving the new degree, because they lacked the practical knowledge accumulated by special needs teachers as much as these lacked clinical and psychopathological knowledge. Thus, to the question who required instruction in *Heilpädagogik*, Isserlin argued that, apart from traditional special needs teachers and psychopath carers, the degree ought to be completed also by

> doctors who take direct part in Heilpädagogik; in second line, doctors who are not directly engaged in Heilpädagogik but who in principle might have contact with it; pastors (*Seelsorger*) (if they are not educators already), social workers, foster parents and guardians (*Berufsvormünder*), magistrates, superior police officers and prison officers…nurses and carers (Isserlin 1924 p. 371).

It is evident that social psychiatry in Munich not only brought about the pathologising of social problems, but it also projected styles of thinking from psychopathology into other previously unrelated occupations.

At the second congress in 1924, which took place during the third year of the pilot study program, Isserlin maintained that the next step would consist of creating 'educational therapy institutions (*heilpädagogische Anstalten*)' because universities did not have the appropriate infrastructure (1924b p. 367). At the same time, Isserlin recognised that the situation of the country in terms of public funds

was not good enough to immediately create educational therapy faculties. Hence, there was the need to consider whether autonomy in terms of instruction for educational therapists could be achieved within the medical and the philosophical faculties (1924b p. 370).

These efforts notwithstanding, Isserlin ultimately failed in his institutional project. The three year course would never be repeated. Isserlin's collaborators grew rapidly impatient with costly and long-term rehabilitation as a solution to the epidemic of nerves and degeneration, and the Society of Heilpädagogik turned into a much more intensive cooperation with the racial hygiene societies of Munich. Already by the congress of 1924, Isserlin admitted that, due to a lack of support, he 'will probably need to postpone the plans for the establishment of a research institution for *Heilpädgogik*, and the hopes for university chairs and an institute for specialised instruction will be limited to a more modest plan…' (1924b p. 374). Isserlin left the society behind and – as described in the previous chapter – focused on the creation of the Heckscher Clinic. Nevertheless, Isserlin's concerns with psychopathic inferiorities and pedagogic-hygienic measures to deal with them remained central in his work.

Indeed, parallel to the attempts to academise *Heilpädagogik*, Isserlin had been accumulating a great deal of experience in psychotherapeutic practice at the university psychiatric clinic, as well as from teaching about psychotherapeutic methods in the medical faculty. Like Heilpädagogik, Isserlin maintained, psychotherapy was 'a discipline that treats, influences, [and] supports abnormal personalities' (1922a p. 1). Indeed, in many passages of Isserlin's publications during the 1920s, psychotherapy and Heilpädagogik (also *Heilerziehung*) were described in very similar terms. This was due to the fact that both would ultimately aim at 'educating' children and adults so as to 'make of them capable and ethically useful individuals' (1922a p. 1). Health and education went hand in hand: they both sought the generation of personal autonomy, self-sufficiency and self-control. In addition, they ultimately aimed at giving to the person the 'capabilities' (*Können*) and the 'knowledge' (*Wissen*) that they were naturally supposed to have in order to participate 'in the activity of the collective' (1922a p. 1). In other words, psychotherapy and *Heilpädagogik* were only different *forms of mental hygiene*. They both needed to be implemented, Isserlin maintained, in order to fight off the epidemics of biological and moral degeneration.

However, despite their common goal, there were considerable differences between these activities. The most obvious being the type of patient they treated. *Heilpädagogik* dealt with alternative pedagogical methods directed at 'schooling-patients' (*Heilzöglinge*) with mental disabilities, sense defects, and antisocial behaviour. Psychotherapy, in contrast, treated 'mild' mental illnesses, that is, the 'psychoneuroses', and aimed first at 'removing those morbid symptoms' coming from 'the emotional and volitional spheres of the personality'. Moreover, Isserlin clarified that 'no matter how many

pedagogical principles it tried to incorporate, psychotherapy will always remain "a medical intervention" (*Heilbehandlung*)' because 'at the centre stand more or less acute morbid symptoms'.

> In contrast, the pedagogue, and specially the educational therapist (*Heilpädagoge*) needs to set general and educational goals so as to make [of the person] a moral, capable, empowered, and intelligent adult in accordance with their individual case of pathological deviance (*pathologische Abartung*) (1926 pp. 177-178).

Moreover, whereas '[t]he doctor aims at cracking (*brechen*) the power of abnormal phenomena', the pedagogue's aspiration 'should always be to provide the person entrusted the feeling of autonomy of action and sense of duty' (1926 p. 178). That being said, removing symptoms and educating personalities were essentially interwoven practices.

Nevertheless, precisely because of these differences, Isserlin believed it to be of the upmost importance that the psychotherapist learnt from the pedagogue. He welcomed the fact that *Heilpädagogik* 'was clearly affecting certain areas of psychopathology with its pedagogical principles' (1922a p. 10). Indeed, at early stages of intervention, psychotherapy would only help remove morbid symptoms, and hence, constituted initially a negative practice. Later on, however, the psychotherapist should turn to a more pedagogical practice. Thus, 'certainly, once the compulsion is cracked, the doctor would have the opportunity to prioritise activities that involve establishing in the personality [of the patient] the feeling of personal autonomy' (1922a p. 9). Here, the experience of pedagogues was of the essence. These had been, from the outset, trained to *create* capable and moral individuals for the public good. Moreover, and conversely, pedagogues would also 'consciously or unconsciously' make use of suggestive techniques used by psychotherapists. Sometimes Isserlin admitted 'that there is really no clear differences' between *Heilpadagogik* and psychotherapy and that 'the activity of the doctor, depending on the circumstances, would be educational and the activity of the pedagogue remedial' (1922a p. 10). As I will show, the great intersections of moral education and psychological therapy were embodied in Isserlin's treatment of psychogenic and psychopathic neurotic conditions in both children and adults as presented in his book on psychotherapeutic methods of 1926.

To summarise Isserlin's position within the larger discussion, up to this point, it can be established that he followed the tradition of Heller and was in favour of a medically-based *Heilpädagogik*. With him, the project initiated by Koch and Strümpell of integrating children into psychopathology adopted a more ambitious character by the end of the nineteenth century, gaining significant momentum in Munich. Moreover, he also took for granted the existence of inferior psychopaths, both children and adults, and perpetuated the feeling of urgency of comprehensive hygienic measures to counteract their proliferation. Despite the fact that his institutional aspiration did not materialise in the long run, he did not abandon his broader projects of mental hygiene.

IV. Isserlin on Psychopathic Inferiorities and the Possibilities of Psychotherapy in 1926

A rationale for psychotherapy

One of the conditions of possibility for psychotherapy was set by Isserlin in the distinction between 'severe mental illness' (*schwere geistige Erkrankung/Geistesstörung*) and 'mild mental illness' (*leichte seelische Erkrankung*). The latter were all mere 'morbid conditions' (*krankhafte Zustände*), pathological occurrences of 'the emotional and volitional spheres of mental life.' The former, in contrast were 'disease processes' (*Krankheitseinheiten*), which followed their own courses of illness, as was also the case with other organic nervous disturbances, such as epilepsy. In the case of severe mental illness – which included manic-depressive illness, dementia praecox and other psychoses – Isserlin was therapeutically pessimistic, because psychotherapy as a form of 'external influencing' could never 'gain direct access into the course of action of a morbid process' (1926 p. 148). In common with the majority of late nineteenth century German psychiatrists, Isserlin considered institutionalisation as the only available resource in cases of severe mental illness; clinical and experimental psychology, as well as neuropathology, had still a long way to go for these circumstances to change. In contrast, mild forms of mental illness, also referred to by Isserlin as the 'psychoneuroses', depending on their aetiology, could be suitable for psychological influencing.

According to Isserlin, the psychoneuroses could be classified in seven main types: obsessive compulsions, hysteria, severe anxiety, tics, sexual perversions (including homosexuality and onanism), panic attacks, and phobias. These mild forms of mental illness could take transitory hold of anyone, including 'healthy' and 'normal people'. In fact, the neuroses were so common precisely because they manifested themselves 'almost within the limits of normalcy' (1926 p. 185). Moreover, depending on their aetiology and their degree of presence in the personality, these forms of psychoneuroses could be divided into three main kinds. First, a kind of neurosis emerged from the interaction of mentally healthy people with a difficult environment (*Milieufälle*). These were the 'psychogenic neuroses'. In such cases, a 'methodical and systematic psychological influencing (*planmässige seelische Beeinflussung*)' could 'remove the morbid mental phenomena' (*Beseitigung krankhafter seelischer Erscheinungen*) (1926 p.1). Accordingly, when the influencing proved to be effective, the psychotherapist – Isserlin further explained – 'generated mental health' (*Herstellung psychischer Gesundheit*) in the patient (1926 pp. 3-4). Second, there was a kind of neuroses that was product or concomitant of a severe mental or neurological illness. In such cases, not only the illness, but also the neurotic by-products remained out

of reach for psychotherapists. Thus, for example, whereas psychogenic panic attacks were treatable, panic attacks that accompanied delusions and hallucinations proper of psychotics were not. When it came to the applicability of psychotherapeutic influencing, these first two kinds of psychoneuroses were for Isserlin unproblematic: in the case of psychogenic neuroses, the person was treatable and health could be expected as outcome; by contrast, in the concomitant neurotic symptoms, hopelessness was the norm. It was the third kind of psychoneurosis that was problematic, because there the source of the disturbances were psychopathic pre-dispositions (*Anlagefälle*). Here, sooner or later, a particular event in life would only awake a dormant weakness of the personality, a pre-set tendency towards neurotic symptoms, which, even though did not amount to mental illness, could not be cured by psychotherapy. In contrast to mental illness, however, psychotherapy did have work to do with regard to neuroses based on psychopathic predispositions. Taking into account that Isserlin was convinced that the psychoneuroses of the first and third type could be infectious, and that 'inferior people precisely spread such infections to the rest of the population' (1926 p. 5), it does not come as a surprise that Isserlin ultimately understood psychotherapy, when it came to this third type of neuroses, as a prophylactic practice.

Isserlin was original when it came to classifying types of psychopathic inferiority. As he saw things, there could be ethical or social inferiority (*sittliche und soziale Minderwertigkeit*), which needed to be distinguished from inferiority in a biological sense (*biologische Minderwetigkeit*). He explained that some biologically inferior psychopaths could in fact be 'ethically sound people', who were 'psychopaths' nonetheless due to the 'development of neuropsychological anomalies in their emotional and volitional lives' (1926 p. 4). The neurotics with psychopathic inferiority fell under this category. Thus, for Isserlin – contrary to most of his colleagues – only a portion of neurotic psychopaths exhibited social or ethical inferiority (see chapter 3). So for example, an obsessive-compulsive or a hysteric could have a biologically inferior constitution without being therefore socially or ethically inferior persons. On the other hand, however, as pointed out above, not all claustrophobics or hysterics were psychopathically inferior; plenty of 'normal' people could present neurotic conditions. Only some psychopaths exhibited both biological and social/ethical inferiority. Finally, all ethically inferior were *de facto* also biologically inferior, without therefore meaning that, say, all criminals were psychopaths. These differentiations acquired relevance for the question of what psychotherapeutic treatment was the most suitable for a given individual case. When they were not widespread in the personality – as was mostly the case of small children – ethical and social inferiority, could be addressed by *Heilpädagogik* with varying degrees of success. However, psychotherapy was here of no use for Isserlin. Only biological inferiority, inasmuch it manifested itself in psychoneurotic symptoms, could be subjected to psychotherapeutic treatment (1926 pp. 5-6).

However, psychotherapeutic methods could not remove the psychopathic inferiority from the patient. This could only be, to some extent, 'corrected', 'adjusted', 'evened out', 'compensated', and 'straightened up' by the therapist. Consequently, Isserlin warned psychotherapists about the limits of their practice: in cases of psychopathy, he claimed, psychotherapy 'must remain orthopaedic' (1926 pp. 6; 186). Orthopaedic corrections and compensations certainly fell short from 'generating mental health' in individual sufferers. The idea of psychotherapy as orthopaedic treatment of neuroses in the inferior psychopath comes across as a rather modest medical practice: the same way that implanting a prothesis to replace an amputated leg does not heal the amputated leg, in Isserlin's descriptions the psychotherapist could never gain access to the personality of the psychopathic inferior in order to alter it. Rather, assuming the chronicity of the constitutional inferiority, the therapist helped setting the patient free only from the burden of some of its manifestations, such as compulsions, obsessions, fatigue, restlessness and so on. Nevertheless, psychopathic inferiors would always be trapped in the limbo between mental health and mental illness.

A correct implementation of psychotherapeutic methods and techniques in the treatment of neuroses in psychopathic inferiors aimed not at curing them, but at making them *fit enough to work* and contribute to the welfare of the collective. In fact, as Isserlin put it, psychotherapy in this case was nothing but part of the endeavour of 'making socially useless and uncultivated existences fit for economical utilisation' and 'social usability' (*soziale Brauchbarkeit*) (1926 pp. 6; 148; 158; 167; 194). In short, Isserlin's idea of psychotherapy, whether dealing with psychopathic neurotics or not, aimed at safeguarding the collective's health from the dangers brought about by dysfunctional, 'useless' elements. Clearly, Isserlin's rationale for psychotherapy in this regard was the same that Egenberger and other Munich eugenicists at the time deployed in the promotion of *Heilpädagogik*. Contrary to many working close to him, however, Isserlin did not forget about the individual sufferer. Thus, psychotherapists could indeed 'make the burden of existence a bit more tolerable' for those biologically inferior neurotics who, despite their abnormal mental constitution, were 'still valuable people (*nicht weniger wertvolle Menschen*)', that is, 'ethically healthy' individuals. Yet, it was only 'along the way' (*nebenbei*) that psychotherapy helped such individuals. Psychotherapy first aimed at giving back to psychopathic inferiors their ability to meet 'their supra individual demands' (*überindividuelle Forderungen*) so as to make them fit to play their part as an element of an organic collective (1926 p. 4), only then did it care about the patient. Isserlin constantly equated mental health with social utility.

Given the epidemics of degeneracy triggered by the war, Isserlin explained that psychotherapy had become in the 1920s, 'for the most part, prophylaxis (*Vorbeugung*)' of psychoneurotic manifestations of inferiority (1926 p. 5). Therefore, a psychotherapist, while meddling with an *individual's past and present mental states*, was nonetheless caring for, in a pre-emptive manner, *the future of society*.

Educational psychotherapeutic methods and the psychoneuroses

Isserlin placed great importance in the role of hypnosis for the removal of morbid mental symptoms. However, he clarified that hypnotherapy and suggestive methods in general could never effect a change in the foundations of the personality; 'this is why nowadays hypnotherapy is rarely used in hysteric types and other general psychopathies' (1926 p. 69). Hypnosis was useful only 'in neurosis which do not emerge from the roots of the personality', such as the psychogenic neuroses. These 'simple neuroses', namely, 'depressive mood, obsessive thinking and compulsive tendencies, insomnia, heart aches, intestinal and stomach disturbances' and many other 'morbid tendencies of the mild-type can gain much from hypnosis'. By contrast, Isserlin emphatically advised against the use of hypnosis in severe cases of mental illness, 'because it stimulates the fixation of recurrent psychotic events' (1926 p. 69).

Cases of neuroses in psychopathic personalities were different. Here, the most crucial therapeutic approach was that of 'a systematic educational therapy' (1926 p. 72). Isserlin discussed at length many of the available practices subsumed under 'this basic notion, which does not amount to this or that particular method'. Among the most discussed by him were those that fell under the category of 'persuasion' (*Überzeugung/Belehrung*), practiced by various late nineteenth and early twentieth century therapists. Among them were the French psychiatrist Paul C. Dubois (1848-1918) and the neurologist Joseph J. Dejerine (1849-1917). Hypnosis was particularly scorned by them due to its alleged habituation of 'autosuggestibility', which allegedly only intensified the morbidity it was supposed to remove in the first place. In fact, they demanded 'no irrational moment' in psychotherapeutic treatments. Persuasive measures, in contrast, could amount to a purely 'rational therapy'. And rationality and knowledge was precisely what Dubois and Dejerine considered could remove neurotic symptoms, because neurosis was to be understood as the product of 'defective understanding and thought processes'. Contrary to hypnotic practices, these doctors thought that persuasion enabled the therapist 'access to the nature of the illness' (1926 p. 76).

With hypnosis and suggestive methods, there would be, according to Dubois, 'always something manipulative and purposely dishonest in play, even when the psychotherapist has good intentions…'. In contrast, 'with persuasion, the idea is to make the sufferer clear what one [the therapist] already sees clearly; to teach a perspective, that one himself already possesses' (quoted in 1926 p. 75). Dubois understood rationality as always overseeing emotional life; emotional control was only reached through understanding. As Isserlin put it, for Dubois – and ultimately also for Dejerine – 'the sun of reason has the power to illuminate everything; the shadows of morbidity abscond from it' (1926 p. 76). But Isserlin

accused the French psychotherapists of overstating the intellectual moments in the processes of persuasion. As he saw things, persuasion had positive effects not just because it addressed a faulty intellect or a confused cognition, but primarily because it created a sympathetic relationship between doctor and patient. Indeed, 'people who seek medical aid rarely want to be persuaded; rather, they only want to break free from their morbid symptoms, and it is evident that it is the conversation with the doctor, not the persuasion, what has a positive effect' on them. Moreover, Isserlin explained that 'even though the intellect was being targeted, it was the affectivity that was being influenced'. For him the psychoneuroses were disturbances of the emotional life, of the *Affekt*, and thus, most of the time no amount of logical thinking could correct them (1926 p. 155). Undoubtedly, moreover, there was 'plenty of irrationality and subjectivity' in any form of persuasion (1926 p. 82).[259]

And yet, Isserlin agreed with Dubois on the usefulness of persuasion for a variety of mild neurotic symptoms. Once Dubois' psychotherapy was disconnected from the author's intellectualistic one-sidedness and was not considered as a particularly generalisable method, the persuasive procedures were recommended by Isserlin, for instance, in 'clarifying and illustrating the patient that their physical complaints are psychogenic', or in 'convincing them about the real possibility that their psychological complaints could be corrected, and allowing them to understand that a substantial factor in the existence of their symptoms could be traced back to some misperceptions and errors of thought' (1926 p. 79).[260]

For example, Isserlin provided Dubois' case of 'Herr X', a 40 year old neurasthenic, who had always suffered from mild fatigue, dyspepsia, insomnia and showed depressive tendencies. The biggest complaint was, however, that he was over-sensitive to noise. The situation became so critical that he could not go out into the street and work. Thus, to Dubois' question as to why he could not regulate the over-perception of noise, the patient replied: 'but that escapes to my control; my auditive nerves are abnormally sensitive'. Dubois persuasive rebuttal went as follows:

[259] Even though Dejerine, contrary to Dubois, praised the value of the emotional connection and the trust relationship that emerged between therapist and patient in persuasion, according to Isserlin, he 'still carried forward a methodical rationalistic project of psychotherapy' (1926 p. 77).
[260] For a recent discussion of the dialectical therapy of Dubois, see Linden and Jones (2013) and Macloed (2018).

