UNIVERSITÄTSKLINIKUM HAMBURG-EPPENDORF

Zentrum für Psychosoziale Medizin,
Institut für Geschichte und Ethik der Medizin

Prof. Dr. med. Heinz-Peter Schmiedebach

International knowledge transfer: The adaption of German Psychiatric Concepts around 1900 during the Academic Evolution of Modern Psychiatry in China

Internationale Wissenstransfer:
Die Anpassungsfähigkeit der deutschen psychiatrischen Konzepte um 1900 während der akademischen Entwicklung der modernen Psychiatrie in China

Dissertation

zur Erlangung des Doktorgrades Dr. rer. biol. hum. / PhD
an der Medizinischen Fakultät der Universität Hamburg.

vorgelegt von:

Wenjing Li
He Bei, China

Hamburg 2016

(wird von der Medizinischen Fakultät ausgefüllt)

Angenommen von der
Medizinischen Fakultät der Universität Hamburg am: 23.09.2016

Veröffentlicht mit Genehmigung der
Medizinischen Fakultät der Universität Hamburg.

Prüfungsausschuss, der/die Vorsitzende: Prof. Dr. H.-P. Schmiedebach

Prüfungsausschuss, zweite/r Gutachter/in: Prof. Dr. D. Naber

Contents

Abstract

Modern psychiatry was first introduced to mainland China along with the concept of ‘science’ and the idea of bio-medicine around 1900 by western missionaries. From the year of 1898 to 1978, the field of psychiatry in China had developed gradually as a result of contact with western psychiatry. In the light of the unparalleled contributions of German psychiatry around 1900, what kind of impact and how it had on the newly introduced discipline in China is the focus of this study.

In order to pave the way for the research, the respective status between Germany and China before 1898 were first compared; the contention in German psychiatry and the shift of the pivotal centre of modern psychiatry were presented. From the perspective of international knowledge transfer, by using the qualitative analytical methods from comparative history and medical intelligence science, this study analysed the role played by key individuals and events in this process of ‘western studies east-bound’ in psychiatric field; investigated the landmark of psychiatric publications in China before 1978; and then argued that modern psychiatry was introduced to China through a process of adaptation in which the United States and three other countries served as bridges for German thoughts around 1900. Moreover, the reasons for the adherence to the somatic-biological orientation and those for the exclusion of the related philosophical explanations in Germany psychiatry were revealed. In view of the similarity of some ideas between Emil Kraepelin and the Traditional Chinese Medicine, the inspiration of re-evaluation of German psychiatric concepts was proposed, and a broader perspective for the future historical research in psychiatry with the emphasis of regression to its medical nature was raised.

This study responds to the paucity of research on the issues of international relationship about psychiatric concepts dissemination from the West to the East. The research result indicated that, despite the lack of direct intelligence exchange in psychiatric field between Germany and China, the original ideas for the initial creation of modern psychiatry in China were actually drawn from German psychiatry.

Keywords: China, German psychiatry, history, knowledge transfer, America, Japan, Soviet Union, Great Britain, Traditional Chinese Medicine

Abstrakt

Die moderne Psychiatrie wurde zum ersten Mal zusammen mit dem Konzept ‘der Wissenschaft’ und die Idee der Bio-Medizin um 1900 von westlichen Missionaren nach China eingeführt. Ab dem Jahr 1898 bis 1978 hatte sich das Gebiet der Psychiatrie in China allmählich als Folge der Berührung mit der westlichen Psychiatrie entwickelt. Vor dem Hintergrund der beispiellosen Beiträge der deutschen Psychiatrie um 1900 wird als Schwerpunkt untersucht, welche Art von Auswirkungen diese hatten und wie sie sich auf die neu eingeführte Disziplin in China auswirkten.

Zunächst werden die Verhältnisse zwischen Deutschland und China vor 1898 verglichen. Sodann werden die konzeptionellen Auseinandersezungen in der Psychiatrie in Deutschland erörtert und die daraus resultierenden Schwerpunktverschiebungen dargestellt. Aus der Perspektive des internationalen Wissenstransfers analysiert diese Studie mit Hilfe der qualitativen analytischen Methoden aus der vergleichenden Geschichte und medizinische Informationswissenschaft die Rolle von Schlüsselpersonen und Ereignisse in diesem Prozess, in dem ‘westliches Wissen’ aus dem psychiatrischen Bereich im Osten verankert wurde. Sodann werden die Charakteristika der psychiatrischen Publikationen in China vor 1978 dargestellt. Auf dieser Grundlage wird argumentiert, dass die moderne Psychiatrie in China durch einen Prozess der Anpassung eingeführt wurde, in dem die Vereinigten Staaten und drei andere Länder als Brücken für deutsche Gedanken um 1900 dienten. Darüber hinaus wurden die Gründe für die Beibehaltung der somatischen biologischen Ausrichtung und die für den Ausschluss der entsprechenden philosophischen Erklärungen in der Psychiatrie in Deutschland aufgezeigt. Im Hinblick auf die Ähnlichkeit einiger Ideen zwischen Emil Kraepelin und der traditionellen chinesischen Medizin

wird vorgeschlagen, eine Neubewertung der deutschen psychiatrischen Konzepte vorzunehmen und eine breitere Perspektive für die Zukunft der psychiatriehistorischen Forschung angeregt, in dem der Schwerpunkt auf die Reduktion hinsichtlich der medizinischen Natur gelegt werden könnte.

Diese Studie antwortet auf den Mangel an Forschung zu Fragen der internationalen Beziehungen hinsichtlich der Verbreitung psychiatrischer Konzepte vom Westen nach dem Osten. Das Forschungsergebnis zeigt dass trotz des fehlenden direkten Informationsaustausches auf dem Gebiet der Psychiatrie zwischen Deutschland und China die ursprünglichen Ideen für die erstmalige Konturierung der modernen Psychiatrie in China aus der deutschen Psychiatrie stammten.

Stichwort: China, der deutschen Psychiatrie, Geschichte, Wissenstransfer, Amerika, Japan, Sowjetunion, Großbritannien, Traditionelle Chinesische Medizin

1. Introduction

1.1 Background & status quo

Psychiatry (*Jing Shen Bing Xue*, 精神病学), the term originated from the Greek ‘psychiatria’, which refers to the treatment of soul diseases. Actually, western psychiatry did not being included into the field of medical science until the eighteenth century, although as early as the fourth century BC, Hippocrates of Cos (c. 460 BC-c. 370 BC) proposed that mental illnesses, like any other physical illnesses, were caused by natural factors, so that appropriate medical treatment were necessary.

The development of modern western psychiatry has so far a history of more than one hundred years. However, given its own property and complexity, restricted by the influence of historical background and the level of technological development, the wisdom of western psychiatry is still lagging behind the other bio-medical disciplines.

Western psychiatry was first introduced to mainland China by medical missionaries in 1898, before which Traditional Chinese Medicine (TCM) had been dominating there. From the period of Fu His (*Fu Xi*, 伏羲), the first legendary Chinese emperor (c. 2,852 BC), the recognized types of illnesses related to *Feng* 疯 (refers to madness) included *Dian* 癫 (refers to paralysis), *Xian* 痫 (falling sickness, similar to epilepsy), and *Kuang* 狂 (excited insanity, similar to hysteria). About 2,000 years ago, mental illnesses began to be found being recorded in Chinese medical literature, referring to the speculated causes, pathogenesis, diagnosis as well as prevention and treatment (Tseng, 1973). However, limited to the understanding and the awareness of mental illnesses, an related independent branch within Traditional Chinese Medicine

had not been generated until the late nineteenth century when western approaches for psychiatry were introduced into China (Xia and Zhang, 1981; Xu, 1995).