> There you are mistaken. Your hearing acuity is normal. It is your mind, not your ears, what is oversensitive. Noises get a hold of you the way they do because you have convinced yourself that you are unable to tolerate them. Believe me, one notices what it is heard only when one listens to it (for example, you tell me you are used to count the strikes of hammers)…one perceives what is provided by the senses only when one directs their attention to them. Of course, with intensive noise and with blinding light, our attention is quickly fixated; by no means I would demand from you not to jump with fright if a bomb detonates close to you. But the noises of everyday life are unescapable, and we need to know how to ignore them. The problem with the neurasthenic is their difficulty to adapt. So, tell yourself: I won't pay attention to the noises; they do not exceed the amount of what is bearable (1926 p. 80).

After three days of intensive 'dialectical therapy', the particular symptom of oversensitivity to noise disappeared. As Isserlin explained, however, the neurasthenic was no less neurasthenic once the symptom disappeared. Persuasion could not alter the personality. Yet Isserlin encouraged psychotherapists to use persuasive techniques when appropriate, and, contrary to Dubois, prescribed it in combination with hypnosis.

There was, however, a set of educational approaches particularly favoured by Isserlin, namely, will therapy (*Willenstherapie*) and occupational therapy (*Arbeitstherapie*). Will therapy was being promoted, among others, by Otto Rank (1884–1939), an analyst highly praised by Isserlin.[261] This consisted of 'systematic exercises intended to improve comprehension and resolute control of both inner and outer actions'. The patient was trained to recognise that their emotions, thought and behaviours could be deliberately regulated by them. It was crucial, first, regardless of the type of person, to make them comply to a daily routine and a structured way of living. Then, 'little by little, by engaging the patient in easy tasks, a feeling of capability and security could be awaken' in them, something of the essence in many cases of neuroses presenting anomalies in the 'volitional sphere of mental life' (p. 85), such as in cases of neurasthenic exhaustion, insomnia, tics, and compulsions. Isserlin found particularly instructive the techniques developed by Oppenhiem loosely referred to as 'will gymnastics' (*Willensgymnastik*). These could be implemented once the patient had acquired certain daily routine. Oppenheim's technique was particularly welcomed. He had recently developed a 'thinking gymnastics' (*Denkgymnastik*), whereby doctor and patient engaged in untying certain internalised reproductive chains of thought. So for example, Oppenheim would first ask his neurotic patients to arbitrarily interrupt the internal enumeration of the days of the week and numbers, or the recitation of verses and prayers they knew from memory, and then provide them with an immediate distraction, forcing their

[261] Rank defended the theory (later called Rankian therapy) that neuroses can be avoided or overcome by asserting the will (or 'counter-will') and by achieving independence.

attention away from the chain. These procedures were proving effective in inducing in patients the sedimentation of mechanisms of control of 'the morbid impulse to think forward' (p. 86).[262]

The psychotherapeutic practices Isserlin most commonly recommended for almost all forms of neurosis were those involving occupational therapy. According to him, setting up artificial workstations that released the patient from the challenges of normal work-life (for instance, social relations) and that distracted them from morbid thoughts, were the best way to remove neurotic symptoms in neurotic psychopaths. Carpentry and gardening had proven to be particularly fruitful settings (see chapter 3). Patients there – most of whom had worked in fabrics or had other monotonous occupations – could have the chance of generating the entirety of a tangible product, which, in combination with the motoric and muscular energy invested, seemed to eventually bring about labour mind-sets based on accomplishment, usefulness and purposefulness, as well as strengthening the will. Such occupations were meant to be regulated and supervised by the therapist. As Isserlin explained, daily work distribution, breaks, rest and sleep, sport and leisure, and even spiritual activities were meant to sustain occupational therapy of any kind, so as to direct 'the economic utilisation' of the patients' mental and physical energy towards the overcoming of neurotic symptoms (pp. 88-89).[263]

Treating the psychogenic and psychopathic psychoneuroses

A problem the doctrine of psychoanalysis shared with the persuasive approaches of Dubois and Dejerine was that they all attempted the removal of neurotic symptoms by reaching into either the depths of the personality, or into the nature of morbid processes. In Isserlin's experience, these approaches had 'revealed the limits of psychotherapy'. Neither the nature of mental illnesses nor the depths of the personality were accessible to the psychotherapist. Instead, Isserlin urged his readers, first, 'not to look too much for the personality in neurosis'; second, to identify them where they were mere concomitant symptoms of 'real' mental illnesses, which were untreatable; then, distinguish whether they were psychogenic or psychopathic, and finally, chose an appropriate combination of existing psychotherapeutic methods to treat them (1926 p. 159).

[262] Another promising technique in Oppenheim's repertoire was being used in the treatment of tics, by simply putting the patient in front of the mirror and teaching them to carry out normal movements without the involuntary ones. Eventually, patients would start thinking of all movements as more voluntary than involuntary.

[263] The problem with this psychotherapeutic approach, Isserlin explained, was that more traditional psychiatric and medical institutions did not have the facilities to implement it in any systematic way (1926 p. 89).

The importance of these differentiations and prescriptions could be seen, for example in the depressive conditions (*Verstimmungszustände*). These could emerge as either 'endogenous' or 'reactive'. Then, if it was a case of endogenous (also organic) depression, the condition should be placed in one of two subcategories, namely 'epileptic' or 'cyclothymic' (meaning manic-depressive). However, if the depressive condition was 'reactive', that is, if it was triggered by an environmental event (commonly referred to in the psychiatric literature of the time as 'functional'), it could be further divided into 'psychogenic' or 'psychopathic' depression. A psychopathic depression did not emerge in the development of the neurotic personality the same way it emerged in the mind of a manic-depressive. For the latter, the development was set deterministically; manic and depressive moods were unavoidable. In the case of depression as a psychopathic manifestation, by contrast, particular life experiences triggered an already weak pre-disposition of character. On the other hand, cases of psychogenic depressive reactions were quite common in people with normal constitutions, and thus, could be successfully treated. Psychogenic depression could be caused by a difficult life event, such as relationship breakdown or bereavement. In psychopathic depression, by contrast, it was the personality's constitutional weakness which rendered the individual prone to depressive conditions (1926 p. 164). Here, psychotherapy could not do much for the epileptic, nor for the manic depressed. In the case of the former, only the application 'of calming psychotherapeutic measures', such as sedatives, was considered effective. In the case of the latter, since it presented a concomitant morbidity of severe mental disorder, '[psychotherapeutic] efforts are also of a merely palliative and symptomatic value, because the cyclical phase takes its own natural course, and thus cannot be influenced by psychotherapy'. Thus, psychotherapy could be used 'only on the very mild, non-suicidal forms of cyclical depression', mostly by 're-establishing the capacity to work' in the sufferer which could 'make their subjective states more bearable' (1926 p. 161).

Together with 'a careful combination' of occupational therapy, hypnosis and sedative medication, Isserlin placed special importance on 'talking cures' for depression, including persuasion and analysis, because 'in these cases it was evident that the patient needed to open up and communicate (*sich eröffnen und sich mittzuteilen*)'. In particular, any treatment for psychogenic and constitutional depression 'needs to put great emphasis on the uplifting of self-confidence and the fighting-off of feelings of inferiority' (1926 p. 162).

Cases of phobias and obsessive compulsions (*Zwangszustände*) were somewhat different. Here, 'the fundamentally pathological' revealed itself in the fact that even though patients were fully aware 'of the insufficiency of the factual to justify the fear', such awareness could not hinder the neurotic mechanism. 'In fact, – Isserlin explained – the motiveless and nonsensical [character] of the event intensifies the fear and adds to it the horror of the possibility of [having] a mental disturbance (*Geistesstörung*)'; that is, fear from being actually insane. In phobias and obsessive compulsions,

talking cures would be of no real use. Indeed, in such cases, 'appealing to the healthy human understanding and the will is pointless' because '[these] patients do not lack awareness of their conditions and precisely such awareness of the non-sensical becomes a huge source of suffering' (1926 p. 154).

As in any other type of neuroses, in order to treat obsessive conditions and phobias it was crucial, first of all, to play close attention to the individual patient and determine whether the obsessions and fears were transitory, or whether they were manifestations of a psychopathic inferiority or concomitant symptoms of mental illness. In cases of mentally healthy individuals suffering from psychogenic obsessive conditions or phobias, it was necessary to avoid any intellectualistic approach and 'target the centre of the disturbance, which is to be found in emotions (*Affekt*)'. Psychotherapy here was all about giving the person back 'their natural self-confidence (*natürtliche Sicherheit*), which had been lost, and which is causing the obsession to grow in power…' In contrast, in cases of 'constitutional-psychopathic forms of obsessive conditions' – somewhere between health and illness – even though the symptomology was 'quite analogous' to psychogenic cases, a significant difference was given by the fact that 'here we deal with personalities who have a predisposed tendency to inner infirmity (*innere Hinfälligkeit*)' (1926 p. 156).[264] Isserlin's general psychotherapeutic prescriptions for these cases went across-the-board. He explained that

> there are mild forms which could be well treated by using talking therapy and persuasion (*Belehrung*), a well-thought mental hygiene[265], distractions, including eventually work-therapy… Regarding the treatment of difficult cases, there is the need for a few further considerations. Medication is in many instances not to be discarded. Together with Bromalkali and Bromural, Diogenal and Abasin can be used recurrently without risking any harm. Mild hydrotherapy works well in severe cases of fear. It must be urgently advised against the use of opioids because, even though they calm the person, their effect is only transitory and becomes addictive. The most important therapeutic measure is suggestion, especially hypnotic. This will give back the patient their lost inner confidence (1926 pp. 156-157).

Nevertheless, Isserlin repeatedly claimed that 'the most important remedy (*Heilmittel*) for the obsessive neurotic, actually for any neurotic' was one that is not even provided directly by psychotherapy, namely 'professional life' (*Berufstätigkeit*). Thus, as with his brain injured patients (see chapters 4-5), the most important means of fighting off neurotic conditions were given by employment. Since many phobic and obsessive compulsive psychopathic inferiors could not hold a job, it was necessary to provide artificial

[264] Isserlin explained how easy it was, 'due to their cyclical fluctuations', to confuse obsessive-neurosis actually caused by psychopathic inferiority with concomitant symptoms of manic depressive illnesses (1926 p. 156).

[265] Mental hygiene is here used in a narrow sense, as including good sleep, a structured day, and healthy food.

work-settings for them. Moreover, even though Isserlin could prescribe 'talking therapy' for these conditions, he warned against the use of *analytic* therapy for the treatment of compulsions, obsessions, and phobias, regardless of whether they were caused by a psychopathic predisposition or not. Psychoanalytic therapy would ask the patient to look into the depths of their inner self for traces of traumatic events. However, 'particularly for the obsessive neurotic, an excessive occupation with inner life does not constitute a remedy, but it is instead damaging poison…' In fact, the exact opposite was required: the patients with obsessive-compulsions and phobias 'must be liberated from the addiction of withdrawing to themselves and conducted into the world of action (*in die Welt des Handelnds zurückgeführt werden*)' (1926 pp. 159-160).

Moreover, there were conditions where determining whether the neurosis was constitutionally based, or psychogenic – that is, brought about by the environment, and probably transitory – were even more determinant for the choice of methods. Thus, for instance, in conditions of 'undetermined anxiety' (*unbestimmte Angstzustände)*, where the patients 'do not know why they are scared or what are they scared of', the use of psychotherapy depended heavily upon whether the patient was a psychopathic inferior, organically ill, or none of the former. This was crucial because, for example, 'one would not really consider any psychotherapeutic measure, say hypnosis, for cases of epilepsy-based anxiety. Here medication remains the single appropriate measure' (1926 p. 147). The same applied for concomitant anxiety in manic-depressives. Again, neurological disorders and organic mental illnesses were for Isserlin conditions that laid beyond psychotherapy's influencing capability. 'In contrast, "conditions of neurotic anxiety" (*angstneurotische Zustände*) are, in an overwhelming majority, prone to psychotherapeutic influencing'. Neurotic anxiety was the undetermined anxiety brought about by a psychopathic predisposition. Isserlin explained that especially in cases where the 'psychopathy or neuropathy had not spread that much' (1926 p. 148), the therapist could achieve very good results with this type of neurosis. Firstly, it was recommended to use suggestion and hypnosis in order to calm down the patient and also to

> protect them transitorily from the cropping up of the fear (…). For the majority of cases, it suffices to start with 10-15 minutes of hypnosis followed by the therapeutic suggestion, and then to give 10-15 minutes of rest. In a portion of the cases it could be made use of mild sedative medication (1-3 g Bromalkali or Diogenal 0,25 many times a day, the same with Abasin) and mild hydrotherapeutic procedures. Under no circumstances opioids should be administered (…) In a considerable number of cases a rational mental hygiene (*vernünftige psychische Hygiene*) proves necessary, occasionally also a methodical occupational therapy (p. 148-149)

Such all-across-the-board prescriptions were given by Isserlin for most categories of neurosis. This is because, ultimately, combinations of sedatives, hypnosis, and hydrotherapy on the one hand, and mental hygiene – which included routines of healthy habits and occupational therapy –, were all directed at providing the patient with at least some degree of 'self-confidence' (*Stützung des Selbstvertrauens*) (p.

160). Self-confidence, self-control, autonomy and self-sufficiency were the ways into mental health, be it individual, or collective.

V. Conclusions

The voices promoting an institutionalization of Heilpädagogik as a psychiatric-based practice fell quickly silent by the late 1920s; or perhaps the impatient and fatalistic outcry of advocates of negative eugenics became too loud to allow those of the former to be heard. Other authors, such as Linus Bopp in his 'General Heilpädagogik' and Heinrich Hanselmann in his 'Introduction to Heilpädagogik' suggested re-orienting the field back to a scientific pedagogy, becoming influential among German special needs teachers. Bopp, a theologian, spoke of *Heilpädagogik* as 'deepened normal education', and as 'education in values' that nonetheless had as objects 'damage, morbidity, and inhibition' in children. He argued that the concept of 'illness' held a value dimension in principle inaccessible to doctors, and precisely that dimension was the subject of *Heilpädagogik*. This became evident, Bopp argued, through the 'lack of biological facts' that resulted from the doctrines of psychopathy and degeneration and through the psychiatrists' failure of subsuming under them such a great heterogeneity and complexity of cases of mental abnormality. Rather, Bopp tried to limit *Heilpädagogik* to cases of deviancy where the problem laid palpably in a 'reduction of value receptivity' (*Wertsinnsminderung*). Accordingly, it was not psychopathology, nor a lack of intelligence or a defective sense organ, but a purely subjective moral incompetence which distinguished the abnormal personalities with which 'Heilpädagogen' were meant to occupy themselves. They needed to limit their practical goals to increasing the 'value-receptivity' (*Wertempfindlichkeit*) of children, which, as Bopp expressed, was already at the root of normal pedagogy. Then, only when defective and problematic children were not corrected in this way psychiatrists and psychotherapists should intervene (Bopp 1930 pp. 10ff).[266] Despite these developments, the WYP in Berlin and the Society for Heilpädagogik in Munich were still operating in the early 1930s, and both kept sharing the widely circulated Journal for Children Research for their publications (Fuchs and Rose 2017 p. 194). It was only with the Nazi seize of power that intentions of rehabilitating the types of inferior and abnormal people created throughout the previous four decades were positively halted. The idea of 'simply removing' the inferior, which as Egenberger had lamented a decade before, was 'impossible', became the only viable form of implementation of racial hygiene for psychiatrists in the Third Reich.

[266] Hanselmann put forward very similar arguments. Like Bopp, he proposed a detachment of *Heilpädagogik* from the medically-laden notion of psychopathy and from the doctrine of degeneration.

Furthermore, on June 28 1933, the new minister of interior appointed by Hitler, Wilhelm Frick, announced publicly that it was imperative for the new public health plans of National Socialism to achieve a rapid reduction of the burden placed on the state by mentally inferior and antisocial people, by criminals, and by the chronically ill. He maintained that the rehabilitation approaches of the WYP and the Society of Heilpädagogik, regardless of their differences, had been wrongfully centred around 'an exaggerated care for the individual…without consideration of the knowledge [gained] by the doctrine of heredity'. The efforts of the state should be instead directed, he maintained, to actions based on 'eradication and selective breeding' (quoted in Shepker et al 2017 p. 28). Following Frick's announcement, the new director of the Reich's public health ministry, Arthur Gütt, communicated to Ruth von der Leyen and Max Isserlin that the state was ceasing funding for their therapeutic institutions and that their editorial work in the Journal for Children Research had come to an end. In addition, Gütt put Ernst Rüdin in charge of restructuring the welfare management of young psychopaths as well as of reassessing the institutions' research data and the patients themselves (Shepker 2017 et al p. 29).

As mentioned in previous chapters, Rüdin had been one of Kraepelin's most important and successful collaborators in Munich. After the First World War he became a major critic of medical specialisation, and thus, had opposed Isserlin's institutionalisation of *Heilpädagogik* and the Berliners' efforts in social pedagogy throughout the 1920s. In Rüdin's eyes, apart from upholding costly homes and unproductive therapeutic structures, rehabilitation institutions had failed to implement the preventive measures required for the health of the coming generations (Weiss 1987 pp. 210ff). Rüdin's demands for reform had already been echoed in 1928 by Paul Schröder (1873-1941) and Hans Heinze (1895-1983). They published the results of their scientific observations in Leipzig that year. There, they maintained that 'we can now determine with considerable precision the individual forms [of inferiority] in terms of their prognosis (good, hardly treatable, untreatable)' and thus 'we can spare the public's financing of hopeless cases' (quoted in Shepker et al 2017 p. 40). Before therapeutic and pedagogical measures could be considered, they urged doctors to establish the 'hereditary valence' (*erbliche Wertigkeit*) of the individuals (Shepker 2017 et al p. 40).

Rüdin explained that the intensive individual care of inferior types provided by Isserlin in Munich and von der Leyen in Berlin was not only 'absurd' (*abwegig*), but also dangerous, because the 'inherited pathological disposition' (*karankhafte Erbanlage*) of the 'pupils' would be merely camouflaged upon release into the real world, where they would keep procreating and passing on their degenerate traits (Shepker 2017 et al p. 43). With the *Gleichschaltung* or standardisation and unification of all public health institutions, Rüdin, Schröder and the rest of Nazi eugenicists quickly succeeded in making of

'care for psychopaths' (*Psychopathenfürsorge*) a contradiction in terms.[267] The 'handling' of psychopathic inferiors was coordinated exclusively by the new 'Syndicate for Racial Hygiene and Race Policy'. Moreover, the Journal for Children Research was also shut down between 1933 and 1935. Among their non-Aryan editors were Robert Hirschfeld (1879-?), Kramer, Isserlin, as well as another important staff member of the Heckscher Clinic, Marcellina Gräfin von Kuenburg. The heavy persecution of Jewish and dissenter pedagogues and psychiatrists rendered impossible any attempt of formal and organised resistance. They, together with other important promoters of *Heilpädagogik* of Jewish descent, such as Friederich Siegmund-Schultze (1885-1969), were immediately dismissed from their posts and forbidden any involvement in public health organisations. Not without irony, the diagnosis of psychopathic inferiority turned against many of its promoters. In 1935, when the Nazis took hold of the children at the observation station of the Charité and other Berlin homes, Ruth von der Leyen committed suicide.

Due to the private character of the new department of the Heckscher Clinic, as well as to Isserlin's relationship with Munich eugenicists such as Rüdin and Egenberger, Isserlin had somewhat better luck, and managed to carry on working in Munich, though completely banned from public health and increasingly isolated. For the first time in thirty years, Isserlin, age 56, would have to carry on without support from the state and the Munich psychiatric elite.

[267] The only academic association involved in public health care that did not fall victim to the Nazi *Gleichschaltung* of 1933 was the Society for Criminal Biology (*Kriminalbiologische Gesellschaft*), understandably so, when considered that Rüdin and Villinger (another important Nazi psychiatrist) were among their most active members. Nevertheless, the institution in charge of its publications was shut down a couple of years later and its editors Hans Von Hentig (1887-1974) and Gustav Aschaffenburg persecuted for their Jewish ancestry.

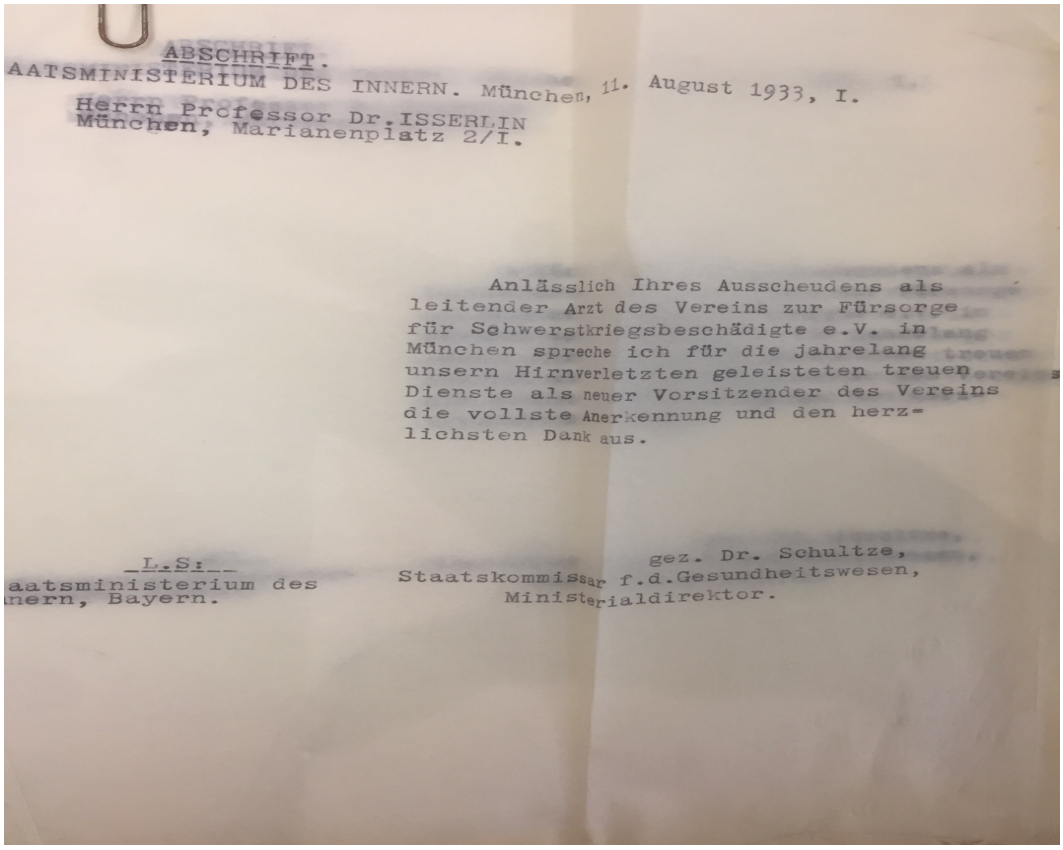
7. Isserlin, the Rockefeller Foundation, and the Aphasia Debates (1930-1938)

Keeping the Show on the Road under Nazi Rule

I. Introduction: New Challenges

As we have seen in the last three chapters, in Weimar Germany it was possible for therapeutic and rehabilitation practices in neuropsychiatry to co-exist with moderate and (not so moderate) eugenic rationales, biopolitical channels, and epidemiological concerns. Isserlin's efforts around *Heilpädagogik* and psychotherapy have revealed that indeed such arrangements were achievable. With the announcements of Hitler's minister of interior in June 1933 concerning radical public health reforms – which implied the cancelling of allegedly futile therapeutic efforts to fight off degeneration – eugenic practice and therapeutic logic became, in the blink of an eye, officially a contradiction in terms. As noted in the previous chapter, for therapeutic-pedagogic psychiatrists like Isserlin, this meant losing professional niches within mental hygiene and psychiatry, namely, *Heilpädagogik* and psychotherapy. However, as a Jewish doctor, he had lost much more than that. With the implementation of the 'Law for the Restoration of the Professional Civil Service (*Gesetz zur Wiederherstellung des Berufsbeamtentums*) two months earlier, which banned Jews from holding civil servant positions,[268] Isserlin lost, on the one hand, his position as university professor, and on the other, access to his welfare and brain-injured patients and welfare organisations in general. He was only left with the management of the fully private 'new' department for children and women (built in 1929 with the money of the Heckscher Trust) (Isserlin to Jones 1935; Jutz 1981). Brain-injury welfare and treatment became tasks of the new Nazi officials of the Ministry of Interior (Schultze to Isserlin 11/8/1933, see figure 7.1). The new house – originally constructed for children and women – also began hosting (and thereby arguably protecting) adult men, many of them 'with general disturbances', such as general epilepsy and chronic mental illness (Isserlin to Jones 1935). Indeed, things were changing rapidly in the institution Isserlin created in 1925.

[268] For the implementation of this law and its effects, see Longerich (2010 pp. 37ff).



ABSCHRIFT.

AATSMINISTERIUM DES INNERN. München, 11. August 1933, I.

Herrn Professor Dr. ISSERLIN
München, Marianenplatz 2/I.

Anlässlich Ihres Ausscheidens als leitender Arzt des Vereins zur Fürsorge für Schwerstkriegsbeschädigte e.V. in München spreche ich für die jahrelang unsern Hirnverletzten geleisteten treuen Dienste als neuer Vorsitzender des Vereins die vollste Anerkennung und den herzlichsten Dank aus.

L.S.

aatsministerium des
nern, Bayern.

gez. Dr. Schultze,
Staatskommissar f.d.Gesundheitswesen,
Ministerialdirektor.

Figure 7.1: Schulze thanking Isserlin for the work he did in the welfare organisation he had created almost fifteen years earlier
[MS/1935: Box 3]

Thus, this chapter takes us back to the Heckscher Clinic and Isserlin's last years of professional life. In chapter 5, we left the Heckscher Clinic at a highpoint and in this chapter we ask how this institution adapted, under the direction of Isserlin, to the challenging new social and political circumstances of the 1930s. Moreover, this chapter asks how and with what purpose Isserlin stayed in Munich as director of the Heckscher Clinic despite the dismissals, prohibitions, and restrictions – whilst so many of his Jewish colleagues went into exile not too long after 1933. Finally – and moving away from institutional and political developments –, this chapter asks what were the intellectual concerns and scientific debates that occupied the last years of Isserlin's professional career? What did Isserlin think and write about during the Nazi regime? The answer to these questions can be provided by looking at two intertwined themes: Isserlin's negotiations with the Rockefeller Foundation and his theories on aphasia. Accordingly, this chapter is divided in two different halves. In the first (sections II), I discuss how, without any more support from the state, the Munich psychiatric establishment, and the welfare system, Isserlin kept the institution running, and how he further consolidated one of his professional niches,

namely, aphasiology. It will be shown, as we explore Isserlin's correspondence,[269] that the Rockefeller Foundation played a critical part in these professional and institutional developments. In the second half of the chapter (III-V), after having comprehended how he managed to turn to research and to writing so much about aphasia in such difficult circumstances, we look at aphasia from a different angle, namely, by looking at Isserlin's clinical and scientific theories of language and speech pathologies of the time.[270] Indeed, his major works remain those of this 'aphasia period', which goes from 1929 to 1939.[271] This provides an opportunity to observe from a different perspective why staying in Munich for six years of Nazi rule might have been, after all, a sensible and productive decision. Furthermore, an investigation which has followed Isserlin's professional and intellectual trajectory from the beginning cannot avoid finishing with Isserlin's celebrated publications on aphasia. Due to space constrains, however, this last chapter addresses selective features of Isserlin's busy aphasia period, which I hope to revisit in a later publication. Thus, we look into his psycholinguistic approach to the study of aphasic syndromes (III); his ambivalent or mediating stances vis-a-vis the theory of cortical localisation of function and holistic neurology (IV); and finally, to ideas regarding 'positive' aphasic syndromes and 'positive features' involved in the loss of speech (V).[272]

[269] All the correspondence used in this chapter (and preserved in the Isserlin-papers MS/1935) can be found in (MS/1935: Boxes 3&4). These boxes include letters going to and coming from the Rockefeller Foundation and some colleagues, mostly from the period 1932 to 1939.

[270] Whilst in chapters 4 and 5 we discussed clinical and therapeutic aspects of 'central disturbances' (aphasia, agnosia, apraxia, etc.) during the 1920s, we examine here the questions and theories that emerged around aphasia in the 1930s.

[271] If Isserlin's scientific work has been recognised anywhere it has been due to what he had to say about 'agrammatism' in 1922; see for example de Bleser (1987); Tesak and Code (2008); Levelt (2012). Nothing has ever been written about his more elaborated work on the subject in a last period of his life.

[272] If Isserlin had a *magnus opus*, it was the four-part monography (more than a thousand pages long) *Die Pathologische Physiologie der Sprache* (1929-1936), parts of which were revised in the extensive treatise *Aphasie* (1936). I look here specially into these texts as well as briefly into his less forgotten *Über Agrammatismus* (1922b). Offprints and manuscripts on aphasia, including the four parts of the monography and experimental work in psychophonetics can be found in (MS/1935: Boxes 1, 5, 9).

II. Isserlin's Management of the Heckscher Clinic and the Negotiations with the Paris Office of the Rockefeller Foundation

The Heckscher Clinic in the early 1930s

In a letter dated February 1931, Heckscher advised Isserlin regarding the financial losses that came as a consequence of the Wallstreet Crash in 1929. The revenue of the clinic dropped 25%. As a consequence, Heckscher urged Isserlin to seek support from other organisations and to cut down expenses. Moreover, in 1932, the welfare offices reduced the amount of their contribution; instead of 4 RM a month per child, the clinic would just receive 2 RM (Jutz 1981 p. 60). As a consequence of the reduction in financial support, Isserlin began to accept more women and children into the clinic who had insurance, or who could pay. He lamented that these circumstances did not allow him to have 'more room for poor children' (Isserlin to Heckscher 24/2/1932).[273] And yet, in May 1932, Isserlin could still write to the Heckscher trustees: 'In spite of the difficult circumstances, the new department is doing pretty well. Hopefully we will not encounter new obstacles on the way!' (Isserlin to Grillo 20/5/1932). We also know from Isserlin's draft letter to an unknown recipient, that at the start of 1933, the Heckscher Clinic as a whole 'comprises, among other things, an internal department for brain injured and children with mental abnormalities (*seelisch abwegige Kinder*), a day nursery for both types of patients, a small women's department, ambulatory centres, several work stations and workshop rooms, laboratories, a library, doctor offices, accommodation for doctors and nurses and scientific spaces' (Isserlin to Unknown 1933 p. 2 of 5).[274] Little did he know, things would dramatically change for him and the institution a few weeks after drafting the letter.

Before the ban of April 1933, Isserlin received from the Heckscher Trust a last substantial sum transferred to the brain injury welfare department with the hope that, at least for a while, both houses could remain tied up through private contracts. However, the situation became increasingly difficult for the head of the institution. By the end of 1933, the monthly funds from the Heckscher Trust were only 25% of what they had been the previous year, and some of the medical staff were not being paid. Moreover, Isserlin lost important collaborators and friends that year. Firstly, Fritz Lotmar, also of Jewish descent, fed up with the situation, relocated to Bern; Erich Feuchtwanger – Isserlin's right-hand man – and Walther Spielmeyer – old lazaret partner and closest friend within the profession – died unexpectedly. With their death, and with Kraepelin long gone (died 1926), Isserlin's relation with the

[273] Strangely, Isserlin had prevented Feuchtwanger's departure in 1930 by getting him a raise.
[274] Names and dates are not always provided in the letters (many of them are photocopied drafts).

German Research Institute of Psychiatry (DFP)[275] and the psychiatric establishment deteriorated rapidly (Isserlin to Heckscher 11/11/1933). As Isserlin reported, '[t]here is little that we can do about the wretched circumstances in which our work in Munich finds itself at the moment'. And yet, not all was lost. With no more students to teach and no more brain-injured to treat (the clinic became much smaller and thus in a way easier to handle), there was 'still hope of saving and working the clinical material accumulated in the last two decades' (Isserlin to 'Herr Doktor' ?/9/33) (see figure 7.2). Isserlin understood that the time had come to focus on what had been partially postponed due to different activities in which Isserlin and the clinic had been involved until 1933 as public health experts. The money coming from the Heckscher Trust had been considerably reduced and was barely sufficient for care and maintenance. There was no money for experimental infrastructure, nor for research assistants; this is when Isserlin decided to ask the Rockefeller Foundation for support.

Figure 7.2: Isserlin with part of his almost all-female staff in the mid-1930s in what remained of the Heckscher Clinic
Maria Weber second from the left and Kuenburg first on the right the right. 'Care and therapy for children, women and chronically ill…was almost fully delegated to them' (Isserlin to Heckscher 2/3/1934)
[MS/1935: Box 11]

[275] By then already part of the Kaiser Wilhelm Gesellschaft.

The Rockefeller Foundation in Munich: psychiatry and eugenics

Most of the clinics, medical teaching facilities, and research institutions that received money from the Rockefeller Foundation (henceforth RF) during the 1920s and 1930s in America and Europe needed to accommodate their projects to the interests and persuasions of their potential benefactors (Berliner 1985; Wheatly 1988). By the late 1920s, the RF operated through five different divisions, which, subjected to volatile economic and political circumstances, frequently modified their structures, aims and set-ups. Thus, whoever received funding from one of the divisions of the RF needed to evolve and adapt to the changing interests of their on-call American administrators (Jones and Rahman 2009).[276]

The RF was created in 1913 on the conviction that scientific progress was only of value when it brought about tangible improvement in social conditions (Kohler 1985). Furthermore, they claimed that poverty was ultimately caused by lack of medical knowledge and education, and they were particularly interested in research on preventive measures against infectious diseases such as tuberculosis, malaria and venereal disease (Farley 2004 p. 5; Jones and Rahman 2009 p. 281). These convictions would become criteria to be fulfilled by any project, institution, or individual aspiring to be recipient of Rockefeller funds in the period 1914-1927. However, by the mid-1920s, due to the lack of tangible results with regard to infectious diseases, the RF sought to invest in psychiatry, where, some thought, more achievable targets could be identified. In the United States, lobotomy, metrazol shocks, and fever and insulin therapies were making some psychiatrists show a certain degree of therapeutic optimism. These and other seemingly promising technologies for treatment caught the attention of the board of the foundation, who by 1923 had established a European office in Paris. Throughout the 1920s, representatives of the European office believed they could, on the one hand, help reduce the stigma of mental illness, and on the other, save psychiatry from what they perceived was an unjust state of neglect (Jones and Rahman 2009 p. 283).

Moreover, the board agreed that little emphasis was being placed on the more common and subtle mental disorders, and on how people with such disorders hindered societal progress. These areas of study fascinated Alan Gregg (1890-1957) who became the driving force behind the RF's interest in the field of the brain and mind in America and Europe during the 1930s (Schneider 2003 pp. 162ff). With Gregg in charge of the Paris Office, research on neuropsychiatry was prioritised over general medical teaching. One of the main tasks of the European office became, in Gregg's words, '…to find, to train, and to encourage first-rate human beings who are able to learn and eager to work out the problems of

[276] As Jones and Rahman (2009) have shown, the Maudsley Hospital in London during the 1930s was a very clear example of this.

understanding and correcting nervous disorders …' (RF Digital). Moreover, Gregg convinced the RF board of trustees of the need to work towards the reduction of the economic burden that nervous and mental diseases were imposing on states and societies in the Western World. In addition, Gregg explicitly favoured an interdisciplinary approach that prioritised laboratory-based science in detriment of psychodynamic interpretations and speculations, such as those of Freud (Jones and Rahman 2009 p. 288).[277] Gregg's initiatives were adopted with enthusiasm by the board. In just ten years, the RF invested $11.5 million in psychiatric research and teaching worldwide (RF Digital). However, the RF had been also a promoter of research in eugenics, especially facilitating the collaboration between questionable American and German eugenicists (Black 2003). The historian Reinhold Müller, looking back at the work of the co-editor of the most important journal of racial hygiene in Germany in the interwar period, Fritz Lenz (1887-1972), admitted in 1943 that in Germany

> racial hygiene [had] remained until 1926 a purely academic and scientific movement. It was the Americans who busied themselves earnestly with the subject. Through massive investigation they have proved (with impeccable precision) Galton's thesis that qualities of the mind are as heritable as qualities of the body. They also showed that these qualities are inherited according to the very same laws as those of the body (quoted in Kühl 1994 p. 20)

Future Munich-based Nazi eugenicists such as Lenz and Alfred Ploetz (860-1840) were heavily influenced by American eugenicists during the 1910s and it was only in 1925 that they managed to re-integrate Germany in the eugenics international community after a 6-year ban that followed the end of the First World War. As a consequence, Germany's research on eugenics begun to consolidate institutionally. Most notably, Lenz developed a significant cooperation with the American eugenicists Paul Popenoe (1888-1979), one of the leading advocates of forced sterilisation of the mentally ill in the United States. Lenz lamented the lack of legislation that Germany had regarding negative eugenic practices in comparison with America (Weiss 1987). He pointed towards the Weimar Republic's 'democratic administration…elected by the masses' as the fundamental obstacle in translating scientific investigation into practical measures (quoted in Kühl 1994 p. 17).

After the re-establishment of official cooperation with the United States in 1925, many other German racial hygienists begun receiving substantial grants from the RF, including Alfred Grotjhan, Hermann Poll, and Hans Nachtsheim (Weindling 1991). Furthermore, beyond the support to individuals, the RF was crucial in the establishment of the most important institutes for racial hygiene in Germany during the 1920s, namely, The Kaiser Wilhelm Institute for Psychiatry and The Kaiser Wilhelm Institute for Anthropology, Eugenics, and Human Heredity, both part of the Kaiser Wilhelm Society (KWG)

[277] See Schneider (2003 pp. 161-162) for more details on Gregg's interest in psychiatry.