Correspondingly, in Europe, nineteenth century was regarded as the golden age of German psychiatry (Shorter, 1997; Li, 2005). Professionalization was completed during this period, and in the 1860s, psychiatry became an academic discipline at the medical faculties of German universities (Schmiedebach and Priebe, 2004). Historical explanation for the changes of the research paradigm, the academic progress, the rise and critique of the asylums, and the protest movement associated with the ruined reputation of psychiatry triggered a wide range of discussion, which provided us a panoramic view before the draw of twentieth century (Schmiedebach and Priebe, 2004; Schmiedebach, 2011; Lerner, 2003; Wolpert, 2006). From the early twentieth century, psychiatry in Germany took new steps to expand its influence.

As illustrated above, around the year of 1900 both Germany and China have undergone tremendous social changes. A great deal of psychiatric concepts were proposed and revised in Germany; meanwhile, modern psychiatry was introduced from the West to the East under the international influence of knowledge transfer. Modern psychiatry was established and developed in China based on the thoughts which came from the West; however, the scholarship or research on the history of psychiatry in China is not sufficient yet.

With the tendency of cultural convergence and the development of holistic medicine, China-related issues received more and more attention from western scholars, especially the intense discussions held by sinologists and sociologists, as well as the related legal studies carried out by jurisprudents. The topic of psychiatry and mental health in China was under the spotlights, yet major due to the curiosity of exploring the cultural correlation that might exist between mental illnesses and Chinese feudal autocratic society as well as the Confucian cultural inheritance.

Taking the highlight works in the recent years into consideration, Vivien W. Ng (Ng, 1990) first described the madness in China with focus on the disposition of the mentally ill under the prevailing legal and political environment during the Qing dynasty (*Qing Chao*, 清朝) (1616-1912). Veronica Pearson (Pearson, 1995) concerned the state policies, professional services and family responsibilities related to the topic of mental health care; however, the research aim lied in the exposure and evaluation of Chinese social system. Angelika Messner (Messner, 2000) discussed the weaknesses in Ng's research and laid the emphasis on the recognition of mental illnesses that had been achieved in the system of Traditional Chinese Medicine. Though the time span of her work crossed from the year of 1600 to 1930, her research was in fact defined in the period of Qing dynasty (*Qing Chao*, 清朝), in which the research status were summarized and evaluated. In her research, the study of collection and analysis of historical documents during the Republic of China seemed relatively weak or insufficient.

There are some other summaries about the psychiatric services established in mainland China (Pearson, 1991; Grau, 2014; Diamant, 1993; Szto, 2002) and a few records of mentally ill cases in specific locations (Chu and Liu, 1960), as well as some rough narrative historical descriptions by Chinese indigenous pioneers (Xu, 1995; Xu, 1989; Chen, 2010; Young and Chang, 1983), most of which emphasized the linear time compiling of specific historical events or enumerating of the patients' conditions, but were lack of historical comparison and logic analysis from beyond the perspective of purely local medical consideration and treatment. The newest set is the <Psychiatry and Chinese History> (Chiang, 2014) by Howard Chiang in 2014 with several themes of minor relevance, such as dream explanation in ancient China, the short-lived of psychotherapeutic culture and the recent psycho-Boom (*Xin Li Re*, 心理热) among Chinese public. The discussion in his edited book can be said being with more emphasis on sociological perspectives, rather than being attributable to medical historical discourse.

Furthermore, the international relationship between different countries or between scientific communities is becoming one of the hotspots in history of psychiatry. For example, the collection of essays named <International Relations in Psychiatry: Britain, Germany, and the United States to World War II> (Roelcke et al., 2010) was published in 2010. With emphasis on the influence of German psychiatry, this book responded to the paucity of scholarship on psychiatric knowledge dissemination within Europe and between both sides of the North Atlantic. Another collection of essays was the <Two Millennia of Psychiatry in West and East> (Hamanaka and Berrios, 2003) edited by Toshihiko Hamanaka and German E Berrios in 2003; however, the 'East' in their selected papers merely referred to Japan and, in the 'West' part, just few of landmark figures, like Aelius Galenus (c. 129-200), Philippe Pinel (1745-1826) and Emil Kraepelin (1856-1926), were highlighted. In addition to these collections mentioned above, the influence of German psychiatry, especially the system of Emil Kraepelin has been also discussed in some professional articles within medical historical community, for instance, <the British reaction to dementia praecox, 1893-1913> (Ion and Beer, 2002a; Ion and Beer, 2002b) by R. M. Ion and M. D. Beer.

However, there is insufficient historical research carried out by medical historians that has taken a comprehensive view at the development of psychiatry in China by examining the processes in which Chinese practitioners accepted or rejected the various strains of academic thoughts coming from the West. Indeed, the present state of Chinese psychiatry cannot be separated from its adaptive historical development dating back to its nascent contact with western psychiatry.

Until now, our understanding of the transfer process of psychiatric knowledge from the West, especially from Germany, to China and the historical impact German psychiatry on China still remains incomplete and inadequate, even though a great deal of convincing historical facts illustrated that Germany dominated the realm of psychiatry academically in the nineteenth century.

As man's knowledge increased over the centuries, it is important to learn how his perception and interpretation of the nature of mental illness changed and developed through time in different cultural environments. This project responds to the paucity of scholarship on the issues of international relationship about psychiatric concepts transmission and of cultural adaptation between the West and the East, in this project specifically, between Germany and China.

1.2 Issued question & purpose

The history of psychiatry has become increasingly important for those people who recognized that knowledge of historical developments in a specific field could help to promote their understanding of current concepts and practices. The comparative study on the history of psychiatry between Germany and China is an attempt to underline the prominence of the cultural adaption[1] in transnational phenomena concerning the development of psychiatry.

The comparative study has been carried out with two main tasks: The first task is to figure out the differences of research paradigms, of diseases classifications, of patient treatments and of patient accommodations, of portrait of alienists and patients in different cultural contexts. The second task is to detect and depict the comprehensive information during the transfer process of psychiatric knowledge from the West to the East.

Hypothesis was employed in the research project: First, there must be some convincing evidences about the modern psychiatric transmission of knowledge from Germany to China around 1900 in view of the highly developed status of German psychiatry in the nineteenth century. Second, there must be some similar features in state of knowledge between German psychiatry around 1900 and the cognition of mental illnesses in Traditional Chinese Medicine, which might serve as the root cause or the instinctive

[1] Cultural adaptation theory was proposed by Herbert Spencer (1820-1903) originally. The concept belonged to the category of sociology. It referred to the initiative of adapting to the cultural and social environment which was generated during the course of human interaction.

driver for the subsequent spontaneous exploitation of the integrative psychiatry in China.

The aim of this research lies in verifying what kind of impact had German psychiatry on China by sorting out the transfer process and surveying the conceptual variation of psychiatric knowledge. The question, what kind of German psychiatric concepts around 1900 had been accepted and what had been rejected in China has been illustrated in Chinese cultural context.

1.3 Research design & method

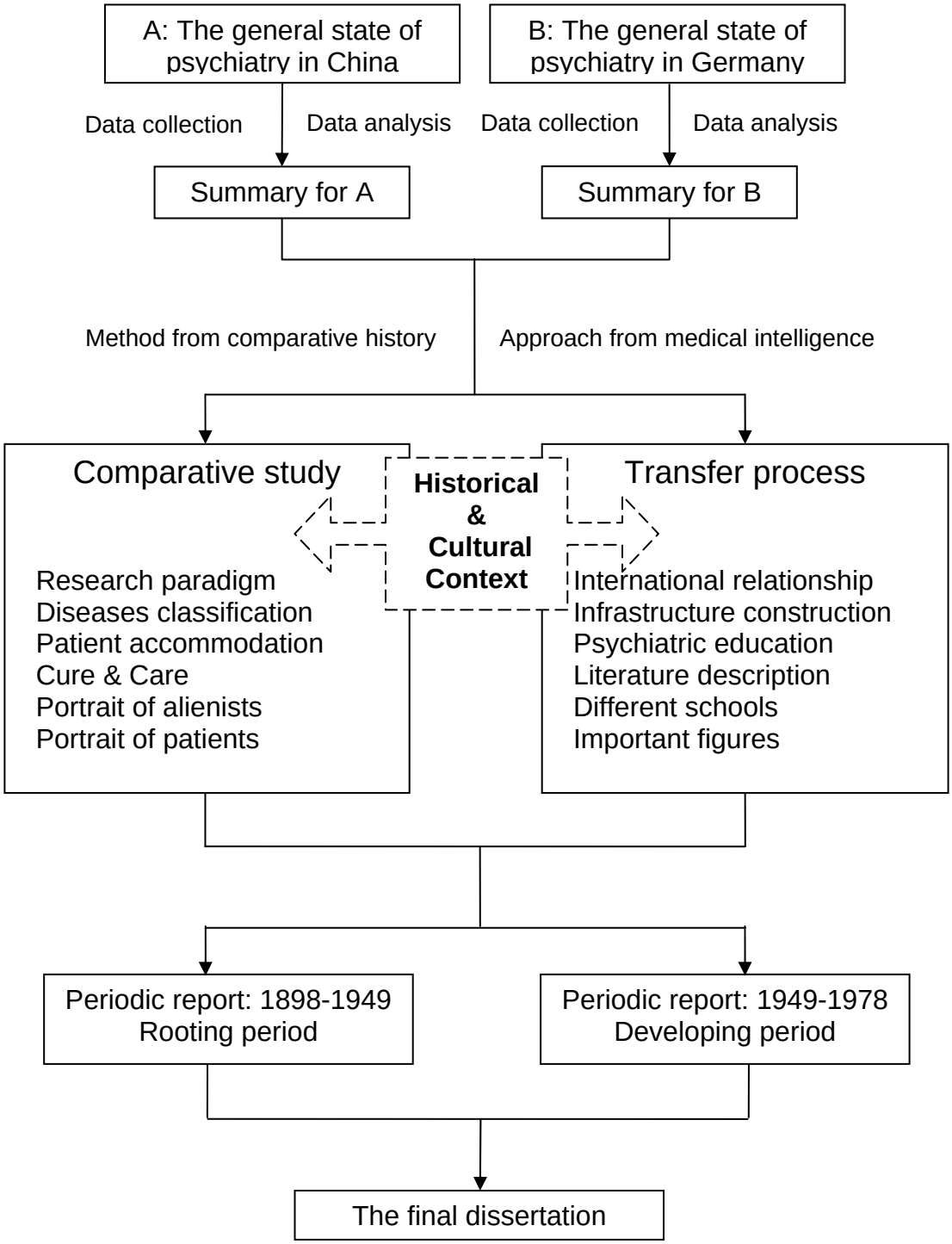

Figure 1 Conceptual framework for the comparative research

Data collection

Credible, accurate and abundant historical materials are essential for a comparative study. Thus it is crucial to retrieve and survey in various sources types, such as monographs, literatures and biographies, archive files from hospitals and health authorities etc., since mutual confirmation of various sources would reduce the risk of distorting or enveloping which could be from political interference and religious obstruction. Further, recordings of expert interviews based on the method of oral history have been used as supplementary sources.

Data analysis

Historical materials can only demonstrate their unique values after reasonable sorting and summarizing, when the essentials emerge from the superficial or accidental phenomenon. Various methods should be employed for difference topics based on the characteristics of each.

First, some ideas and methods from comparative history[2] (Bloch, 1953; Sewell, 1967), including the macro and micro historical comparison, have been used extensively to improve theoretical depth. This study is designed to be a qualitative research, with necessary quantitative analyses. This research is a horizontal and also a longitudinal comparison abided by the principles of comparability and synchronism (Skocpol and Somers, 1980). The several comparative aspects in the 'Figure 1 Conceptual framework for the comparative research' make it possible to confirm the differences and similarities during the historical development of psychiatry in Germany and China, and thereby to draw the conclusion of general patterns and dynamics,

[2] Comparative history is the comparison of different societies which existed during the same time period or shared similar cultural conditions. Marc Bloch (1886-1944), an early distinguished comparative historian, published a famous article named <Toward a Comparative History of European Societies> in 1928, which provided a conceptual and methodological basis for comparative history for the first time. The methods of historical comparison held by Bloch derived from 'Mill's Five Methods'. Recently, the concept of scientific history and the methods oriented by historical materialism enriched the methodology of comparative history.

as well as to discover the historical origins behind the phenomenon (He, 2004).

Second, this study drew on the way of thinking from medical intelligence science[3]. The general methods, such as literature and network resource research, the logical approaches, included comparison, analysis and synthesis, reasoning (inductive and deductive) etc., as well as content analysis, which is dedicated to medical library and information study, all served for this study in different chapters. Conversely, classic quantitative research methods, such as principal component analysis, bibliographical analysis, regression analysis, citation analysis, cluster analysis etc. have been rarely employed due to the properties of the research theme.

Third, all major cultural or scientific exchanges in world history involved translation activities inevitably. This study is not an exception. In view of a large amount of translation were referred, the idea or the principle from translation research was also committed to this study. Actually, translation implies 'negotiation' (or 'transformation'), 'which is always a shrift not between two languages, but between two cultures', as Umberto Eco (1932-) pointed out. From the receiver's point of view, it is a form of gain, enriching the host culture (or 'target culture') (Liu, 1995) as a result of skilful adaptation; however, from the donor's point of view, on the other hand, translation is a form of loss, leading to misunderstanding and committing violence to the original. The great the distance between the languages and cultures involved, the more clearly do the problems of translation appear (Burke and Hsia, 2007). Actually, recently scholarship has made it clear that the imbalance of power relations[4]

[3] Medical intelligence science is an emerging cross-disciplinary, which refers to the utilization of the principles, methods and techniques from intelligence science into medical field. It focuses on the medical literature and other technological information analysis, so as to provide targeted and instructive as well as comprehensive analytical conclusion. It could be seen as an important branch of intelligence science. Medical intelligence science commits to the research on the compositions and characteristics of specialized medical information, on the regularity during the whole process of medical information exchange. In other words, it is a discipline aimed to study the production, formation, collection, organization, dissemination, absorption and utilization of all forms of medical information.

[4] Translation is often embedded with asymmetrical power relations, serving as an effective means of interpretation between the colonizer and the colonized.

and ‘pivot languages’[5] plays a key role in this process of relay translation. Depending on which sources for written translation were selected, ignored and compromised. Relay translation could give rise to different interpretations of the originals ideas (St. André and Peng, 2012). Therefore, this study concentrated on such gains of China and the losses of German psychiatry during the relay of the translation process, through investigating the professional individual works and the collaborative works.