(Weindling 1991, 1993; Weiss 1987). The Kaiser Wilhelm Institute for Psychiatry was the new name that Kraepelin's Munich research institute founded in 1917 (see chapter 4) acquired when it was incorporated into the KWG in 1924. By 1926, with the death of Kraepelin, Ernst Rüdin's genealogical department and research on congenital inferiority (*erbliche Minderwertigkeit*) became the priority of the Institute. The Munich psychiatric establishment in general concentrated all its efforts in the project of determining the somatic and neurological hereditary components associated with anti-social behaviour, mental retardation and mental illness (DFP 1925; 1927). In 1928, Rüdin received $325,000 from the RF for the construction of a new building for the Institute. Meanwhile, in Berlin, the Institute for Anthropology, Eugenics and Human Heredity was also partially funded by the RF (Richardson 1990 p. 25; Schneider 2002 p. 39). Later on, in 1930, Rüdin became president of the International Federation of Eugenic Organisations, thus becoming able to promote on an international level the work of his Munich colleagues. These were, among others, Eugen Fischer on the genetics of tuberculosis and Hans Luxemburger's Kraepelinian-inspired study of heredity in schizophrenia and manic depressive illness (Cesarani 1993; Kühl 1994 p. 21). The relevance that the RF had in consolidating eugenic research directions for German psychiatrists, especially in Munich, is indisputable. Rüdin and other beneficiaries of Rockefeller funds subsequently became Nazi medical officials. Until 1933, it appears that the promotion of psychiatry and eugenics were not conflicting for Gregg and other executives of the RF. It took Gregg and the Paris office a very long time to realise that Hitler was more than a fad, and that funding those fields of research was tantamount to financing the material realisation of an ideology which ran counter to the liberal and democratic principles they held (Schneider 2003).

In 1930, Gregg took charge of the Medical Education Division and Daniel O'Brien succeeded him as the director of the Paris office.[278] With the economic depression the activities of the International Health Division in Europe had shifted from funding institutions to granting small awards. As Gregg later put it, '[g]one were the days when the Rockefeller Foundation provided major capital investment in medical schools and related disciplines' (quoted in Schneider 2003 p. 166).

[278] Back in June 1926, O'Brien had been hired as Gregg's assistant in Paris. O'Brien had been a Yale undergraduate, with a medical degree from Johns Hopkins University. Moreover, Robert A. Lambert, a pathologist, also joined the office in 1928 (Schneider 2002 p. 16)

First request for support

By the early 1930s, Isserlin became alienated from the Munich eugenic environment that the RF was financing. The Nazis had not just taken away part of his clinic and revoked his teaching license, but they had also assaulted the very scientific foundations around which the 'Kraepelin group' had oriented their work after 1903. What was for most German psychiatrists in the 1920s – including Isserlin – a probable hypothesis to be substantiated through research, namely, the idea that mental illness was innate and inherited, was mingled by a faction of racial hygienists with an Aryan ultra-nationalist rhetoric, and turned into racist propaganda disguised as science. The Kraepelin group, originally composed by Alzheimer, Plaut, Nissl, Spielmeyer, Isserlin and some other big names in neuropsychiatry during the 1910s and 1920s, had been superseded in Munich by a faction led by Rüdin, Ploetz, and Lenz. Isserlin withdrew from any research informed by Nazi racial hygiene. Instead, he became exclusively concerned with concluding his research on the correlation of brain injury and speech disturbances, as well as with settling some important issues in what at the time was a major debate over aphasia and cerebral localisation of function. Isserlin's new challenge would be finding a sponsor for his research, the funding received from the Heckscher Trust (24,000 RM a year) was cut down considerably in the years 1931-1933 ('Yearly Costs Estimate' 10/5/1933).[279] Isserlin was forced to seek support from the same body financing those who were putting him in such necessity.

Isserlin sent his first communication soliciting support to the RF in July 1933 (Isserlin to Unknown 7/1933 pp. 1-5). He explained the financial situation of his institution in great detail, specifying the problems that Heckscher was encountering to fund research at the clinic. Almost nothing was left, Isserlin explained, after paying for maintenance of inpatients, medicines, nursing staff, taxes, and insurance. He maintained that, with the support of the RF, he and his staff could 'save the precious clinical material on brain injuries accumulated in the course of two decades from becoming irreparably useless',[280] and that saving that material meant 'investing in laboratory research'. Furthermore he used the terms 'cerebral pathology' (*Hirnpathologie*) and 'aphasia' (*Aphasie*) to describe his clinical work, not psychiatry or mental illness (p. 1). Through colleagues such as Otfried Foerster from Breslau – who was also negotiating himself with the RF that year too – Isserlin must have been clearly aware of the interests of Alan Gregg and Daniel O'Brien.

[279] A report on expenses from the year 1932 shows that indeed very little money was available for research at the Heckscher Clinic. Most of its monthly budget went for fixed management and operating costs as well as for maintenance of patients (*praktisch-ärztlichen Betrieb*). For medicines 21% of the budget, and for 'medical science' only 20% (Isserlin to Heckscher Trust 1932).
[280] The same argument was used by Von Malaisé's request to the city of Munich to get permission for the construction of a neurology clinic back in 1923 (See chapter 4).

After this introduction, Isserlin enumerated five research topics that occupied him directly at that time. First, he mentioned 'traumatic epilepsy', which he did not define as a disease but as a 'syndrome of syndromes', where 'the interaction between general and circumscribed disturbances could become unveiled' (p. 1). Second, he mentioned the 'central disturbances of speech', with particular emphasis on 'the relation between speech and intelligence'. He talked next about his recent interest on 'brain damage during and after birth'.[281] He then alluded to one of the research topics that emerged during the transfer of clinical material that started in the clinic after the construction of the children's department, namely, aphasia, agnosia and apraxia in children (p. 1). Next, he referred to the work of his three most important colleagues at the clinic in 1933. First, there was Eric Feuchtwanger. His research was primarily directed towards 'the pathologies originating in the frontal lobe' and their correlation with 'amusia and agnosia'. Secondly, Isserlin referred to the neurophysiological research of Fritz Lotmar. He had been researching 'extrapiramideal diseases, the histopathology of athyreosis and congenital hypothyroidism (this in active collaboration with the DFP)'. Finally, Isserlin made reference to the research of Marcellina Gräfin von Kuenburg, the only of the three who would still be working at the clinic a year later. She was investigating 'how the faculty of abstraction in normal associations between words and concepts was disrupted in aphasics' (p. 2). As it can be clearly observed, in 1933 the Heckscher Clinic seemed to have become much more neurologically and neuro-linguistically oriented.

After sketching the research directions of his staff, Isserlin made reference to recommendation letters that would be sent (or had already been sent) to the European office by some of his most internationally famous colleagues. Karl Bonhoeffer and Otfried Foerster, Isserlin explained, were 'convinced of the necessity [for them and Isserlin] of finishing the research started in the neurological lazarets' during the First World War for the 'the field of aphasia' (p. 3). Bonhoeffer had the chair of neurology and psychiatry in Berlin, was head physician at the Charité, and was well connected with top state officials, all of which made of him the most powerful psychiatrist in Germany in the 1930s (Pantel 1993). Bonhoeffer was also an important aphasiologist. Foerster had recently made important contributions in surgical therapy in Breslau and was receiving support from the RF (Guenther 2015). From Munich, he was supported by Oswald Bumke (p. 4), successor of Kraepelin at the university clinic. Isserlin finished his five page letter with the assertion that 'all their work will not see the light if the clinic does not receive at least 10,000 RM a year for a period of four years' (p. 5).

[281] See 'Baby tests' from ca. 1937-1939 (MS/1935: Box 8).

Second attempt

In a letter to Isserlin from 14 September 1933, Robert Lambert rejected the request. Lambert argued that the RF found itself in the same difficult financial position that was affecting the Heckscher Trust in the United States. Moreover, he pointed out that the organisation 'was at the moment focusing all their energies in finding your most promising Jewish colleagues a place to work elsewhere' and thus, were unenthusiastic with the idea of funding more research in Germany. On the one hand, the RF was indeed not comfortable with the new government policies in Germany. Daniel O'Brien told Alan Gregg – by then directing the education division from New York – that Germany 'is in the throes of a very serious revolution. An almost universal state of fear prevails in which people are afraid to express, verbally or in writing, their feelings about present conditions' (quoted in Richardson 1990 p. 27). At the same time, however, they did not believe that the Nazi regime would last. Lambert doubted that the new government would actually persecute Jewish scientists (Richardson 1990 p. 28). The issue was whether forceful representations would help or hinder the cause of those whom the foundation sought to aid. Nevertheless, the RF ultimately washed their hands with the matter and continued financing both Jewish neuropsychiatrists and Aryan ideologues in Germany, while at the same time organising programs for the support of those who needed to leave due to Nazi persecution.[282]

Meanwhile, Isserlin's work was becoming well-regarded not only in Europe but also in America (see Introduction). However, there are indications that some members of the international medical community showed little hope for Isserlin's future work. For instance, a review from an unknown British doctor dated 7/11/33 reads 'it is most doubtful if he [Isserlin] will still have any possibility to work up the large material gained on the question of restitution of cerebral lesions'. Isserlin waited over a year to formally apply to the RF again. By this time circumstances had changed; in 1934 the Heckscher Trust had increased the clinic's funding. The 'new security funds' from the Heckscher Trust reduced the amount requested from the Foundation by half. Furthermore, Isserlin was now negotiating with Daniel O'Brien, the director of the Paris Office. O'Brien would determine the fates of important psychiatric institutions such as the Maudsley Hospital in London, the DFP in Munich, and of neurologists such as Otfried Foerster in Breslau and Kurt Goldstein in Frankfurt and later in America.[283] Although we have no records of the communications between Isserlin and O'Brien in the first semester of 1934 in MS/1935, we can presume that it was a year of intense negotiations between the two. From

[282] For more on how the moral dilemmas of the RF did not translate into practical dilemmas during the second half of the 1930s, see Richardson (1990 pp. 31ff).
[283] For some details on how Foerster managed to get O'Brien's support see Guenther (2014; 2016).

a letter of 10/12/34, we know that O'Brien had visited the Heckscher Clinic three days earlier and was impressed by the work carried out by its staff. That day, he asked Isserlin to draft a new proposal.[284]

Isserlin started the proposal to O'Brien by re-stating the important changes that had taken place that year. Among them were, first, Lotmar's relocation to Bern. 'For him [Lotmar], political circumstances have become unbearable in Munich.' (Jutz 1981 p. 76). This was not just unfortunate due to the fact that it meant losing a top researcher, but it also meant – for reasons that remain unclear – owing him two years of contract, which amounted to 7,600 RM (almost equivalent to four months of the budget that the Heckscher Trust had had in 1932 for the clinic). Subsequently, he stated that the Heckscher Trust had managed to acquire new 'security funds' (141,500 RM) through tradable financial assets (*Wertpapier*). From the interests, he explained, an amount of 16,500 RM could be assigned to the Heckscher Clinic in 1935, a sum which, although larger than the one they had for 1934, it would still be ' just enough to secure practical work', that is, care, maintenance, and staff. In other words, although there were more funds available from the Heckscher Trust, there was no money for completing the research on the large clinical material accumulated from the war; they would 'only have 800 RM for scientific work and library'. To make things even worse, the *Notgemeinschaft* ('Emergency Agency for Science') would discontinue its provision to the clinic (1000 RM).[285] Isserlin lamented the fact that these circumstances had forced the staff to cover various expenses from their own pockets.

The 'new security funds' of the Heckscher Trust allowed the semester requested amount to be less than half of what Isserlin asked the year before to Lambert. Instead of 10,000 RM, he was now asking only '4,500-5,000 RM' every six months. Moreover, it is important to realise that there was virtually no reference to care, rehabilitation or therapy in either of the two proposals. Indeed, rehabilitation and mental hygiene were evidently no longer part of Isserlin's professional activities. He knew his time in Munich was soon coming to an end and therefore, he focused exclusively in working out the clinical material for his publications on aphasia and other disorders of speech.

[284] Meanwhile, that year, August Heckscher visited his clinic for the second time. From a letter of 13/12/34, it can be appreciated that O'Brien used very similar terms to those of Heckscher to describe Isserlin's professional character, such as 'kindness of heart' and 'self-sacrifice'.
[285] The Emergency Agency had been established and subsided by the same RF in 1922 (Richardson 1990 p. 22).

Short-lived stability

Isserlin's request was finally approved; the RF agreed to give to the Heckscher Clinic 10, 000 RM a year until the end of 1938. Isserlin began his letter of 16 May 1935 thanking O'Brien for the '5000Mk he had received that day, which will be used to cover the expenses of my investigations in the upcoming semester'. These investigations would allow him to finalise the fourth and final part of his *Pathologische Physiologie der Sprache* as well as his treatise *Aphasie*, both published in 1936. But for Isserlin there was much more to come in terms of research. In the letter, he asked O'Brien for permission to use the funds to buy instruments for his phonological investigations. He argued that in the contract it was stipulated that the funds could be used 'for technical and field expenses in the field of aphasia and related psychopathological studies', and that that was a bit vague. He referred to O'Brien's visit to the clinic, when Isserlin 'had forgotten to mention' that he indeed needed 'a microphonic-gramophonic reproductive device' which would 'work together with the device used to take photographs of speech I have shown you…Until now I have only been able to reproduce speech in photography but not to make loud reproductions of sounds'. He also asked O'Brien if he could 'buy one of those modern audiphones, because it is very difficult to differentiate between perceptive-acoustic and acoustic-agnostic disturbances' without them.

In a report sent by Isserlin to the European Office on 11 February 1936, it is clear that Isserlin's research was heavily focussed on psychological-phonetical investigations.[286] In the report Isserlin gave details of the projects carried out by the Heckscher Clinic at the time. He explained that the work on 'aphasia rehabilitation' by Feuchtwanger, 'who had worked out statistically the materials gathered from 308 cases of aphasics…will be continued by Dr. M. Ludwig'. Moreover, he made reference to the work of Gräfin von Kuenburg on 'the musicality of speech in aphasic children' and of 'Frl. Dr. Ortenau' who 'took over the question of the psychological condition of children suffering from Little's Disease'. Thus, despite the political circumstances and the personal and professional losses, with the aid of the RF things seemed to be looking up for the clinic and for Isserlin's research on language disturbances.

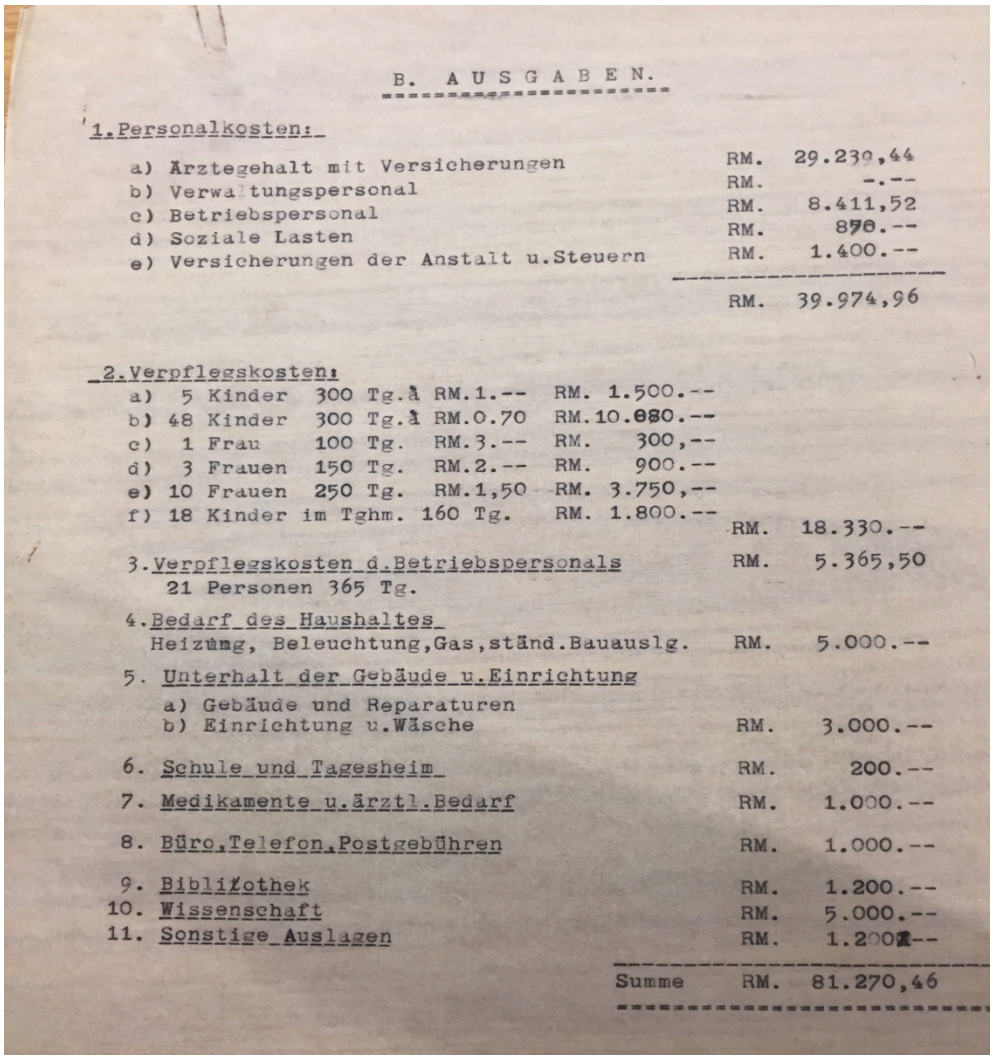
In a letter from 4 May 1936, short after his last publications regarding aphasia that year, O'Brien wrote to the Maudsley Hospital that

[286] Isserlin made reference to the papers given by him and the other three mentioned colleagues in 'the II. International Congress of Phonetics' held the previous year in London, as a proof of their expertise on language.

> Professor Isserlin's works in the general field of aphasia and other psychopathological investigations is considered of such significance that a number of recommendations in support of his work have been received from psychiatrists in various parts of the world. In connection with Professor Isserlin's research on the brain, it is considered of particular importance for him to visit the scientific workers at Maudsley Psychiatric Hospital of London who have a special interest in this line of research

Isserlin would start visiting London with more regularity. It seemed to have been part of the contract that he shared his scientific expertise with the doctors of the Maudsley Hospital, where the RF was starting to have a strong presence (Jones and Rahman 2009). From a letter to O'Brien from 22 October 1936, we know that Isserlin visited the Maudsley Hospital in the summer of 1936, where he started 'a collaboration on brain-injury and schizophrenia' with the Jewish German émigré Wilhelm 'Willi' Meyer-Gross.[287] Everything indicates that 1937 was not a bad year for Isserlin and the clinic, with relative financial stability and enough resources for research. By the end of 1937 the clinic regularly treated as outpatients 53 children, hosted another 18 in the house and served as psychiatric asylum for 14 women. The Heckscher Clinic would not treat or host an adult male patient ever again (see figure 7. 3).