1.4 Academic innovation & value

The state of psychiatry in China was concerned by the West, partially because of its medical-social-cultural associated character. Through investigating the status of mental illnesses in China, the cultural impact and the social reality could be detected and explored to some extent. The interests of the previous research associated with psychiatry in China by western scholars biased towards Chinese culture and social transformation, which were also the reason why most of the pioneer studies were carried out by scholars from the fields of general history, sociology and anthropology etc., instead of from research areas in which medical knowledge served as the basic support. In other words, modern psychiatry in China has not been investigated comprehensively from medical perspective by researchers who have profound and comprehensive medical cognition.

It is for granted that different researchers prefer different research perspectives and research priorities. Unlike the discovery of the relationship between knowledge and power, which was proposed by Michel Foucault (Foucault, 1988), in this study, mental illness is independent from gender and age as well as folk custom; instead, such entity could be investigated, understood, and also could be treated with some kind of systematic and scientific approach (Shorter, 1997). Various strains of medical concepts in psychiatric field will gain the greatest currency. Various factors which influenced or even played the role of decision-making for the acceptance of

[5] The translation of a text from language A to B, and then from language B to C, D, E, and so forth, where B is said to act as the pivot language.

the academic concepts from Germany to China have been first brought to the light.

‘Psychiatric history, to be of use, must do more than chronicle surface events. It must also unveil the particular structures of successive psychiatric discourses’ (Berrios, 2008). Combining with the ideas from cultural history of translation, which was an academically marginal activity until recently (Burke and Hsia, 2007), in this study, transnational adaption of German psychiatric concepts around 1900 during the academic evolution of modern psychiatry in China have been described and explained based on the depth understanding of Chinese indigenous culture. Meanwhile, a panoramic view of modern psychiatric concepts developed in China from the year of 1898 to 1978 has been depicted.

2. Comparison between Germany and China before 1898

Before being in contact with each other, China and Germany have their own beliefs in psychiatry. The reason why the term ‘belief’ is used here is not due to its original meaning from religion, but because different ways of looking and interacting with their surroundings can lead to totally different focus points in connection with ordinary issues. To do a comparative study between the West and the East, the obstacles resulting from lack of interworking ideas and concepts should be removed first. Only when man has a comprehensive understanding of the background from both sides, the crucial points of the issues to be discussed could be handled properly.

In this project, as the psychiatric-related backgrounds should be compared in the context of medicine, several parallel aspects and a specific framework for contradistinction have been defined in advance. Even though different medical systems maintained their remarkable autonomy respectively; common indicators could be defined according to the features that any independent medical specialty should have. In the process of brief comparison, the differences rather than similarities between countries have been emphasized (see Table 1).

Table 1 Psychiatry in Germany and China before 1898

	Germany	Mainland China
Research paradigm	from outside into medical science, not offspring, psychological model --- physiological model	described in traditional medicine, not an independent discipline, balance of the body and the mind, Taoism influence, holistic
Diseases classification	depend on syndromes and symptoms, course and prognosis	depend on the '*Zheng Hou* 征候'
Accommodation	asylum --- sanitarium (insanity boom) --- psychiatric hospital	no specialized place, Buddhist temples or catholic institutions, *Yang Ji Yuan* 养济院, home (major), local jail
Cure & Care	Psychotherapy and physical therapy (SPA, occupational therapy, electrotherapy etc.), sedative and hypnotic drugs	prevention is crucial: body-mind together, adapting to the environment, not targeted Herb medicine, acupuncture, sleep therapy
Portrait of alienists	observation under the microscope, therapeutic nihilism, law officer rather than savior, professionalization completed	absence of significant role in the discussion of criminal insanity, Confucian bias: devaluation of the worth of specialist and professionals
Portrait of patients	protection of patients rights movement, passive nature of human --- lose of complete freedom --- compulsory treatment	family oriented stigma, family responsibility, deny & disguise of the patients condition, hereditary basis, mandatory registration and confinement program

2.1 Research paradigm

One of the fundamental elements that decisively make psychiatric achievements belonging into different medical systems is the research paradigm. It referred to not only a pattern but also a guideline or a principle that 'regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished' (Weaver and Olson, 2006). So an exploration of the paradigms adopted in different medical systems will be done prior to any other issues in this study.

If regarding the rise of asylum with the property of hospice care or isolation therapy[6] as the representative of alleviation of human spiral anguish, then before the nineteenth century, psychiatry was a blank sheet of paper in Germany. Psychiatry was born with declared therapeutic purpose in Germany. The term of 'die Psychiaterie' was first proposed in 1808 by Johann Christian Reil (1759-1813) who had won his honorary in neuroanatomy and internal medicine in advance. In the view of Reil, the state of psychiatry was as same as internal medicine and surgery, and psychiatric training belonged to the essential contents for any type of doctors (Stone, 1997).

However, unlike nephrology or cardiology, which were separated gradually from their natural mother, internal medicine, psychiatry, as an adopted child, responded to the call from the outside world initially and then assimilated into the medical field subsequently, based on its mature of proved abnormalities on pathophysiology and mechanism on etiology. Therefore, as a new discipline or a fresh specialty in a big family, psychiatry would need to find its ways to solve the problem under the premise of following the paradigm of contemporary western medicine consciously. Specifically, during the later nineteenth century which was featured by the establishment of psychopathology and experimental physiology and was dominated by the thinking way of empiricism and materialism, German psychiatry experienced

[6] Isolation therapy was proposed by William Battie (1703-1776), an English physician who published in 1758 the first lengthy book on the treatment of mental illness, <A Treatise on Madness>, and by extending methods of treatment to the poor as well as the affluent, helped raise psychiatry to a respectable specialty. He was president of the Royal College of Physicians in 1764.

the debate on the nature of mental disease between the ‘Psychiker’ and the ‘Somatiker’ and then transferred from psychological model to physiological model (Hirschmüller and Whitrow, 1999).

However, in China, even though there was no independent branch about mental illness in the system of Traditional Chinese Medicine, the symptoms of the mentally ill and the manifestations of behavioral abnormalities had begun to be discussed in Chinese ancient medical books from long time ago. During the Qing dynasty (*Qing Chao*, 清朝) (1636-1912), mental illness was separated from the other illnesses gradually and was recorded as an independent category ‘*Shen Zhi Men* 神志门’, a disease group associated with consciousness or mind of human being. Since growing from traditional medicine, it followed the general principles of TCM very naturally (Li and Schmiedebach, 2015).

In western medicine, a conventional practice is that doctor looks for specific causes of diseases and focuses on particular body components to treat. Traditional Chinese Medicine has never worked like this way. There are fundamental differences in principles between Western medicine and Chinese medicine; the latter is featured by the property of holism. The concept of ‘holism’ includes integrity of the body and the relationship with the outside world, which also served as the basic idea of Taoism, a kind of philosophy in China.

According to the basic principle of Traditional Chinese Medicine, when ‘*Yin* 阴’ and ‘*Yang* 阳’ in body lose the balance between each other, signs of illness would appear, which was also acted as the basis of the explanation of pathogenesis for mental illness in ancient China.

Internal organs were viewed as the centers with combined physiological and psychological functions. The *Xin* 心, *Shen* 肾, and *Fei* 肺 appeared to be of special importance in regulating the psychological functions. Although the ‘heart’ in western medicine which represents a particular organ in the thoracic

cavity has been translated in Chinese as *Xin* 心 for the aim of explanation of concepts in biomedicine, the same character of '*Xin* 心' from the saying *Xin Zhu Shen Ming* 心主神明 in Traditional Chinese Medicine have never referred to one precise body component, like 'the heart' or 'the brain', but been on behalf of a broader organic and somatic-oriented conception, because each component is interdependent and interactive mutually. However, the function of brain, as a specific organ, in mental illness has never been denied.

If the framework of reductionism from modern science could offer a reasonable explanation for the paradigm of contemporary western medicine, then Traditional Chinese Medicine sat on the opposite, under the shelter of holism.

2.2 Diseases classification

Antoine Laurent Bayle's discovery of progressive paralysis in 1822 was of fundamental importance, because this was the first time that a somatic pathological-anatomical cause was recognized as the origin of a true psychiatric disease (Pichot, 1983; Beumont, 1992). However, the classification has been impeded by the insufficient etiological knowledge of majority mental disorders. Until the mid-nineteenth century, mental disorders were classified on the basis of their clinical symptoms. In an innovative departure, Karl Ludwig Kahlbaum (1828-1899) attempted to establish a classification, which took into account, not only symptomatology, but also the observed course of the illness (De Boor, 1954).

Around 1900 German psychiatry consisted of various schools which represented different intentions and perspectives respectively. During that period, the opinions of classification were far from consensus. Emil Kraepelin integrated many concepts of his predecessors and reached fruition following the work of Kahlbaum. In addition to Kraepelin, many other psychiatrists in Germany delivered a wide discussion about the content of the classification. For instance, Karl Bonhoeffer's description of organic psychoses 'acute exogenous reaction type' acted as an important amendment of Kraepelin's

system (Neumarker, 2001). Yet, Carl Wernicke, Karl Kleist and most recent Karl Leonhard have advocated a model of endogenous psychoses which encompassed a wide range of mental disturbances. Eugen Bleuler and Kurt Schneider retained the 'dichotomy' but emphasized the clinical manifestations and discounted the value of prognostic implications (Lanczik, 1992).

Although various focuses mentioned above, these psychiatrists were all benefit from the significant on the development of nosology of Kahlbaum's work, and all of them believed that a diagnosis in psychiatry implied that a kind of illness had specific etiology, a series of clinical manifestations, course and prognosis. They tried to establish diagnostic categories through careful clinical observation (Lanczik, 1992). Classifications based on syndromes and symptoms, with emphasis on the course and prognosis of illness could be seen as the general feature of German psychiatry around 1900.

However, in Traditional Chinese Medicine, the basis for diagnosis and classification is the concept '*Zheng Hou* 证候' (Xi, 2001; Zhen, 1991). *Zheng Hou* 证候 was a comprehensive concept which was consisted of signs that represented various life phenomena of patients in particular stages in disease process (Wang, 1995). It is noteworthy that the concept of *Zheng Hou* 证候 usually included not only symptoms which could be perceived subjectively but also the signs which could be observed objectively (Guo et al., 2006). Moreover, *Zheng Hou* 证候 was different from the concepts of symptom and syndrome in western medicine. The changing condition of patients in different stages was not included in the concepts of symptom or syndrome usually, but it was emphasized by the concept of *Zheng Hou* 证候.

Information of patients was usually obtained through the process of *Si Zhen* 四诊. *Si Zhen* 四诊 included four main procedures: observation, listening, inquiring, and pulse touching (Zhuang, 1992). Then, the collected information made the compositions of *Zheng Hou* 证候. *Ba Gang* 八纲, another crucial concept, acted as the main principle in the process of *Bian Zheng* 辨证 which was a necessary and essential step before prescription and therapy. *Bian*

Zheng 辨证 was very similar to, but not identical with the process of diagnosis in western medicine. Next, on basis of *Ba Gang* 八纲, *Zheng Hou* 证候 was analyzed and evaluated. Thus, a result including speculative etiology, pathogenesis as well as the observed and analyzed signs of disease could be formulated (Liu, 1981). Finally, the decision of treatment, usually included herb prescription, acupuncture, sleeping therapy and unstructured psychotherapy (Mei, 1956) would be designed. In other words, the clinical practice related with mental illness in Traditional Chinese Medicine to a large extent was based on intra observation, description, empirical knowledge and accumulation of facts, through which *Zheng Hou* 证候 was summarized. Due to the holistic view, the whole clinical activities were performed in the context of maintaining the integrity and motility of human body.

A classification which was suggested by *Ken Tang Wang* 王肯堂 (1549-1613) between 1602 and 1607 (Wang, 1962) was the earliest attempt to put a large number of mental illnesses into a systematized frame. In this classification, the description of *Zheng Hou* 证候 already played the fundamental role for the differentiation of various diseases (Lee, 1958), and *Zheng Hou* 证候 became more accurate and more precise over time.

Although no corresponding concept to *Zheng Hou* 证候 existed in western medical system, the phase, as the main feature of *Zheng Hou* 证候, is similar to the illness course that was emphasized by Kahlbaum in Germany.

2.3 Accommodation

According to the history of psychiatry in the West, the housing places of mentally ill had two different types: specifically, the initial ‘madhouse’ during the ascent era, the later ‘asylum’ which represented the modern institution during the nineteenth century and the twentieth century. The changing of the names (types) reflects the advances in psychiatry from one side. In addition to the practical idea of separating the lunatic from the normal group of residents in society, madhouse was often reminiscent of the chaotic and noisy spaces.

While the asylum reflected more orderly and caring undoubtedly. Only when the asylum took over the place of madhouse in the nineteenth century, did moral or occupational treatments and rehabilitation for mental patients become the basic functions in these regulatory agencies.

The period of transition from the madhouse to the asylum was corresponding with the professionalization process of German psychiatry. These psychiatric asylums were affiliated to the institutionalization of psychiatry, which was as the main representative of the emerging branch of medicine. In the early nineteenth century, the operation in psychiatric asylums in Germany indeed showed a significant trend with treatment-oriented care for severe mentally ill and reflected the features of rationality and humanity.

The Eberbach asylum, which was established in 1815, was one of the advanced accommodation agencies in Germany in the early nineteenth century. It was famous for practicing the moral treatment thoroughly. However, such humanity did not sustained to the later of the nineteenth century. With the advent of the industrial age and the combination of other various factors, the form of asylums that were featured by humane treatment and moral therapy could no longer meet the requirements of the re-allocation of patients care (Li, 2005; Shorter, 1997).

Another reason for the recession to back seat of asylums was due to the development and transformation happened in psychiatry itself. Although there had been lectures on psychiatry within the framework of internal medicine since the beginning of the nineteenth century, not until 1864 was the first chair of psychiatry in Germany established for Wilhelm Griesinger (1817-1868) in Berlin, who actually rendered the center of teaching and research transfer to universities and integrated psychiatry with other specialties in medical examination. At the end of the nineteenth century, the nosology of Kraepelin was accepted gradually; meanwhile, most of the asylums had been renamed as psychiatric hospitals (Reaume, 2002). The asylum underwent a process of differentiation with outside institutions, the form of family care and so on in Germany.

‘Asylum psychiatry and university psychiatry’, the expression was coined by Karl Jasper for this basic conflict to describe a dual system of psychiatric care, a structure which has persisted in Germany throughout the whole twentieth century. The former wording was much based upon custodianship; and the latter was perceived as elitist (Hirschmüller and Whitrow, 1999).