[287] Also in that letter, Isserlin announced O'Brien that his monography *Aphasie* had finally been published by Foerster and Bumke in the *Handbuch für Neurologie*. He thanked him for the support, 'without which I could have never found the peace and muse to complete and revise…my manuscripts'.



B. AUSGABEN.

1. Personalkosten:

a) Ärztegehalt mit Versicherungen	RM.	29.239,44
b) Verwaltungspersonal	RM.	-.--
c) Betriebspersonal	RM.	8.411,52
d) Soziale Lasten	RM.	870.--
e) Versicherungen der Anstalt u.Steuern	RM.	1.400.--
	RM.	39.974,96

2. Verpflegskosten:

a)	5 Kinder	300 Tg.à RM.1.--	RM.	1.500.--
b)	48 Kinder	300 Tg.à RM.0.70	RM.	10.080.--
c)	1 Frau	100 Tg. RM.3.--	RM.	300,--
d)	3 Frauen	150 Tg. RM.2.--	RM.	900.--
e)	10 Frauen	250 Tg. RM.1,50	RM.	3.750,--
f)	18 Kinder im Tghm.	160 Tg.	RM.	1.800.--
			RM.	18.330.--

3. Verpflegskosten d.Betriebspersonals 21 Personen 365 Tg.	RM.	5.365,50
4. Bedarf des Haushaltes Heizung, Beleuchtung,Gas,ständ.Bauauslg.	RM.	5.000.--
5. Unterhalt der Gebäude u.Einrichtung		
a) Gebäude und Reparaturen		
b) Einrichtung u.Wäsche	RM.	3.000.--
6. Schule und Tagesheim	RM.	200.--
7. Medikamente u.ärztl.Bedarf	RM.	1.000.--
8. Büro,Telefon,Postgebühren	RM.	1.000.--
9. Bibliothek	RM.	1.200.--
10. Wissenschaft	RM.	5.000.--
11. Sonstige Auslagen	RM.	1.200.--
Summe	RM.	81.270,46

Figure 7.3: Expenses as reported by Isserlin to the Paris office of the RF
[MS/1935: Box 4]

But stability was short-lived for Isserlin and his Munich institution. In late 1938, Heckscher and the RF stopped funding the Heckscher Clinic. Isserlin resigned, finally fulfilling the wish of his daughter Beate to join her in Sheffield. The clinic would be fully reintegrated into public health, although the non-Jewish staff members continued their activities with certain autonomy.

Despite the scantiness of information we have about Isserlin, it is unquestionable, he had been a very resourceful neuropsychiatrist to last so long in that environment. From what Gregg explained in 1937, it seems that Isserlin was one of only two recipients in Germany of funds from the RF that year:

> [e]xcept for two small appropriations in psychiatry, the Foundation made no contributions for work in Germany…It is more than merely a problem of financial support: it is the problem of the attitude of the present and future German governments toward pure science. The chemical institute in Berlin-Dahlem is now given over entirely to work in the field of chemical warfare; the institute in Munich is almost entirely dominated by projects in the field of 'race purification'. What might the physics institute be in five years? (quoted in Richardson 1990 p. 57)

It seems also that in Munich, psychiatry as a medical specialty (the Heckscher Clinic being one of the 'small appropriations'), and eugenics as a project of 'race purification' had become very different things indeed. With the last remark Gregg was referring to the dilemma of funding the project of Max Planck in Berlin due to the risk of that project also contributing to the Nazi agenda. Isserlin's monographies on aphasia of the period 1929-1932 had made him a reputed aphasiologist but only with his publications of 1936 he reached international praise. Despite the moral ambiguities of the RF, thanks to this organisation the 1936 work was completed. To Isserlin's ideas, theories, and debates on aphasia and language we now turn.

III. Isserlin and the Psycholinguistic Turn in German Aphasiology

In 1874, Wernicke applied Meynert's sensory-motor reflex model to explain certain language dysfunctions: a word was spoken (or comprehended) when a sensory image and a motor image were associated in the brain. Paul Broca had already shown that a lesion to the third foot of the frontal convolution disrupted the activation and association of motor images of speech. Moreover, Meynert had demonstrated the relationship of the hearing apparatus to the insular cortex and the temporal convolution. Building on these findings, Wernicke believed it was plausible to consider the first temporal convolution the locus of sensory images, and to see the insula as the association system linking the sensory and motor images. As a consequence of these ideas and findings, Wernicke explained motor aphasia and sensory aphasia as the outcome of damage to these image centres and he hypothesised a 'conduction aphasia' as the outcome of a lesion of the connecting association system in the insula. Ten years later, Wernicke's close collaborator, Ludwig Lichtheim, pointed to the existence of a number of other aphasic forms, which he saw as notionally deducible from further correlations between models of sensory and motor neural function with clinical symptoms. Wernicke agreed with Lichtheim's deductions and gave many clinical aphasic pictures anatomical bases (Eggert 1977; Blanken et al 1994; Tesak and Code 2008).

Underlying the classic theory of aphasia was an association psychology that determined that language production was a psychic reflex: there was a hearing sensation which triggered a sensory word image; then the sense of the word, that is, the representation of the object that the word designated was evoked and became the initial image of a chain of several images which ended in a 'target image'. This, in turn, triggered the motor images necessary for speech articulation and production. Thus, according to this Wernickean theory, language learning in childhood took place first by establishing pairs of sensory word images and motor word images through constant repetition and only afterwards the links to concepts (words) were established (Wernicke 1874; de Bleser 1897 pp 191ff).

Isserlin did not learn neurophysiology directly from Wernicke, but from Lichtheim in the late 1890s during his undergraduate studies in Königsberg (CV p. 2). He developed a cautious relationship with the theoretical assumptions of these 'classic localisers' (*Klassiker*), or as the British neurologist Henry Head (1860-1941) pejoratively called them, 'diagram makers' (Head 1926). At the same time, Isserlin would constantly defend the value of their theories and achievements against what he called 'an unfair assault' on the localisers by the 'iconoclasts' aphasiologists, such as Head, Pierre Marie (1853-1940), or Kurt Goldstein (1878-1965). Despite his Kraepelinian clinical ethos and his commitment to psychological investigations, Isserlin was not as neuroanatomically agnostic as his mentor might have been. In fact, Isserlin was an admirer of Wernicke's aphasiological work. Yet that was not uncommon. Most major German aphasiologists in the early twentieth century had been in personal contact with Wernicke, either as his students (for example Kurt Goldstein), or as his assistants in Breslau (for instance, Karl Bonhoeffer and Carl Heilbronner), or later in Halle (as was the case with Edmund Forster and Karl Kleist) (Tesak and Code 2008 pp. 114ff). Though most reacted against Wernicke's 'enormous one-sidedness' when it came to anatomical localisation and association psychology, their alternative proposals remained largely within the general framework set by the localisers (de Bleser 1987 p. 190). Arnold Pick (1851-1924), a Czech Jewish psychiatrist contemporary of Wernicke – and a major influence on Isserlin's later work – was linked to Wernicke's ideas indirectly, through an assistantship for Theodor Meynert in Vienna. Others, like the 'ultralocalisationist' Karl Kleist (1878-1860), would continue the Meynert-Wernicke psychophysical parallelist program for neurology and psychiatry in the twentieth century together with other neuropsychiatrists such as Hugo Liepmann (1863-1925), and Bonhoeffer, while Kurt Goldstein, Constantin von Monakow (1853-1930), Arnold Pick (1851-1924) and Isserlin, would initiate research programs involving new psychologies and new, more complex understandings of language (Critchley 1964; Eling 1983).

Figure 7.4: Arnold Pick (1851-1924)
A pioneer in psycholinguistics whose work was decisive for Isserlin's views on language [online]

Arnold Pick (see figure 7.4), another student of Meynert's, acquired his scientific reputation by a series of classical localisation studies published in the late 1870s. He was among the first to find empirical evidence for Wernicke's sensory aphasia and was the first to describe circumscribed senile atrophy (Pick's disease) (Kertesz and Kalvach 1996). However, later work led him to a new conception of the localisationist issue: by the early decade of the twentieth century he no longer accepted sharply delineated cortical areas as centres of memory images but assumed that there were functionally unitary neuronal complexes in certain cortical slices which could be affected in isolation. He then argued that the identification of these unitary neuronal complexes could be achieved through psychological analysis of the aphasic's speech and linguistic acts. He thus committed himself to applying the emergent discipline of psycholinguistics to aphasia research (Pick 1913; Kertesz and Kalvach 1996). Pick explained that this meant that the psychophysical aphasiology of the word and memory images should be substituted by an approach that took, not the word, but the spoken sentence as the basic unit of language analysis. Instead of a 'neurological localisation' of words images, he thought possible to aim at what he called 'psychological localisation': aphasic disturbances should first be localised in a psychological system of language production and comprehension (see figure 7.5) which was meant to be taken as an active, lively, and complex process. This was irreconcilable with the notion of engrams and their fixed localisation in static brain centres (de Bleser 1987 p. 194). Isserlin's aphasiology was crucially indebted to Pick's program of psychological localization and sentence aphasiology, as he recognized in every possible occasion (1922a, 1925b, 1929, 1931, 1932, 1936a, 1936b).

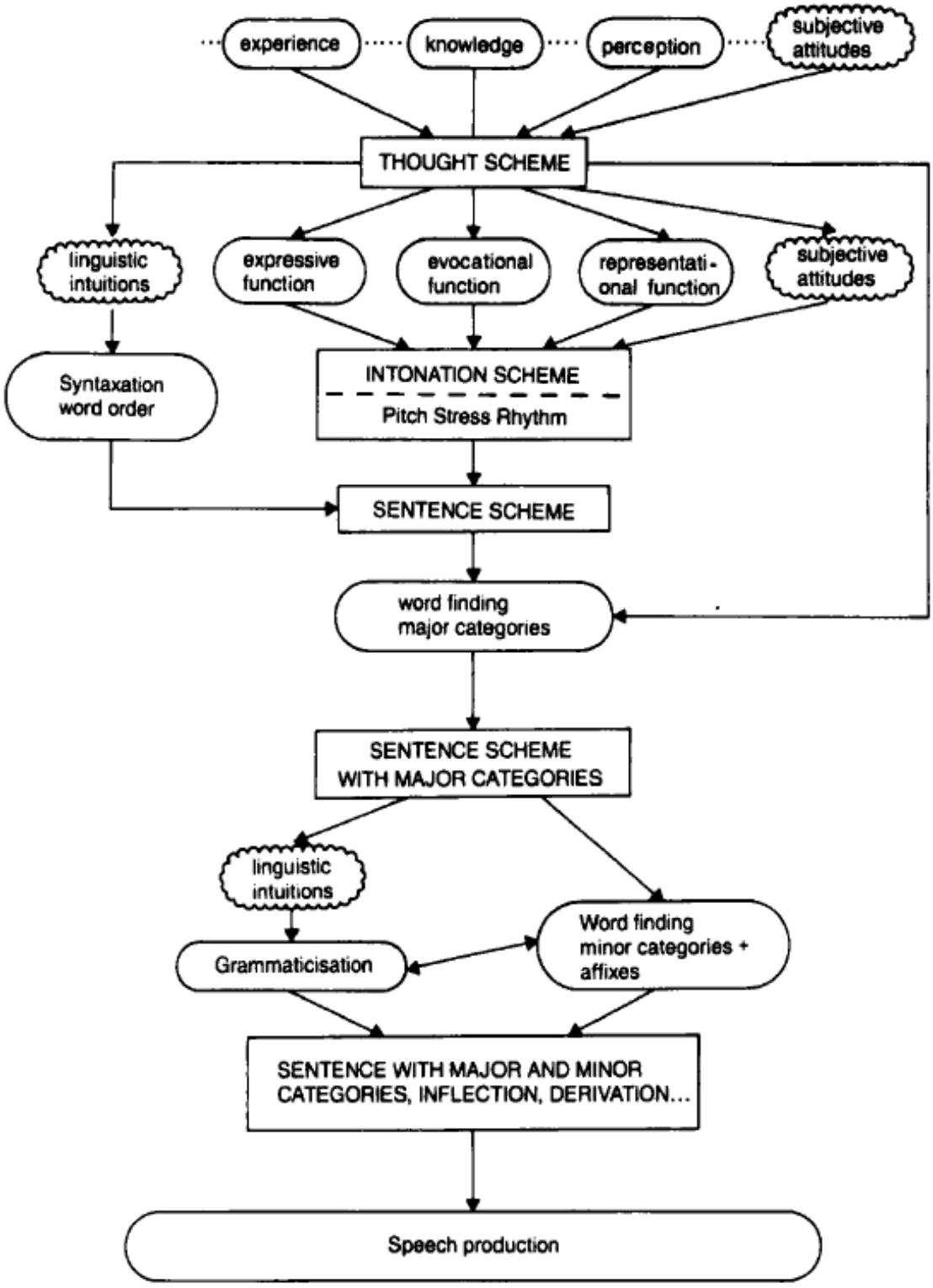


Figure 7.5: Pick's psycholinguistic model of speech production
[Taken from de Bleser (1987 p. 198)]

According to Pick's model (1913) – which Isserlin relied substantially on – thinking and speaking were articulated, not only physiologically, but psychologically in a speech act through different 'stages' of thought and sentence formulation. These stages were not always run through completely, nor had they any fixed sequence. Every speech act was unique, since they depended on the communicative intention and the affective moments involved. Linguistic and thought formulation were most of the time simultaneous. In the former, different linguistic means were available: pitch, intonation, accent, word order, and grammaticizing. Only following a 'sentence scheme' came the process of word-finding. Words were then inserted into the sentence scheme and then the content grammatised in order to express relations. Finally, physical structural relations, that is, sensory and motor networks corresponding to the inner linguistic ordering taking place were articulated and thus, the speech act could be performed by the executive language organ (Pick 1931; Friederici 1982 pp. 251ff). This represented a break with the psychophysical parallelist tradition, where the psychological association run parallel to the physiological, thus reproducing and mirroring but not interacting with the physiological association of memory images. Moreover, it became clear that that evocation of a word content followed the construction of a sentence scheme, which meant that sentences were not merely associative combination of words. In this sense, Pick's psychological model also represented a break with the traditional atomistic psychology. A further innovation was the attention Pick paid to the role of the speaker's attitude and affective intent for language production. He stressed the importance of intonational elements as well as gestures and mimicry in sentence formulation (de Bleser 1987 pp. 198-199). Isserlin's aphasiology depended on this functional approach to psycholinguistics.

The aphasiologists of the newer psychological orientations, such as those learning from Gestalt theory, would also develop the idea of the sentence and the speech act as central in aphasia research. However, contrary to Pick and Isserlin, they questioned the entire localisationist project. The holists – or 'noetics' as Isserlin called them – were calling into question whether there could be anything linguistically 'localised' at all. Moreover, they were also questioning to what extent linguistic impairments could unfold independently of conceptual dysfunctions. Isserlin was ready to defend these particular challenges to the received view of the classics. Isserlin argued at length against the reduction of language to thought and of aphasia to mere paralogisms. He argued against Goldstein's notion of a 'disturbance of a fundamental function' (*Grundfunktion*) as the ubiquitous cause of aphasic syndromes.[288] According to Isserlin, Goldstein was trying to homogenise all syntactic disorders, general

[288] Goldstein criticised the Wernickean model of aphasia early on in his career with reference to the newer psychology of thought processes of the Würzburg School and then from the 1920s on with Gestalt psychology. In the 1920s and 1930s, his central interest became the detection of the common disturbance (*Grundstörung*) underlying different disturbances, an all pervasive alteration in the mode of functioning after brain damage. This approach brought him into conflict with more (psycho-) linguistic authors such as Pick, lsserlin, and Lotmar. See Ludwig (2012); Geschwind (1964) for more on Goldstein's critique of localisation.

morphological disorders, amnesic disorders and ultimately sensory aphasia and motor aphasia as the outcome of the same basic disruption of an 'abstract attitude'. What Isserlin labelled the 'noetic school of aphasiology' which developed around Goldstein and Gestalt psychology traced every speech disturbance ultimately to conceptual and intellectual deficits. Instead, Isserlin was convinced that there was something 'specifically linguistic' (*sprachlich Spezifisches*) damaged in aphasia and that there were different forms of aphasia according to different types of neurological damage (Isserlin 1929 p. 172). This would remain Isserlin's biggest point of contention with Goldstein and the 'theorisers of wholeness' (*Ganzheitstheoretiker*) (Isserlin 1929 p. 139).

Moreover, Isserlin realised that linguistics in the nineteenth century had been treating language as a rational system of arbitrary symbols, an objective system furnished out of particular rules and conventions. However, he had found in the Munich philologist Karl Vossler (1872-1949) and later in Ferdinand de Saussure (1857-1913) support for his idea that language was determined by more than objective rules and conventions; the existence of such system was always essentially tied to the situational dimension of the individual speaker (or listener or reader). Isserlin found one of de Saussure's explanations 'very appropriate' (*ein sehr glückliches Bild*), namely what he called 'the chess analogy' (Isserlin 1936a pp. 715-716). De Saussure had explained that conventional rules ascribed a value to the individual figures of the game the same way that in language the rules were grammatic and semantic conventions. However, once the game started, the figures acquired different values depending on the momentary configurations with the board and the rest of the figures. Thus, for example, the knight conserved the 'L' movement as a fixed value in the game; and yet, every move the knight makes in a given game 'made this value swing' (*schwanken*). The same, according to the French linguist, happened in language: the meaning of words swung according to the situation in which it was uttered or heard. Isserlin considered going a bit further and thought that the analogy would work better if the elements of language were not settled in words but in phonemes (*Laute*) occurring in live speech articulations (*Lautungen*), since such elements were prone to experimental analysis. In particular, he considered of the upmost importance to pay attention to the affective moments represented in such 'voicing states' (*Sprachzustände*) (Isserlin 1929; 1931; 1936a; 1936b). Furthermore, Isserlin realised that the chronogenic aspect of the speech act could be also accessed when the 'momentary', the 'current' was given central significance:

> The system is always a current (*augenblickliches*) one…each arbitrary state in which a match of chess finds itself to be has the peculiarity of being uncoupled from previous and following ones…Speech functions in a similar way. It operates only in voicing-states. The objective rules of language have in themselves no significance (*Geltung*) for speech (1936a p. 716).

Instead of the intersubjective features of language, Isserlin was interested in determining how 'the voicing states' were connected with the intellectual and emotional states of the individual aphasics.