In China, as early as the period of *Nan Song* 南宋 (1127-1279), *Yang Ji Yuan* 养济院 was established by governments, in order to adopt those who had no kith and kin and can’t make a living by themselves. The rangers who had intellectual and mental disabilities were included. In addition to *Yang Ji Yuan* 养济院, the Buddhist temples and the catholic institutions also acted as the role of custodian for the vulnerable groups in ancient China.

During the early Qing dynasty (*Qing Chao*, 清朝) (1644-1912), the *Pu Ji Tang* 普济堂 (first appeared in 1706) and *Yu Ying Tang* 育婴堂 (first appeared in 1724) financed by the local wealth could be looked as a kind of complementary for the government-run institutes. During the later Qing dynasty (*Wan Qing*, 晚清) (1840-1911), due to the smaller size of a few asylums established by the western missionaries and the increasing of the number of mentally ill, *Feng Ren Yuan* 疯人院 which was specific for accommodation of insane was set up. *Feng Ren Yuan* 疯人院 was attached to the original *Pu Ji Tang* 普济堂 at the very beginning. For example, in 1908, there was a specific establishment for insane by government in Peking, which was attached to the *Pin Min Jiao Yang Yuan* 贫民教养院 (with the similar property of *Pu Ji Tang* 普济堂 mentioned above) in *Shi Bei Hu Tong* 石碑胡同[7]. From 1917 to 1918, it gradually became independent institute and was relocated to *Bao Chao Hu Tong Yu Huang An* 宝钞胡同玉皇庵, with a new name of *Bei Jing Feng Ren Shou Yang Suo* 北京疯人收养所 (Chen, 2014; Wang, 2012; Fan, 2013).

[7] *Hu Tong* 胡同 is a type of narrow street or alley, commonly associated with northern Chinese cities, most prominently *Bei Jing* 北京.

Although all the practical efforts in China around 1900, psychiatric thoughts appeared to be extremely rare in China's general population in that era. It means that only few problems would be defined as 'psychiatric' initially (Woo, 1991). Medical treatment was rare or absolutely nowhere and charity motivation was the main driving force for the management.

Actually, before western psychiatry was introduced in China, no attempt was made to create special place of accommodation only for the insane, and home was usually the primary and major site for incarceration. For the insane with the tendency of violence specially, when families could not meet the security required by society, according to the mandatory registration and confinement program issued by the government, local jails could be employed (Ng, 1990).

2.4 Cure & care

In the West, psychiatry has been making painful choices between the two views of mental illness, the bio-somatic psychiatry and the psycho-dynamic psychiatry, from the dawn of the discipline emerged. Under the impetus of Enlightenment in the eighteenth century in Europe, rational thinking was respected and humanity received unprecedented cherish. During the nineteenth century, psychiatrists from both the two views had given considerable attention to the psychotherapy with moral intervention (Shorter, 1997). In addition to the moral therapy, a kind of official practice of doctor-patient relationship for the aim of patients' rehabilitation was first proposed by Pinel in 1801, as 'le traitement moral' in French language. A variety of methods were employed in order to improve the efficacy.

Although it did not go beyond the scope of common sense, it was Johann Christian Reil (1759-1813), who represented the liberal tendency, outlined a set of systematic treatment planning (Reil, 1818) including physical therapy (occupational therapy, drama therapy etc.) and psychotherapy without emphasis of individual differences, and then rendered the formation of unique

development path in the Central European based on the concept of empiric therapy (Shorter, 1997).

In German speaking area, the psychotherapy was discussed by many scholars, such as Johann Cristian August Heinroth (1773-1843), Friedrich Eduard Beneke (1798-1854), Ernst von Feuchtersleben (1806-1849) etc. At the same time, some drugs that could maintain the state of sedation of patients were used, which included scopolamine, camphor, opium and chloral hydrate. It is worth mentioning that since the hypnotic properity of chloral hydrate, 'to relive insomnia in anxious and depressed patients who were not insane', was determined by a German pharmacologist Oscar Liebreich (1839-1908) in 1869 (Liebreich, 1869), 'it remained for decades the workhorse of asylum pharmacology and enjoyed wide popularity' (Shorter, 1997).

Furthermore, Wilhelm Griesinger advocated that sedative bath could ease excited state; a SPA might reduce stress and relieve psychotic symptoms. Like the theoretical draft of dropping paraffin in palm of patient, to achieve the similar goal, immersion in cold water had been also widely used in Germany. Due to the popular purely somatic understanding, 'electrotherapy[8] in its many forms was the treatment of choice for a wide range of mental illnesses, such as hysteria, by the end of the nineteenth century' (Gilman, 2008). Last but not least, good food, adequate sleep, sunbathing and mesmerism as supportive therapy were depicted (Shorter, 1997; Li and Cheng, 2009; Stone, 1997).

[8] Electrotherapy was introduced in neurology by a French neurologist Guillaume-Benjamin-Amand Duchenne (1806-1875) and a Polish/German embryologist Robert Remak (1815-1865) in the case of paralyzed limbs in the middle of the nineteenth century. It worked with application of alternating current to the muscles of patients; it became a commonplace treatment in the nineteenth century. Between the end of the First World War and the mid-1960s, mention of electrical stimulation for treatment of mental illness all but disappeared as the focus on defining mental illness moved from a purely somatic understanding of mental illness to one that mixed somatic and psychological aetiologies. Electrotherapy machines became the stuff of medical museums. By the 1990s mental illness had again become 'brain disease'. Electrotherapy reappeared as a therapy. The development of an analogous treatment, Electronic Convulsive Therapy (ECT), by an Italian neurologist Ugo Cerletti (1877-1963) and an Italian psychiatrist Lucio Bini (1908-1964) in 1937, replacing insulin and camphor therapy for schizophrenia, appeared at a point when electrotherapy had fallen out of fashion. ECT has also recently made a public comeback for the treatment of profound depression in our age of re-somaticization.

All in all, the principles embodied in the treatment in psychiatry today have a long tradition; most of them already existed or have their prototype during the nineteenth century in Germany.

Contrary to the European tradition that underlined the treatment of emotional catharsis, in Traditional Chinese Medicine, avoiding excesses of emotions and fitting individual emotional state to natural and social milieu were recognized as one of the important strategies for prevention. 'Training body and mind together as a traditional Chinese method for psychological intervention, but its value was held to be greater for prevention than for therapy' (Lin, 1981). '*Bu Zhi Yi Bing Zhi Wei Bing*, 不治已病治未病' was one of the dominant principles in traditional Chinese medicine, which means the best measure is to maintain healthy state before falling ill, instead of treating occurred disease.

The main methods of treatment included herbal drugs, acupuncture and psychotherapy, together with massage, dieting and nutritional therapy. In Traditional Chinese Medicine, valuable experience in herbal treatment for mentally ill has been accumulated from generation to generation till the eve of the twentieth century. The medication principle was *Kuang Xie Dian Bu* 狂泻癫补 which aims to pursue holistic balance (Mei, 1956). Personalized treatment according to specific condition was researched following the criterion of *Yin Ping Yang Mi* 阴平阳秘, which emphasized to balance between *Yin* 阴 and *Yang* 阳[9]. Different from the medication in western medicine, the herbal drugs were not targeted for any specific organ. According to the identification of *Zheng Hou* 征候, some general rules of prescriptions and the formulation of *Fu Fang* 复方 which refers to herbal formula, were studied in practice according to the results of repeated attempts, and then were revised from generation to generation according to the recorded experience. In regard of the acupuncture, strong stimuli were used

[9] In traditional Chinese philosophy, *Yin* 阴 and *Yang* 阳 describe how apparently opposite or contrary forces are actually complementary, interconnected, and interdependent in the natural world, and how they give rise to each other as they interrelate to one another.

for acutely disturbed psychotic patients and mild stimuli were used for chronically psychotic and neurotic patients. Furthermore, psychotherapy was already being used widely in ascent China, although it was usually practiced in an unstructured manner (Liu, 1981). For example, a kind of psychotherapy called *Huo Tao* 活套, which was designed to induce different affective reactions in various emotionally disturbed patients, was proposed as a treatment for mentally ill by *Zhen Heng Zhu* 朱震亨 (1281-1358).

In addition to the methods that belonged to the Traditional Chinese Medicine, the folk healing practice, as 'the little tradition', which was not lied in the scope of discussion in this project, was also really existed. It should be pointed that, the coexistence of 'the great tradition' (therapies within the system of Traditional Chinese Medicine) and 'the little tradition' (refers to a wide variety of folk recipes for mental illnesses) demonstrated strong pragmatic and pluralistic conventions in Chinese society (Lin, 1981), instead of in Chinese medicine. However, it is worth noting that, in Chinese folk medicine that belonged to the little tradition, all diseases were explained in supernatural ways, such as divination, sorcery, spirit loss and spirit possession; but Traditional Chinese Medicine had been separated from sorcery since around 700 BC, end of the Zhou dynasty (*Zhou Chao*, 周朝) (1046 BC-771 BC) (Tseng, 1973).

2.5 Portrait of alienists

In the West, the professionals who treated the mental alienation were called 'alienist' until the twentieth century. Therefore, the term 'alienist' is adopted to replace the of commonly used words 'doctor' in the title of this section.

The medical specialization of German psychiatry in the nineteenth century (Engstrom, 2003) was accompanied by a differentiation process of psychiatric asylum, in which the number of crew increased to the peak dramatically until 1914, the beginning of the First World War (1914-1918). Although Griesinger was a humanitarian psychiatrist with contact to his patients, the process of psychiatric modernization not only promoted the maturation of a new

discipline in medical field, but also led the clinical work into a desolate situation inadvertently. Influenced by the advancement of microscopy and pathology, psychiatrists in the universities were keen to observe the structures and slices of brain under microscope, yet showed indifferent to the patients accommodated in asylums (Shorter, 1997).

On the other hand, the theory of degeneration that was introduced into psychiatry by the French psychiatrist Benedict Morel was appreciated by German psychiatrists. degeneration acted as the core understanding for psychopathology by Emil Kraepelin (1856-1926) (Roelcke, 1997). Combining with the influence of Darwin's theory of evolution, the claims to make a decision with self-awareness by the patients themselves, who had been already diagnosed as suffering from mental deterioration, could be denied by the result of psychiatric assessment. The therapeutic nihilism was stimulated under the shadow of acceptance of naturalism and the nature of 'passivity' (Hoff, 1998) of human being (Shorter, 1997). In the nineteenth century, forensic citification from psychiatrists was increasingly added into the court proceedings, and played more and more important role. In 1876, crazy of the defendant first became the standard of accusation being acquitted in court (Eigen, 2004). The psychiatrists transformed themselves into the arbiters who ruled legal fate of patients with unconscious to some extent, before perfect medical treatment program had not been drawn up.

Furthermore, the racial hygiene was introduced under the historical background of extreme nationalist sentiment in Germany, many psychiatrists, like Ernst Rüdin (1874-1952), responded to which positively. It seemed that it was the alienists who were responsible for the increased prevalence of insanity and for the imminent degeneration of the nation (Roelcke, 1997).

Whether to secure the survival and longevity of individuals and populations of 'low value' and, therefore, were likely to result in a deterioration of the whole genetic pool or not, rendered the alienists in Germany slid into an awful awkward situation. Between 1939 und 1945 the alienists were responsible for the murder of about 300,000 mentally ill persons.

Comparing with the psychiatrists in Germany who owned a powerful voice in the medical and the judicial field, it can hardly be said that the physicians (no specialized psychiatrists existed) in China had their own rights.

The absence of any significant role played by physicians in the discussion on criminal insanity during the Qing dynasty (*Qing Chao*, 清朝) (1636-1912) was telling. The violent nature of madness was well known to physicians long before the Qing, 'the Qing government's determination that the insane constituted a potentially dangerous segment of society was not instigated by new medical knowledge'. In other words, the notion of criminal insanity cannot be traced to any new medical discovery, but was shaped and limited by local culture and tradition (Ng, 1990). The first record about the responsibility of psychotic patients in ancient Chinese history was founded in <韩非子> (*Han Fei Zi*)[10] which was written by *Fei Han* 韩非 (c. 280 BC-233 BC) at the end of the Warring States period (*Zhan Guo Shi Qi*, 战国时期) (475 BC-221 BC) in ancient China, as 'psychotics cannot escape from punishment according to law' (Liu, 1981).

The remarkable state of being discriminated for physicians stemmed from a Confucian[11] bias of long standing: devaluation of the worth of specialists and the professionals. Not like politicians and merchants, being a doctor was not recognized by public as a dream career in ancient China. Specialized knowledge was regard as 'petty things' (*Xiao Dao*, 小道), and in a key passage in <论语> (*Lun Yu*, Analects of Confucius)[12], this point of view was recorded as *Jun Zi Bu Qi*, 君子不器, which meant that high-minded men did

[10] The <韩非子> (*Han Fei Zi*) contained 55 chapters detailing the political philosophy of *Fei Han* 韩非. It belongs to the legalist school of Chinese philosophy. It is also valuable for its abundance of anecdotes about pre-Qin (*Xian Qin*, 先秦) (before 221 BC) China.
[11] Compared to western civilization, Chinese culture has been less concerned with ontological issues such as the existence of God on the ultimate fate of the human race. Its two dominant philosophical traditions are Confucianism and Taoism.
[12] <论语> (*Lun Yu*, Analects of Confucius) is a collection of sayings and ideas attributed to the Chinese philosopher Confucius and his contemporaries, traditionally believed to have been written by Confucius' followers.

not occupy themselves with these work[13], unless they could not make a living by the other means (Feng and Zhao, 1985). And because orthodox Confucianism dominated the political scene during the Qing period, there was little possibility that the comments by physicians should be solicited. During the Qing dynasty (*Qing Chao*, 清朝), physicians did not organize themselves into any professional society that carried political clout (Ng, 1990).

2.6 Portrait of patients

Before 1900, largely due to the generous support from the government, the management of the asylums in Germany was as the exemplar for the other western countries. However, the changing paradigm of sentiment in family life from emphasis on the ties of property and lineage to the emotional unit (Shorter, 1975), maybe is one of the important explanations for intolerable for the disruptive relatives in addition to the industrialization in Europe, which rendered a surge in the number of patients with mental disorders going into asylums and the insanity boom emerged in the later nineteenth century. In the 1890s, the movement of protection of patients' rights was broke out, which called for legislation in order to monitor the management in asylums (Lerner, 2003).

As mentioned above, patients were deprived of their complete freedom and were abandoned by their family, and further were recognized as the stumbling block of race evolution. The situation of patients in Germany was very disappointing.

In fact, the adjudication of psychiatric patients with negative legal responsibility for their bad behavior denoted that they lost the complete freedom and the full-fledged as an independent person at the same time, which prompted the compulsory treatment into legal proceedings in Germany during the nineteenth century (Li, 2008).