IV. Between Holism and Localisationism

Isserlin begun his monography 'Aphasia' in 1936 by claiming that 'it has not been a matter of chance, but rather one of intrinsic laws (*wesenhafte Gesetzmässigkeiten*) that a real pathological science of the brain had started with a theory of 'the central disturbances of language' (Isserlin 1936a p. 627). Broca inaugurated this science, he argued, regardless of whether his theories were right or wrong. For Isserlin, the mind-body problem as a scientific problem had only begun with Broca's clinical finding of the correlation between the damage of the third frontal convolution with symptoms in motor aphasia (1936a p. 628). Advances in psychology and linguistics by the turn of the twentieth century made aphasiologists only aware of the significance of linguistic phenomena (*sprachliche Erscheinungen*), and their inescapable psychological dimension. Isserlin considered that the biggest question in aphasiology was no longer how to localise speech functions in cortical regions, but rather, 'to what extent should psychological research be involved in the investigation, interpretation of results, and the formation of theories' when it came to the pathological science of the brain? (1936a p. 627).

For Isserlin, the revolt against the classic localisers went too far: 'iconoclasts', 'noetics' and 'wholeness-fanatics' had 'downplayed the significance of central disturbances of speech'; instead of more or less different psychophysical natural kinds, types of aphasia were all homogenised and conceived unequivocally as 'emanations from changes within the mental being' (1936a p. 629). For Isserlin, all the questions of neuropathology depended on the validity of the investigations of the central disturbances of speech, such as aphasia, apraxia, agnosia and all their subtypes. As I have shown in chapters 4-5, Isserlin fought hard for the legitimation of the distinction between central and general disturbances with regard to brain injuries, and some of the new holistic aphasiologists were endangering that legitimacy.

Isserlin explained that the problem with Broca had been, not his localisation attempts, but his failure to establish a unitary conceptual framework for them. The holists had provided such unitary concept: the unity of the organism. According to Isserlin, the 'wholeness' counter currents, in which Head and Goldstein were prominent figures, had consistently argued that the classical aphasiology that started with Broca was misguided because it was based on the fatal misconception of functions of the mind as outcomes of a 'composition' of independent anatomical provinces of a mapped-out brain (Isserlin 1936b p. 629). Isserlin welcomed the holists' new research directions. As he put it, 'their success is to

the extent justifiable, since a mere decomposition of the problems of the central disturbances of speech would not do justice to the given evidence' (1929 p. 138).

However, Isserlin explained that the holists had gone too far with their wholesale rejection of the work of the *Klassiker*. In particular, he believed that the 'word-concept' had been unfairly dismissed and its 'logical significance' for research not recognised. Isserlin explained that the word-concept of Wernicke, when separated from association psychology, served well to refer to the elementary unitarian formations (*Einheitsbildung*) in speech acts. Acoustic-motoric properties of a given speech articulation (*Lautung*) such as sounds, syllables, words, and so on, represented features (*Merkmale*) of the actual realisation of 'the acoustic-motoric object'. The elements required for the scientific study of aphasia, Isserlin argued, were provided by these 'objects'. In this sense, if phonetic psychological science could manage – as Isserlin thought it could – 'to abstract…that objective moment' represented in the acoustic-motoric articulation (the classical sense of word-concept), from the stream of the speech process, Isserlin asked, why then dismiss that basic unit of analysis? The 'word-concept is nothing else than the deepest and most solid connection between the acoustic and the motoric' (1936b p. 630). Through abstraction, he believed, it was possible to study these objects. As Isserlin explained, 'clinical delimitations gain scientific validation only when the *pathophysiological regularities behind the elementary functions are established*.[289] This applies also for the clinic of central disturbances of speech' (1936b p. 631). Isserlin's was a psychopathological *physiology* of language after all. And this is why Isserlin started the first part of his *Pathological Physiology of Language* (1929 p. 129) by arguing that 'any kind of pathological-physiological observation has to put pathology into the service of physiology; [pathology's] goal is to…acquire understanding of the laws of natural events' and not, as others were trying (read Freud, Goldstein, Jaspers), to acquire understanding of human nature or of the occult meanings of disease. Isserlin argued that his studies in aphasia 'presupposed everywhere performances subordinated to distinct sites (*Stätte*)', that is, to anatomical and physiological cortical structures (1929 p. 129).

On the other hand, with the advocates of holism, Isserlin also spoke against the localisers who isolated provinces of the cortex in a map-like fashion assigning to them autonomous functions. According to Isserlin, this approach was not grounded in experience, it was static and did not take into account the speaker, the speech act, and its temporal features. Isserlin proposed to work in brain pathology instead with concepts like 'clusters of functional performance' (*funktionalen Leistungsverbänden*) and 'adjustment and readjustment' (*Einstellung und Umstellung*) in order to loosen up the rigidity of the Wernickean conceptions (1922a; 1936b). Yet he did not reject the localisation project altogether, as the holists did. Isserlin agreed with critics of the classic doctrine that aphasia needed to find its basis in

[289] My italics

something different than nineteenth century reflex- and association psychology. However, Isserlin did not think that the state of psychology had improved enough with the new 'Gestaltist revolution' and the new, post-Wundtian experimental psychology of the Würzburg School. According to him, aphasiology had been purged from mistaken sensualists preconceptions by the 1920s. However, there was no theory of the mind that had managed to do justice to the imperatives of a truly empirical psychology. As he put it,

> …despite the agreement regarding the need of a psychological methodology for brain pathology, the lamentable state of psychology, which still overloads its empirical questions with an abundance of exuberant theory formation, and which has split into a number of strongly feuded schools through the formation of dogmas, is indubitably here to blame; the commitment to the dogmatic formation of theories…has to date been the downfall of every theory of brain pathology, including theories of aphasia. And still, it should be the task of anyone pathologically interested, to engage in a healthy eclecticism enforced by purely empirical questions, to elicit the pure facts valid in all psychologies regardless of theory formations, and to process them in a 'medical psychology' (1929 p. 136-137).

In fact, for Isserlin it was not the idea of localisation of function that was problematic in aphasiology. Rather, the real concern in his view was that of the excessive 'theory formations' in psychology because they endangered the fundamental empirical character that he claimed for aphasiology.

According to Isserlin, Goldstein did not have a secure empirical psychology, nor a methodology that stood independently of any speculative theory. Isserlin explained that holistic neurology– such as practiced by von Monakow and Goldstein – entailed the risk of '…exchanging the static brain mythology of some classical localisers for a dynamic [mythology]…' (1929 p. 139). In Isserlin's opinion, Goldstein failed by allowing wholeness to go beyond the mere metaphor-like hypothesis. As a consequence, 'the singularities of the phenomenal' were being overshadowed by 'the overwhelming reference to the whole…: the classic localisers certainly thought too much of the sum and not enough of the whole; but are not the new holistic psychologists thinking too much about the whole and neglecting the "differentiation" (*Gliederung*)?' (1929 p. 140). Indeed, the emphasis on the whole had made Pierre Marie claim already by the turn of the century that '*l'aphasie est une*'.

For Isserlin, nothing could have been further from the truth: in speech disturbances, there was the need to separate syndromes and symptoms, to distinguish central disturbances from general disturbances, to identify the psychological location of the damage in relation to the moments within the articulation of the spoken sentence. In Isserlin's view, all these tasks were being obstructed by the holists. Moreover, it was clear to Isserlin that aphasia was not a disorder of intelligence or of formal thought (a 'paralogism', as he explained the 'noetics' Arthur Kronfeld and Otto Binswanger were also arguing at the time), although it could be accompanied by it (Isserlin 1931 pp. 4ff; 48ff). Furthermore, when

aphasics forgot words, could not name objects, used poor grammar, or could not understand speech, there was ultimately, Isserlin emphasised, a sensory-motor event (or networks of events) taking place in their bodies. This physiological moment was being dangerously downplayed in the new psychologies of language of these authors (Isserlin 1929; 1936b). As discussed in chapter 4, Isserlin did recognise that after brain damage 'a general lowering of attention', a 'disruption of affectivity' and 'fatigability' would normally take place, but they were only 'secondary symptoms' when aphasia and other 'central disturbances' were involved. He was interested in tracing how a primary symptom led to secondary effects such as neurosis or fatigue. Aphasia was a disturbance of some element or part of a psychophysical process which had an essentially linguistic component. He did not believe, as Goldstein did, that a brain injury caused a disturbance of a *Grundfunktion* that in turn led to language problems. Rather, Isserlin argued, circumscribed brain damage led to particular language disorders which in turn could affect other mental performances. In this aspect he was closer to the classic localisers than to holists. The classic conception of language as a tool of thinking, of the linguistic as distinct from the discursive and conceptual, clearly opposed the 'noetic' view that an aphasic disturbance was a disturbance of basic thought functions (Isserlin 1929 pp. 195; 221).

According to Isserlin, speech was the outcome of an individual creative linguistic process within a given conventional language. Thus, he stated, '*abnormal language can only be examined in close connection with the speaker*. The methods, if one cannot fully and consistently call them scientific, need to be at least empirical, as far as they look at mental states' (1936 p. 635). Given this situation with Goldstein and the holists, '[t]he question arises as to how far such important views, which are, for instance, ideologically grounded, should be allowed to influence research' (1929 p. 140). Isserlin argued that the holists, despite their clinical findings and innovative therapeutic practices had still many issues to clarify. He asked Goldstein, for instance:

> Are there, from the perspective of the holistic approach…only symptoms of equal legitimisation? Or are there maybe dysfunctions in which the whole is hit primarily, and may there be others in which "secondary" effects recur onto them? Is it really an error to deal with general and circumscribed dysfunctions within the field of pathology? For even from the pathology of the body, there are enough examples which would serve to highpoint the importance of the question, "Generally circumscribed or not?" (1929 p. 144).

Furthermore, Isserlin claimed that the rejection of associationist psychology did not ipso facto dismiss of the notion of 'basic mental elements' (*Psychischer Tatbestand*) prone to some kind of localisation and thus, to scientific analysis, even if that could be achieved only through abstraction. How was it possible to keep using the terminology of mental elements without thereby falling into the association psychology of the reflex arc (as the classic localisers did)? Isserlin explained:

> It is necessary to go into the terminology of the mental element, which is currently being banned from psychology. Certainly, we are moving in constructs far from experience when the mind is explained as being created through these elements like a mosaic, [or when these elements] are treated as real mental atoms existing by themselves. Of course, in reality this is opposed by the holistic flow of the mental…like an undisrupted stream. But this stream is not homogeneous; it is rather…like a colourfully crafted rug…The strings go on continuously without disruption and never tear, but they magically interweave in manifold ways. In this wonderful construct, one could certainly abstractly detect certain partial images, even though the strings go on to the next image and no gaps occur. And in every abstracted part one can find certain fundamental components, even though the combinations change continuously. One probably needs to or must treat such fundamental components – or rather fundamental facts, to avoid any wrong resemblance of the composition of the spatially-thought mosaic…such fundamental facts…can only be isolated in scientific abstraction, as elements of the mental experience at the service of scientific work, without risking factual or methodological errors (Isserlin 1929 p. 16)

Although Isserlin rejected atomistic conceptualizations of the mind, he was reluctant to see the mind as the complete opposite, that is, as an homogenous whole, where a part had no individual role or value within a psychophysiological structure. So, although there were undisrupted tracts of mental activity (say, in the speech process) it was possible to do abstractions in order to pick up, not localised memory images or anatomical centres, but '*circumscribed facts'*. Certain aspects of the psychophysical bundle of events that were the act of speech or any language act were, Isserlin believed, traceable this way. For Isserlin it was not a matter of anatomical fixation but a matter of empirical necessity to work within 'representations' of the circumscribed, the differentiated, the hierarchised, the heterogeneous. Moreover, localisation for Isserlin was no longer to be seen as 'regional localisation'. In fact, psychic components shared by several sensational qualities could be attached to the same formal elements and structural groupings that were distributed across various brain regions. Accordingly, Isserlin argued for a 'scattered and diffused localisation' (1929 p. 154). As Isserlin explained, 'the scattered localisation can be compared to the threads of a knitted textile: 'be it knitted of black, grey, and brown threads, one can say: the grey threads are present everywhere, meaning that even the smallest space separable by the eye contains them, and yet, in a strict sense, the grey threads are in fact not present everywhere, but they are localised' (1929 p. 154).

It is clear for Isserlin that any holistic approach to aphasia was forced to concede assertively to the fundamentals of localisation. Thus, '[e]ven Goldstein, who is one of the most consistent and extreme supporters of holism, had to go for such an approximation: if one writes about "irritation distribution", and is convinced about the "influence of the specific structure of a single location", then one localizes' (1936a p. 636). Isserlin accused holists of being, after all, localisers themselves. Like Goldstein, Isserlin argued, 'Head does mostly circumscribe localization' (1929 p. 150).[290] An empirically and

[290] According to Isserlin, Head had subsumed motoric, sensitive, optic and speech dysfunctions under the view that 'a local lesion of the brain produces some distinctive loss of function'. However, Head himself certainly tried, like Goldstein, again and again, to demonstrate his rivalry with theories about cortical centres. He claimed

psychologically informed aphasiology needed to be protected from both extremes, from ultra-localisationism as much as from radical holism.

V. Isserlin and the 'Adaptive' Aphasic Syndromes

Agrammatism as adaptation

A move towards the sentence in aphasiology focused the attention of specialists on the particular disturbances of grammar production and grammar comprehension. In 1916 Kleist placed grammatical disturbances outside of the actual speech area and hence, had attributed a transcortical origin to them, involving a dissociation between non-linguistic concepts and the sensory centre. A couple of years later, Forster (1919) had also accepted a transcortical origin, though involving the motor area, explicitly stating that 'agrammatism' was nevertheless a distinct disturbance of language from motor or sensory aphasia (de Bleser 1987).

Isserlin explained agrammatism as a 'positive symptom' and as 'a language of need' and became famous for it. Some agrammatics cannot deploy the engrained rules of grammar, and thus, although they can speak and understand words, they do not have control over the articulation of speech at the level of the sentence. Isserlin explained that such circumstances forced some aphasics to resort to a telegram-like speech: only short and concise disconnected words were used to convey meaning which otherwise would be expressed in sentences. Isserlin noticed back in 1922 that the telegram-style speech of his patients disappeared when the patients wrote down what they wanted to say. The written sentences of the patients were either correct, or paragrammatic. Those paragrammatisms occurring in the speech production of motor aphasics would generally be found when the patient tried to abandon his 'correct telegram style'. Paragrammatisms in sensory aphasia were different. Here patients usually did not 'adjust' (*sich einstellen*) to their deficits and thus, did not plan their thought formulation into telegrams, but let themselves go into convoluted sentences (Isserlin 1922a; 1936b).

Isserlin found that what was commonly known as 'motor aphasia' had to present one of these forms of agrammatism: either speech in 'telegram-style' with impressive agrammatism (grammar could not even

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that the so-called centres in the cortex were not conglomerations of cells and fibres where some particular and more or less exclusive function was initiated, and disrupted by their removal. Instead, they were sites where a process 'could be reinforced, deviated or inhibited'; in fact, they were, as Head, explained 'loci of integration'. Isserlin agreed, but then asked consequently, 'are not these "loci of integration" anatomically localised'? (1929 pp. 148ff).

be understood when heard) or telegram-style without impressive agrammatism. Moreover, Isserlin established that all forms of sensory aphasia necessarily portrayed 'paragrammatism', that is, the confused and congested use of mistaken grammatical structures (the opposite to agrammatism). Isserlin was able to determine that indeed there was something like a 'circumscribed comprehension disorder for grammar'. In addition, Isserlin established that there was no evidence of impressive agrammatism without the expressive form, but that he had observed the reverse, and thus, impressive and expressive agrammatism were independent. Finally, he corroborated the fact that in severe aphasias, the agrammatism was first covered up by other phenomena but typically became noticeable in the process of recovery, lasting sometimes for years (1936b). In milder cases, where recovery was quicker, agrammatism was observable in the early stage only. In short, Isserlin was able to claim the following: the deficit in grammar production was associated with either motor aphasia and telegram-style speech and could occur with or without impressive agrammatism, or with paragrammatism and sensory aphasia. In addition agrammatic and paragrammatic utterances cooccurred in the same patients (Isserlin 1922a; 1936b).

Beyond the clinical classification of symptoms, the recognition of the telegram-style as *Sprachnot* was very well received by the neuropsychiatric community, especially by Pick (1931). Isserlin was claiming that in some cases of motor aphasia, a disturbance of automatised grammar emerged and the patient would be as a consequence inclined toward the telegraphic expression of their thoughts as available in thought planning stages according to Pick's model. Isserlin concluded from his studies in 1922 that there was no need for assuming a special location of grammar in the cortex, nor a lesion model for the positive, compensatory symptoms of agrammatism. Since agrammatism was an expression of and a psychological adaptation to motor aphasia, it would result from lesions underlying motor aphasia, and thus, presumably induced by a lesion in in the frontal lobe. Similarly, a temporal lesion was generally the cause of sensory aphasia, with which he had linked paragrammatism. Isserlin thereby attempted a conciliation between localisation attempts and psycholinguistic requirements.[291] In the 1930s, and following Pick, Isserlin 'localised' agrammatism with a disruption taking place at some stage previous to that of the formulation of the sentence in the language processing model. In other words, he localised agrammatism 'psychologically' and rejected the possibility of localising it in any of the lobes or convolutions of the cortex. At this stage, an integration of all the concepts and observations in the literature could only be accomplished by the kind of 'healthy eclecticism' for which Isserlin would plea, namely, 'a reconciliation of the great discoveries of the classics with the dynamic

[291] Isserlin was not exempt of critics though. Bonhoeffer (1923) illustrated some problems with Isserlin's and Pick's approach towards agrammatism and paragrammatism. Firstly, the reliance on a clear distinction between motor and sensory aphasia. Secondly, the reliance on the concept of 'language need' as a distinctive feature of motor aphasia. Finally, an alleged inability to account for patients who could not so easily be classified as predominantly agrammatic or paragrammatic, but who produced balanced mixtures of both.

views of functional psychology' (Isserlin 1929 p. 136).

Evidently, Isserlin's taxonomy did not have much validity for the 'iconoclasts' and holists since they did not accept the functional separation of motor and sensory aphasia. Isserlin gave a lengthy and severe criticism of these approaches in many publications in the 1930s, having early expressed the classic localisationist view that 'an examination of older and newer experiences must lead to maintaining the separation of motor and sensory aphasia – to the acceptance of corresponding isolated engram stores' (1922a p. 392). For holists like Head and Goldstein, talking about engrams and 'mnemonic associations', that is, of memory storage in cortical centres, was untenable.

Aphasia as 'Involution'

One of Isserlin's major contentions with the holists in the 1930s was the latter's assertion that all language disturbances could be traced back to disturbances of basic functions of thought, and as rooted in a handful of critical paralogisms. For him the proof that language disturbances presented essential features not shared with formal thought was given by the fact that – as he had been showing from 1925 onward with phonetic measurements – speech was primarily informed by an 'affective substructure' (*affektiver Unterbau*) (Isserlin 1925b; 1932). Isserlin recognised that a significant number of his patients with sensory aphasia could retain the musicality (*Musie*) of speech even when talking in incomprehensible paraphasias. According with his latest psycho-phonetic investigations he argued in 1936 that

> sensory aphasics, who largely fail at comprehending articulatory sentence structures, have not a bad performance at grasping mobile musical events. Such aphasics do much worse at registering crucial tones (*Klangfarben*) related to fixed meanings than at grasping temporal variations and tone pitches (*Tonhöhe*) and loudness (*Tonstärke*)' (1936a p. 718).

In other words, he managed to establish that sensory aphasics lost the acoustic-motoric moment in the process of comprehension without thereby losing elements such as rhythmic, accent, and tonal amplitude, which in turn seemed to retain semantic and communicative value. Isserlin claimed to have found proof for the fact that musical factors, crucial in speech comprehension and production, were rooted in emotivity (*im Affekt*). He argued that the symbolic correlations between musical, other emotive factors, and meaning must be differentiated from the fixed symbolic correlations between conventional pronunciation and phonetics.

Isserlin thus inferred a theory of language acquisition: when a person learned a language, be it the mother tongue or a foreign language, that person not only learned abstract words and rules of grammar, but also internalised emotive experiences associated with those learning instances. Thus, when a word was uttered, it could not be simply a 'word-image' which was activated, but also an unconscious memory of the experience (and hence the emotions) associated with the use of that word (Isserlin 1936a pp. 709ff.).

As a consequence of Isserlin's reflection on his empirical findings, an old dichotomy gained significance for his conception of aphasia: 'intention and automatism' (*Willkur und Automatie*). Isserlin recognized his debt to John Hughlings Jackson in this aspect of his late aphasiology (1936a; 1936b). He gave Isserlin 'the insight over the distinction between intellectual and the emotional aspects of language'. By measuring the lively voicing states of language disturbances it was possible to observe an organic interaction between primitive, emotional automatisms on the one hand, and conscious and volitional acts on the other. From this, Isserlin argued that his recent research on psychophonetics with the aphasics of his clinic had consistently shown that the more affectively rooted speech related faculties were, the more severe the outcome of their impairment. Musical factors were crucial vehicles of the emotional substructure of language and were therefore deeper and more fundamental than the knowledge of the rational rules of language (1936b). Aphasics did not lose language completely, they lost the relatively higher, more complex functional aspects of it.

Thus, as many other aspects that made up a speaker and a listener, Isserlin explained, musical qualities of speech were learnt through 'mnemonic (*mnestisch*) processes', that is, they were first consciously processed but rapidly incorporated as sort of memory reflexes in the nervous architecture. For instance, an aphasic might not be able to reproduce the alphabet, but could sing the 'ABC song' almost without difficulty. This was due to the fact that many German soldiers had learned the alphabet through that song when children, and the musical qualities of the learning experience were 'stored' in deep layers of the psychophysical systems evoked during speech. The significance for the doctrine of aphasia of these, as Isserlin called them – 'mnemonic facts' (*mnenstische Tatsachen*) had become clear in the second decade of the twentieth century, as Isserlin affirmed, thanks to Hughlings Jackson's 'happy intuitions' (*glückliche Intuition*) of the 'the differentiation of intellectual and emotional aspects of language' (1936 p. 719). Accordingly, Isserlin understood some aphasic symptoms, such as agrammatism and word-amnesia, not only as psychophysical disturbances to be found somewhere in the thought-sentence processing model, but also as the taking over of emotionally charged automatisms in what would normally be voluntary and conscious speech production. As an example of this process, Isserlin referred to a case in which a patient could not produce the word 'no' on command, and yet, in frustration, shouted

once, 'I cannot say no!' (1936 p. 647). The volitional, intellectual dimension had no longer access to what still remained 'mnemonically stored':

> What is at first conscious, often full of deliberate intention elapsing series of movements (actions) [*ablaufenden Bewegungsreihen (Handlungen*)] is slowly transformed into predominately or completely subconscious (*unterbewusst*) [actions] which become available for future performances (*kommendes Konnen*). Preconditions for the success of a purposeful motoric action ('-praxia' and '-phasia') is the correct course of practiced, accomplished motor performances corresponding to intentional impulses (*der korrekte Ablauf eingeübter, "gekonnter" motorischer Leistungen*). In aphasia as in apraxia, as Lipemann has been showing, it is precisely this correspondence between determined intention (*Willkür*) and automatised (practiced) kinetic performance what had been damaged, [these are] "dissociated" in the sense of the classics (Isserlin 1936b p. 692).

Isserlin had used Jackson's distinction between automatism and intention in combination with the 'classic' talk of damage of the association of motor-sensory performances. The aphasic was not deaf-mute, or speech-less. Aphasia implied instead, Isserlin explained with Jackson, a return to more primitive ('more practiced') motor performances. Put differently, the aphasic could not speak when they wanted, or when they should, and yet speech was not fully lost and some 'residues' (*Residuen*) could take over so as to realise some limited communicative functions and intentional acts. Moreover, Isserlin praised Jackson's thesis that 'destructive lesions never cause positive effects, but induce a negative condition which permits positive symptoms to appear'. He had also observed that 'positive mental symptoms' such as telegram-style speech arose during activity of 'lower centres' or 'lower nervous arrangements' which had remained unaffected by injury; these lower arrangements replaced the lost higher ones, needed for correct grammar use. It was therefore clearly not the anatomical and physiological lesion what caused these symptoms 'for the disease was a destruction of nervous arrangements, and hence, as such, could not logically make an individual do something, function positively, as the aphasic patient did with their agrammatic and paragrammatic speech forms' (Isserlin 1936b p. 695).

None of these conceptualization would have been possible, Isserlin explained, without Jackson's 'genetical approach', which accounted for processes such as 'evolution and dissolution' (*Aufbau und Abbau*) in the active adaptation of the nervous system to external and internal events. Isserlin acknowledged that 'Head was the first to pay attention to Jackson's psychical phenomenology and discipline of objective description'. However, Isserlin made very clear that, in contrast to Head, his use of Jackson's intuitions was meant to 'enhance the scientific contributions of the classic aphasia researchers, which Head has not yet accredited enough' (1936b p. 693).

Thus for Isserlin, 'evolution' was also 'a passage from the most to the least organized – that is to say, from the lowest well organised centres up to the highest least organised centres'. Well

organized centres, such as the musicality of speech and other emotive mnemonic features of language were incorporated in the automatic structure of the nervous system and brain in the first two years of life; in contrast, high centres, or as Isserlin called them, 'central representations' (*zentrale Repräsentanz*) were subjected to an ongoing organization throughout life, thus making them more fragile and vulnerable than lower elements when brain injuries occurred (1936b p. 696).

Isserlin lamented the fact that that holists who were embracing Head's rediscovery of Jackson's work were not recognizing the fact that Jackson constantly talked about 'organisational centres' which Isserlin considered indeed 'a highly classical view' (1936b pp. 693-698). Isserlin explained how to combine Wernicke's theory with Jackson's:

> The classics had not yet excelled in establishing the "defects"; and [yet], their theoretical explanations provide – with regard to the defects – today still essential insight. However, if one looks at the whole picture that each individual aphasic presents, one needs to amend this. One is entitled to use Jackson's terminology and establish: if it is about the patients' negative conditions, classic aphasiology suffices still today. If one instead observes "the patients positive conditions", Jackson becomes indispensable. Moreover…, if language were only a conventionally ('"artificially") constructed rational system, we would need for the comprehension of the aphasias nothing more than the doctrine of the Classics. But since language cannot be seen as being made by such a system, but rather 'as a living structural unity (*lebendig strukturierte Einheit*), then Jackson's conceptions are clearly justified (1936b p. 705).

Isserlin was not using Jackson to attack classic aphasiology as Head had been doing. In fact he was doing the opposite. Jackson's explanations of evolutionary layers fitted well with the explanations of the functions of high, circumscribed centres. For negative symptoms, as in the case of a motor aphasic's inability to articulate speech, the lesion model was still useful. The notion of the existence of positive symptoms through resorting to more primitive and organized levels of function did not affect the existence of circumscribed lesions.

VI. Conclusions

Much is left to be said about Isserlin's theories of language disturbances (and those of his prolific staff at the Heckscher Clinic) and their place in the debates over aphasia and cerebral localisation during the late 1920s and 1930s in Germany. Yet one thing becomes evident: as it could be said of other twentieth-century better-known aphasiologists, Isserlin used the historical tensions of the discipline (Wernicke, Jackson, Pick, Golstein, Head and many more) to boost his own clinical work and convince his peers about the validity of his claims on aphasia, as José Merino (2001) argues it had been the case with Head

and later with Norman Geschwind (1929-1984). Head had certainly used history to delegitimise localisers, and Geschwind, himself being a holist, could not depart from evidence gathered by the Wernickean localisers in order to validate his own clinical research during the 1960s. Geschwind actually revised the so-called 'aphasia debate' of the early twentieth century in order to show that there was no real conflict between holists and localisers. In short, he deployed a narrative for strategic purposes. Head and Geschwind seem to have had in common what Rachel Laudan (1983) labelled 'stipulative history', that is, rewriting (and even twisting) the history or the state of a discipline in order to set the grounds for a definitive reorientation in the field.

In the second half of this chapter I have presented some elements of his stance in the clinical and theoretical developments of his time about speech disturbances caused by brain damage as the product of quite a unique eclecticism of approaches to old and new problems. His analysis of the debates would definitely be closer to those of Geschwind than to those of Head. The latter wanted to convince his peers that classic localisationism was unscientific, and used history as a polemical tool in the furtherance of his own approach (Jacyna 2000 pp. 17ff). Geschwind, on the other hand, attempted a reconciliation, or as he put it, 'a healthy active disagreement' (1964 p. 215), thus recognising the achievements of both sides of the debate. As we have seen, Geschwind's eclectic aspirations in the 1960s were nothing new by the end of the 1930s in Germany.

When it came to neuropsychiatry in Germany in the 1930s, the RF was only interested in funding short-term, laboratory-based, and result-oriented research. Isserlin's teaching ban and alienation from public health structures reduced the scope of his work. However, he managed to find ways to reinvent his scientific practice and produce more than he ever had. Thus, in a way, socio-political events contributed towards the direction that Isserlin's research agenda took after 1933, and this, in turn, matched – although not without effort – the requirements of the RF in the mid-1930s. In fact, under Nazi rule, Isserlin and his staff went through the most prolific period of their professional lives in terms of publications because of the support they received through this organisation.[292] However, this period was short-lived. Ironically, as we have noted, the RF contributed simultaneously – knowingly or unknowingly – to the termination of Isserlin's professional career. In 1939, Isserlin was finally forced to leave Germany, finding asylum in Britain, where his daughter Beate was already working as a doctor.

[292] A considerable number of papers published by the clinic staff in the mid-1930s is preserved in (MS/1935: Boxes 1, 5 &12).

Conclusions

I. Exile

Max Isserlin would ultimately spend the last two years of his life in Sheffield, England, close to his daughter Beate. What he did between his arrival in Sheffield in 1939 and his death following complications from prostatic surgery in 1941, is not known. What we do know, however, is that he did not practice medicine at any point in those two years in exile. His last day as director of the children *Anstalt* – what had remained of the Heckscher Clinic by 1939 – was his last day as an urban scientific psychiatrist. Isserlin had already lost by 1933 his identity as an academic psychiatrist and public health expert, that is, as a psychiatrist working within public health structures and university psychiatric clinics. Once a formidable clinician, an expert in mental hygiene and welfare management, a pioneer in education-therapy, psychotherapy, experimental psychology and psychophonetics, an internationally known figure through his work on the aphasias, and a former member of the most prestigious psychiatric elite in the world, Isserlin spent his last two years of life – having only just turned 60 – with his wife at his daughter's home and away from his *Vaterland*. One can only imagine that his bodily ailments at the time were nothing compared to the frustration and sorrow he must have felt for having lost it all. Everything indicates that despite his Jewish lineage and the persecution he endured because of it in the 1930s, Isserlin's identity as an agnostic and conservative German remained unshaken until the very end. If it not were for a questionnaire and a couple of letters of 1939,[293] there would be nothing in the Isserlin-papers (MS/1935) which could show Isserlin ever acknowledging his Jewishness, less anything which would indicate that his activites were ever influenced by a cultural heritage that was not plainly Germanic. Perhaps the only time Isserlin utilised his cultural affiliation with the Jewish community was when he started arranging his exile.[294]

Between 1933 and 1940, there were eleven Jewish organisations in Britain that provided aid to Jewish émigrés. The six non-Jewish organisations providing aid were almost exclusively concerned with supporting academics and scientists. Always with the intervention of the Rockefeller Foundation, the more progressive medical institutions and organisations in Britain, such as the Maudsley Hospital – which itself had been modelled on Kraepelin's DFP –, the Bethlem Royal Hospital – financed by the London County Council –, the Medical Research Council, and the Society for the Protection of Science

[293] See (MS/1935: Box 6 and 4 respectively).
[294] As indicated in Chapter 3, less assimilated Jewish colleagues had found his personality and disposition rather strange for a *Rassengenose*.

and Learning, cooperated in importing the best German neuropsychiatrists into British teaching hospitals in the second half of the 1930s (Jones et al 2007 p. 357). From Isserlin's correspondence in the years 1938-1939 we know that he was granted asylum in Britain through the agency of one of these organisations, namely, the Society for the Protection of Science and Learning (henceforth SPSL).[295] The SPSL was founded by a group of British academics, led by the sociologist William Beveridge from the London School of Economics, and supported by Nobel Prize winners, such as Charles S. Sherrington. In 1936, this organisation managed to raise £10 000 to provide one-year stipends to German Jewish doctors and concentrated its efforts in placing the refugee scholars in temporary positions, given that this was a government prerequisite to grant residence and work permits. Despite the discriminatory policies of British officials, the SPSL managed to secure 80 permanent placements for Jewish physicians in 1937 and 127 in 1938 (Loewenau 2016 p. 355). However, we do not know anything about the particulars of the arrengements made between Isserlin and this organisation in 1939, nor whether the organisation contemplated any temporary work placement for him.

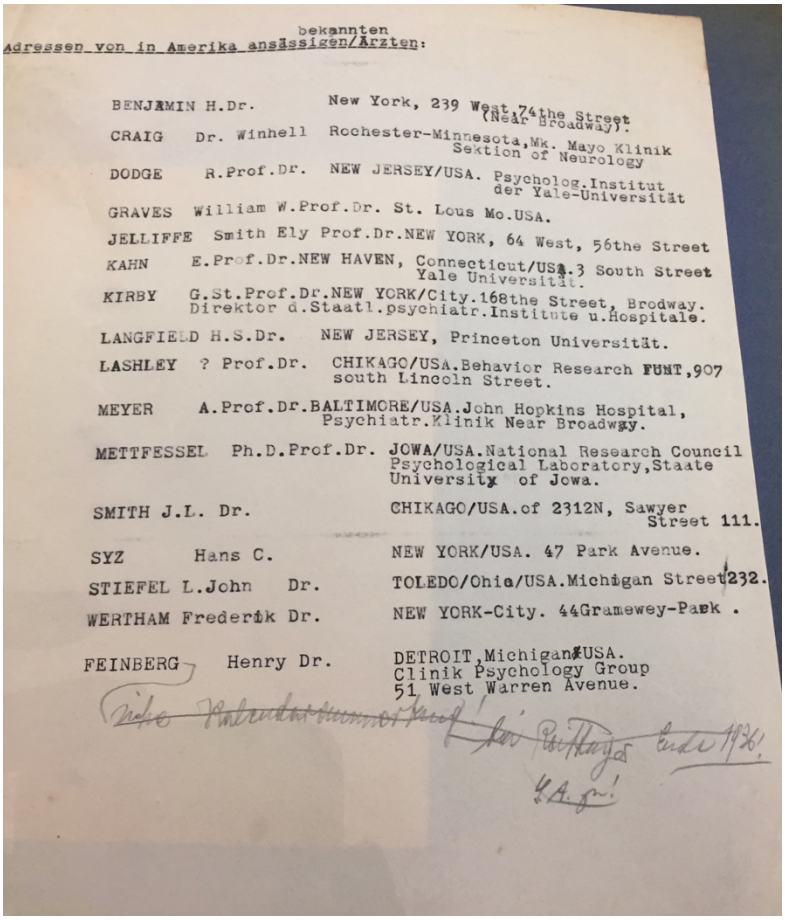
Most of the prominent Jewish neuropsychiatrists who emigrated to Britain between 1934 and 1938 through the agency of organisations such as the SPSL had had a good relationship with Isserlin in Germany. Among them were: Willi Mayer-Gross (1889–1961) from Heidelberg University, who was placed at the Bethlehem Royal Hospital; University of Bonn's neuropathology professor Erich Wittkower (1899-1983), who went to the Maudsley Hospital and later became founder of McGill University's Transnational Psychiatry; and neurologist Eric Guttmann (1896-1948) from Breslau, who thanks to the Rockefeller Foundation was appointed to the Maudsley Hospital (Loewenau 2016 pp. 352-353). Throughout the 1930s, Isserlin regularly visited the Maudsley Hospital and collaborated, in one way or another, with all the above mentioned psychiatrists, all of whom belonged to a younger generation.[296] There should be little doubt that by 1939, Isserlin had acquired more prestige and recognition than any of them. Moreover, the SPSL was itself financed in 1939 by the Rockefeller Foundation, which had already funded Isserlin's research for four years prior to his arrival in England and was actively funding brain research in England at the time (Jones and Rahman 2009 p. 292). If we add to all this the fact that, as Loewenau (2016 pp. 360; 353) has pointed out, in 1939 there was a very high demand for specialists in psychotherapy and that the Medical Research Council in London received $42 968 to provide funding for psychiatric research to those who had escaped Germany with the help of the SPSL, one might wonder why Isserlin did not work in Britain.

[295] Originally called the Academic Assistance Council (AAC).
[296] See Isserlin's correspondence (MS/1935: Box 3&4) for more details on Isserlin's friendly cooperation with these doctors. Especially, see correspondence with Guttman (18/6/1936), with Meyer (22/03/1937), with Mayer-Gross (16/01/1937).

There is no clear answer to this question. Nevertheless, there is some room for speculation. Firstly, Isserlin did not want to abandon his personal projects; hence his reluctance to leave Munich earlier. There is sufficient indication of the fact that in 1939 Isserlin intended to continue with his work on aphasia from both psychological and neurolingustic perspectives as described in Chapter 7. For instance, in a letter to Adolf Meyer of 29 June 1937, he had asked his Jewish colleague – by then working in the Phipps Clinic at the John Hopkins Hospital in Baltimore – to send him a copy of a paper on aphasia that Meyer held in 1909 'in the Harvey Lectures'. In the letter, he explained that he needed that copy because he 'wished to re-work his Pathological Physiology of Language and publish it as a textbook'. Furthermore, the content of the Isserlin-papers, that is, what he took with him to Sheffield (see section III of Introduction) provide a good representation of what was important for him in 1939: language physiology and psychopathology make up the majority of the research materials and sources there. Evidently, the British marketplace of mind and brain would not have given him the intellectual and scientific freedoms he enjoyed in Munich, and this even despite the latest professional restrictions he had been enduring. Thus, we can be confident in assuming that upon his arrival in Sheffield Isserlin was completely focussed on drafting his textbook and was not interested in clinical work. Secondly, Isserlin must have known that in Britain professional life was not necessarily easier for German psychiatrists and he would have been reluctant to subordinate to younger English clinicians. As Paul Weindling (2007 p. 142) has indicated, despite the prestige enjoyed by German Jewish neurologists and psychiatrists among their British counterparts, after 1933 the former were seen, due to their research-based medical degrees, as a competitive threat.

Moreover, there has been a discussion[297] as to whether Britain was only a temporary destination for most Jewish psy-doctors escaping Nazi Germany. A document in (MS/1935: Box 4) (see figure c1) lists all of Isserlin's contacts and their addresses in the U.S., among them a few close friends, such as Adolf Meyer (Baltimore) and Ely Smith-Jelliffe (New York), which could suggest that England had been thought by Isserlin only as a transitory location.

[297] See Weindling (2009) and K. Decker (2003).



bekannten
Adressen von in Amerika ansässigen/Ärzten:

BENJAMIN H.Dr. New York, 239 West 74the Street (Near Broadway).

CRAIG Dr. Winhell Rochester-Minnesota,Mk. Mayo Klinik Sektion of Neurology

DODGE R.Prof.Dr. NEW JERSEY/USA. Psycholog.Institut der Yale-Universität

GRAVES William W.Prof.Dr. St. Lous Mo.USA.

JELLIFFE Smith Ely Prof.Dr.NEW YORK, 64 West, 56the Street

KAHN E.Prof.Dr.NEW HAVEN, Connecticut/USA.3 South Street Yale Universität.

KIRBY G.St.Prof.Dr.NEW YORK/City.168the Street, Brodway. Direktor d.Staatl.psychiatr.Institute u.Hospitale.

LANGFIELD H.S.Dr. NEW JERSEY, Princeton Universität.

LASHLEY ? Prof.Dr. CHIKAGO/USA.Behavior Research FUNT,907 south Lincoln Street.

MEYER A.Prof.Dr.BALTIMORE/USA.John Hopkins Hospital, Psychiatr.Klinik Near Broadway.

METTFESSEL Ph.D.Prof.Dr. JOWA/USA.National Research Council Psychological Laboratory,Staate University of Jowa.

SMITH J.L. Dr. CHIKAGO/USA.of 2312N, Sawyer Street 111.

SYZ Hans C. NEW YORK/USA. 47 Park Avenue.

STIEFEL L.John Dr. TOLEDO/Ohio/USA.Michigan Street 232.

WERTHAM Frederik Dr. NEW YORK-City. 44Gramewey-Park .

FEINBERG Henry Dr. DETROIT,Michigan/USA. Clinik Psychology Group 51 West Warren Avenue.

Figure c1: Addresses of Isserlin's contacts in America
[MS/1935 Box 4]

On the other hand, we know that Isserlin had indeed applied for a place at the Maudsley Hospital in 1939 and was rejected by his younger Munich ex-colleague, Karl Stern (1906–1975). In a letter, Stern explained to Isserlin that he had brought his case and request to the attention of Eric Guttmann (well-regarded at the Maudsley hospital for his histopathological work) and of Aubrey Lewis, and that

> as I had myself anticipated, these gentlemen agree on that fact that the Maudsley Hospital is inappropriate (*ungünstig*)…for your purposes (*Absicht*). The reasons are the same as those you had suspected. This decision has been reached after objective [deliberation], and I think Dr. Guttmann's personal preferences have not influenced it (Stern to Isserlin 14/09/1939).

Stern and Isserlin knew each other through Spielmeyer, of whom Stern had been assistant. Yet their age difference was significant (30 years). The Maudsley Hospital might have preferred employing younger researchers with no established agendas of their own. The rejection could have had also something to do with the actions of British officials, who were encouraging German expatriate psychiatrists and neurologists to return to Germany in 1938-1939. Indeed, around 2000 had agreed to return only in those years (Atkins 2005 p. 71). Nevertheless, Stern wanted to 'put [Isserlin] on the right path', and

recommended he enquired in Manchester and Oxford, providing him with the addresses of the pioneering neurosurgeons Geoffrey Jefferson (1886-1961) (Manchester) and Sir Hugh William Bell Cairns (1896–1952) (Oxford). This was one of Isserlin's final communications preserved in the Isserlin-papers. Whether or not Isserlin actually pursued the leads suggested by Stern or any other avenues, remains yet to investigate.

Following the outbreak of the war in 1939, many German Jewish émigrés lost their positions at hospitals and medical institutions in Britain and were placed in internment camps under suspicion of being spies at the service of fascism. From the Maudsley Hospital, two young neuropsychiatrists, the Jewish-Italian Amadeo Limentani (1913-1994) and the Jewish-German Felix Post (1913-2001) were taken to these camps in 1939 (Hilton 2007 p. 218). Isserlin could have suffered the same fate had he not remained under the protection of his daughter Beate, who had been working in England as a medical practitioner for over a decade. In short, Isserlin's apparent failure to continue his medical career in exile may have simply been a question of bad timing; self-promotion and active job hunting would have been more difficult in 1939 than in previous years. Age and health may have played a role too. Isserlin was 60 years old when he moved to Sheffield. As Loewenau (2016 p. 356) shows, 17 of the 20 neurologists, neurosurgeons, and psychiatrists of Jewish origin who were accommodated in an academic or scientific institution in Britain by the SPSL had been younger than 41 years old.

II. Isserlin's Professional Routes and the Unconnected Dots in the History of the Mind and Brain Sciences

We have identified with a bit more clarity some of the persons, ideas, processes, scientific theories, diagnoses, therapeutic practices, institutional settings, and socio-political events that stood behind Isserlin's and Weber's success in saving the lives of the children who were not hidden from the Nazis in the countryside of Bavaria in 1939. In hindsight, we now know also that Isserlin was saving lives already in the 1920s. The practical application of the vital distinction between *bildungsfähig* and *bildungsunfähig* (capable and uncapable of learning) in adults (especially brain injured soldiers) and children was the outcome of Isserlin's life-long navigation through a myriad of complex scientific, institutional, and bio-political occurrences. Yet, after tracing some of the routes Isserlin took, we have also been provided with a remarkable opportunity for examining broader issues in the history of the mind and brain sciences in Imperial and Weimar Germany.

First of all, although increasingly different and contradictory aspects of Kraepelin's research program continue to be uncovered by historians, most are largely reluctant to accredit the fact that Kraepelin had a team that contributed heavily to the achievements for which he is best known today. Thus, for example, with Chapter 2 it has become evident that the ever evolving disease entities 'manic-depressive insanity' and 'epilepsy' were not only co-created by Kraepelin, Isserlin, Sommer and Aschaffenburg, but also that such co-creation relied heavily on the application of Wundtian and Wundtian-inspired psychological experiments to patients that passed through the observation wards of their psychiatric university clinics. Disease entities were after all not the exclusive outcome of careful clinical observation and sophisticated inscription technologies, but also of psychological experimentation.

Despite the fact that Kraepelin did not have in Munich what we can call a research school as was the case with Wundt in Leipzig, this thesis has shown that there was something we can call 'Kraepelinianism' and that it entailed complex scientific, institutional, and biopolitical sets of causes. We have been able to establish some of the rationales for these causes and the extent to which Isserlin contributed to their realisation. Thus, in the late nineteenth century psychiatry had stagnated in the pathological laboratories and the novel urban setting was failing as much as its old rural counterpart in disciplining their unruly objects, namely, the different forms of mental illness. Kraepelinianism, as practiced by Isserlin and other *Hilfswissenschaftler* of Kraepelin was a conscientious and systematic attempt to, through innovative scientific practices as much as through a biopolitical agenda, bring order and discipline to those unruly objects. At the same time, however, it has been possible to determine the extent to which such disciplining was prone to individual interpretation, subjected to particular interests and discourses, and executed in singular ways. Isserlin's Kraepelinianism was *his* inasmuch as it unfolded in unique institutional settings created in response to the professional and sociopolitical consequences of war. It will remain a task for historians of German clinical psychiatry to determine other ways in which Kraepelinianism was embodied by the practices and institutions of other psychiatrists.

Moreover, if Isserlin's work has taught us new things about Kraepelin's psychiatry, it has also helped us reconsider the historical place of Freudian psychology in early twentieth century German psychiatry. Besides indicating the reasons why revisionist historiography of Freud's early German reception should be taken with considerable nuance, and that the 'legend' of Freud as victim of ostracism was not as fabricated and mythological after all, in chapter 3 we have been able to identify events, debates and arguments that reveal an intense confrontation by proxies between Freud and Kraepelin. Isserlin's agency in particular was crucial in undermining psychoanalysis academic pretensions in the first decade of the past century. The way Isserlin explained why the theories and practices of Jung and Freud were a threat to the progress of medical psychology boosted his and his group's own credentials as the legitimate doctors of the psyche. Historical research on the evolution of German academic psychiatry

in the first decade of the twentieth century should not longer ignore how Freudian ideas and practices were received, interpreted and dealt with in university psychiatric clinics.

One of Isserlin's broader criticisms of Freud and Jung was their lack of scientific standards and of commitment to empirical methods. Yet, chapters 4 through 6 have revealed that Isserlin and the Munich establishment — under the notions of weak predisposition to war neurosis and psychopathic inferiority — toyed with the idea that some of those considered to belong to borderline abnormal types had lesser human value than those taken to be well-adjusted individuals and, as we have seen, this belief responded less to empirical neuropsychiatric science than to technocratic ideologies, professionalisation quests, class politics and governance, as well as to fears of the perceived ills of modernity. Furthermore, chapter 4 has evidenced that previous historical accounts of the work of neuropsychiatric military lazarets have ignored important diagnostic and prognostic categories produced in such locales, such as 'focal brain damage', 'central disturbance' and 'late consequence of brain injury'. As we have seen with Isserlin's lazaret 'München L' and the welfare institutions evolving from it, 'war neurosis' was not the only condition brought about by the trench warfare and not the only target of psychiatrists' classificatory regimentations and therapeutic endeavours. Put differently, if war neurosis was a capacious umbrella concept, it was not as capacious as historians have suggested; in Munich, psychological consequences of brain injury did not fall under such umbrella term. As chapters 4 and 5 described, Isserlin successfully demonstrated to the medical community, to state officials, and to some extent to the German public at large, that different to people with weak mental constitutions and neurotics, different to the mentally challenged, and even different to old aphasics, the victims of late consequences of focal brain damage could be rehabilitated to some extent through therapeutic-pedagogic practices borrowed from special needs teachers. Isserlin – as we revealed in chapter 6 – went as far as to almost create a new discipline out of neuropsychiatric-pedagogical arrangements, namely, *Heilpädagogik*. Educational therapy as understood and practiced by Isserlin and his co-workers has presented itself as a good example of a pre-Nazi platform for eugenic practices that had, in its principles and purposes, little to do with what we now understand as special needs education. Thus, if the history of psychology was more intermingled with the history of clinical psychiatry in late Imperial Germany than is commonly recognised, the history of the interface of eugenics and psychiatry in the Weimar period requires taking the implementation of educational-therapeutic practices by psychiatrists more seriously.

Moreover, we have been able to determine that Isserlin was ultimately, in terms of the time, a psychiatrist, *not* a neurologist. He did not promote the disciplinary autonomy of clinical neurology, as certainly others close to him did. In fact, he contributed to the furtherance of a unitary institutional model for nerves, brain and mind, which, as we have seen, could be traced back in some ways to the beginnings of scientific psychiatry with Griesinger's urban asylum. As chapter 5 has revealed, throughout the first three decades of the twentieth century, but especially after the First World War,

emergent medical disciplines of the mind and brain presented largely blurred boundaries. Attempting to find in the German lands of Isserlin's time what we can now more or less effortlessly distinguish as neurology, psychiatry, psychology, psychotherapy, occupational therapy, special needs education, forensics, and even psycholinguistics and social work could not possibly evade anachronisms. The Heckscher Clinic, which Isserlin, the sociocultural pessimism and economic depression produced by a lost war, a unitarian neuropsychiatric discourse, and the technocratic Weimar welfare system conspired to create, was not a clinic specialised in the treatment of diseases of the spinal cord, or of peripheral nerves and ganglia; it was not a neurology clinic (although it was meant to be). Authors who have made references to this institution as a centre for neurological rehabilitation have for the most part ignored its unique character and its complex means of medical and social productivity. A paradoxical figure like Isserlin could not have lead an establishment that did not carry out paradoxical tasks. Thus, on the one hand, it was *a psychiatric clinic*. In early twentieth century Germany, this did not mean that it was a psychiatric asylum which hosted mentally ill patients. The Heckscher Clinic was a psychiatric clinic because it worked as a cog in the machinery composed by the Munich university psychiatric clinic and the German Research Institute of Psychiatry. Together, they worked as centres of diagnostic regimentation, prognostic inscription, and social prophylaxis. On the other hand, however, it was a unique psychiatric clinic because psychiatric practice could be extremely capacious. By tracing its genealogy, we have been able to establish that the clinic became a diagnostic and rehabilitation centre for consequences of brain injuries caused by war; that it incorporated within its walls workstations for the purposes of restablishing the employability of patients; that at some point became a centre for the care of special needs children; that it functioned as a laboratory research for psychophonetics and speech disorders (especially equipped with the money of the Rockefeller Foundation in the 1930s); that throughout the 1920s, the clinic was an ambulatory fitness check-up and patient transfer coordinator (under the euphemism 'welfare centre'); and at some point, it served the role of mental asylum (not surprisingly, their least advertised task). This constituted a remarkable case of interdisciplinary set-up within a unitary neuropsychiatric model. How many other 'nerve clinics' at the time could have performed in such original ways should be a task for future research.

By claiming membership in disciplines based on common academic backgrounds, research methodologies, and topics of study, Isserlin contributed to the production and dissolution of several early twentieth-century disciplinary boundaries. This thesis has shown that in early twentieth-century Germany, blurring as much as establishing disciplinary divisions were at the core of any (successful) psychiatric practice. Thus, aphasia was originally an object of psychiatric discourse and practice, even though today it would be rarely considered to be. Evolutionary neurolinguistics, psycholinguistics, as much as pathological anatomy, were all areas over which psychiatrists like Isserlin could claim expertise and jurisprudence. Furthermore, although much has been written about how German holists like Kurt Goldstein and Constantin von Monakow (as well as Freud) reacted to the inadequate and

unproductive nineteenth-century paradigm of cortical localisation of language function, we have seen in chapter 7 that actually there were indeed ways in which 'classical' or 'Wernickean' approaches to aphasia were productive as late as the late 1930s. In particular, Isserlin and his co-workers generated an understating of positive features of agrammatism and motor aphasia which was indeed indebted to both psycholinguistic and localisationist approaches. This exposes a rather complex epistemological and methodological situation that mirrors some of the inherent contradictions of the research agendas of the neurosciences today.

By following the trajectory of Isserlin and the Heckscher Clinic along their convoluted milieus, we have seen how numerous psychiatric diagnoses and medical categories were up for grabs in terms of interpretation and use; we have seen how some descriptive and normative dichotomies used by Isserlin and his colleagues to classify people were at the same time plastic and powerful: normal and abnormal, sane or insane, capable or incapable of learning, curable or incurable, neurotic or psychotic, sensory aphasic or motor aphasic, paragrammatic or agrammatic, organically diseased or psychologically/functionally disabled, demented or manic-depressive, constitutionally inferior or constitutionally fit, hereditary or non-hereditary; all these dichotomies had a remarkable plasticity when it came to further (or hinder) the professional interests of German (neuro)psychiatrists like Isserlin, particularly so amidst social, economic, and political upheavals. This categorical plasticity was also evident in the self-perception of the professionals involved in such descriptions and normative prescriptions: clinical neurologist, neuropsychiatrist, internist, alienist, nerve-doctor, experimental psychologist, psychotherapist, eugenicist, therapeutic and social pedagogue, aphasiologist – these were by no means fixed and neat descriptions of medical or medically-related occupations. The instability of diagnostic categories, the proliferation of debates, the diversity of institutional settings, and the ambiguity of professional self-understandings, all seemed to have unfolded in tandem in each of the episodes of Isserlin's story.

Therefore, we cannot help to notice that, in significant ways, like most successful psychiatrists of his time, Isserlin helped create the problems he tried to solve. Isserlin's story has allowed us to identify which understandings of disease and abnormality and which ways of disciplining and organising social reality produced the manic-depressive insane, the epileptic, the brain-injured veteran, the inferior psychopath, the problematic child. In addition, in most cases, Isserlin and his colleagues claimed to be carving nature at the joints when they created categories or therapeutics to organise their objects without realising that at the same time they were inventing both their patients and their own professional identities. In Isserlin's story, many of the practices described involved the 'making up of people': health professionals, patients, and mentally healthy people were produced side by side. We have been able to observe, especially in chapters 2, 4-7 that, in some instances, 'a kind of person came into being at the same time as the kind itself was being invented' (Hacking 2002 p. 106). Many of the patients,

professional identities, disciplines, practices and categories emerged in an interactive and almost cyclical fashion (Engstrom 2003) in the psychiatric discourses Isserlin conspired with.

The chapters of this thesis suggest that scholarship on the history of German neuropsychiatry in the pre-Nazi period still has significant ground to cover in order to truly appreciate the ways in which changes within psychiatric discourse were the reflection as much as the outcome of developments in larger social thinking. As we have been able to detect in the case of Isserlin and some of his Kraepelinian fellows, the medicalisation of social problems and the expansion of the jurisprudence of psychiatry were the outcome of broad dialogues between a troubled modern middle-class and self-proclaimed experts on solving modern troubles. If Isserlin succeeded in implementing diagnoses and prognoses recognised by public health officials it was because these diagnoses and prognoses mattered directly or indirectly to the German public and to specific interest groups inside and outside the profession.

Furthermore, we have been able to establish that the history of German psychiatry poses historical questions which transcend the precincts of traditional narratives of German racism. Hitherto the history of the interface of eugenics and psychiatry in pre-Nazi Germany has been neglected because it has been conflated with a stage of development of an ultra-nationalist racial ideology. According to this interpretation, the rhetoric of 'being born well', which gathered considerable momentum in the aftermath of the First World War, was essentially destined to end in the Nazi atrocities. Exploring the complexities of scientific psychiatry through Isserlin's professional trajectory has reaffirmed some links between early twentieth century German eugenically-informed psychiatry and Nazi racial hygiene, but by no means leaves German psychiatry in Imperial and Weimar periods as the necessary predecessor of psychiatry under Nazism.

A common problem in the historiography of early twentieth-century German psychiatry remains having disconnected biographical, local, intellectual and institutional accounts of what in reality where only components of broader processes. However, research methods are now sophisticated enough to allow comprehensive, across-the-board accounts of the history of the mind and brain sciences in the period 1900-1939. This thesis has evidenced that historians with pre-determined agendas have produced multiple writings of the history of German psychiatry that often talk past one another, rather than engaging in dialogue. There is a pressing need for establishing common origins of otherwise seemingly unconnected dots of the psy- and neuro-landscapes of early twentieth century Germany.

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