[13] The term 'them' here refers to 'the specialists and the professionals' mentioned before.

During the latter half of nineteenth century, in which the advances of neurophysiologic knowledge and the rapid progress of the natural sciences brought multiple promises to the world, psychiatric patients went into the new medical era together with the new discipline in such a portrait: They are undoubtedly part of the nature, and was governed by the laws of nature; their mind was nailed on their body without any other choices. It was also exactly the impression in the eyes of psychiatrists, of society and of their own (Li, 2008).

On the contrary, before 1898, the mentally ill person in China was still like a baby who was embraced by its mother, named the family care. Cultural norms in China held the family the responsible unit for the individual's behavior and their welfare (Lin, 1981). The psychiatric stigma (intense shame and guilt) from the erratic and antisocial behavior of psychotic patients, which acted contrary to the Confucianism values of avoiding emotional exposed in order to maintain social harmony (Ng, 1997), was largely family-oriented. In Chinese culture, the exposure and the manifestation of mental illness would make family honor, surname and ancestors tarnished. As a result, there was strong resistance and extreme delay for seeking medical help because Chinese family did not want to expose its own shame to outside; denial and somatization[14] are often used to relieve the stigma of family (Lin and Lin, 1981).

From social perspective, considering the public order and social safety, the mandatory registration and confinement program was made for criminalization of madness with violence during the Qing dynasty (*Qing Chao*, 清朝) (1636-1912). The policy would have been inconceivable if without the *Bao Jia* 保甲[15]

[14] The dichotomy of body and mind did not exist in the system of Traditional Chinese Medicine. The 'somatization' here could be seen, on the one hand, it was a kind of natural expression. In Traditional Chinese Medicine, each emotion was thought to be related to a specific organ in the body which meant that any emotional disturbance was thought to originate from a corresponding organ; on the other hand, it was a result of shame avoidance as mentioned above.

[15] The *Bao Jia* 保甲 system was an invention by *An Shi Wang* 王安石 (1021-1086) in the Song dynasty (*Song Chao*, 宋朝) (960-1279), who created this community-based system of law enforcement and civil control that was included in his large reform of Chinese

system. Only when families could not meet the security requirements would local jails be used (Ng, 1990). Although, the Qing government seemed to have believed that the family as a social unit was strong enough not only to continue its traditional function of caring for sick members, but also to bear the new responsibility of surveillance and controlling, for the good of the family as a whole. The policy failed ultimately because people or neighbors were unwilling to condemn their kin or friends to be a felon, which was corresponding with a Chinese saying '*Ge Ren Zi Sao Men Qian Xue, Bu Guan Ta Ren Wa Shang Shuang*, 各人自扫门前雪, 不管他人瓦上霜', which means each one sweeps the snow only from his own doorsteps and doesn't care about the frost on his neighbours'.

Although mentally ill without the tendency of violence was protected or hidden by the family from exposing to society, they were excluded from the marital pool in traditional Chinese society due to the perceived or speculated hereditary basis. Once beyond the boundary of family control and the circumscription of social security, patients would be punished and even send into jail. Different from the portrait of patients in the West, in the eyes of Chinese public, 'the same degree of psychological fear of craziness' could not be detected (Lin, 1981).

government, the *Shang Yang Bian Fa* 商鞅变法, from 1069 to 1076. Although the structure of it was changed over time, the *Bao Jia* 保甲 system has continued to resonate with Chinese citizens during the twentieth century.

3. Contention in German psychiatry and shift of the reference center

The aim of compiling this chapter is not to provide a new interpretation of the whole story or to reveal the darker side associated with political stance among some of them, but rather to have a brief but comprehensive understanding for the entire academic situation of somatic-oriented German psychiatry that began from the second half of the nineteenth century, and pave the way for the following chapters, in which China's response to different German psychiatric schools and their main ideas will be discussed.

Although brilliant (or even dominated) achievements of German psychiatry around 1900, during the process of knowledge was transferred across its borders, especially went to the far East, not all academic concepts and psychiatrists received equal attentions. Many valuable ideas and research routes were discarded or forgotten to a large extent for non-academic reasons.

In addition, English translations have been always inadequate. Here, I do not want to emphasize the authority of English language in the academic world, but to emphasize the role of lingua franca English language played in the process of knowledge dissemination, specifically in reference to the path from the West to the East. Thus far, on this topic, there is no review with the length of an article[16], in English or in Chinese, covering a comprehensive interpretation. The recognition and evaluation of the tension between various German schools of psychiatry around 1900 might have scattered more of

[16] Among Chinese academic circles at present, generally consideration is that the publication of articles, which were monitored by the peer review procedure and the world-class academic publishing platform, is a more equitable indicator over the publication of monographs (books) at local, from the perspective of evaluation of academic contribution. In addition, the emergence and development of various literature databases, such as the Science Citation Index (SCI) and the Social Science Citation Index (SSCI), are making easier to share ideas in the form of article in China.

those research projects or publications in German, which really only belonged to an academic circle of regional in central Europe.

Therefore, before dealing with the following sections, a brief but comprehensive generalization for this precondition or the background is necessary, especially for audiences from non German speaking regions.

It is worth noting that with the focus on original system of different thought, psychotropic substances and treatments like bromide sleep therapy which in order to relieve symptoms and ease the pain of patients are not within the scope of this chapter. Many psychiatric drugs with great historical significance, for example, the application of lithium, were discovered by the researchers who had not yet any interesting in the study of psychoses, only when they carried out research in their own field that had none business with psychiatry. Pharmacological mechanisms of these drugs have not been defined, due to the largely unknown of etiology and pathogenesis. The attempt to determine the mechanism of various drugs only began in 1956. In this year, German psychiatrist Wolfgang de Boor (1917-2014) who was trained under Willy Hellpach (1877-1955) wrote a book <Pharmakopsychologie und Psychopathologie> (Boor, 1956). It was the first systematic study about how drugs regulated the function of brain.

3.1 Definition of ‘German psychiatry’

In the following study, an unavoidable theme is the impact of German psychiatry had on China, for which the definition or connotation of what does ‘German psychiatry’ look like will be the primary issue.

As mentioned before, there was tension in Germany during the beginning of the nineteenth century between the ‘Psychiker’ who believed that mental illness was best approached by trying to understand the mind in health and disease, and the ‘Somatiker’ who believed that mental disorders were organic illnesses themselves or were intrigued by organic illnesses.

However, here, the ideas held by the ‘Psychiker’ are not within the scope of subsequent discussion. The reason lies in: The emergency of the small group of ‘Psychiker’ was influenced by the Romantic Movement in Europe around 1800, in which emotion and passion was advocated. They committed to the integration of medicine with natural philosophy of Friedrich Wilhelm Joseph Ritter von Schelling (1775-1854). Despite the term ‘Psychiker’, they are not real psychologists, because they did not apply scientific psychology to the disorders of mental illnesses (Hirschmüller and Whitrow, 1999). ‘What they lacked was a methodology that would have made it possible to have conceived a theory of illness that was more than just speculative’ (Wolpert, 2006). In addition to the widely remembered romantic psychiatrist Johann Christian Heinroth (1773-1843), whose model of personality was considered being foresight of Freudian thinking (Wolpert, 2006; Ellenberger, 1970), generally speaking, the ‘Psychiker’ casted almost no influence on and were unhelpful to modern psychiatry (Shorter, 1997) that was mainly somatic-oriented and monitored by the rising nature science.

The break point in this study was designed to begin with Wilhelm Griesinger (1817-1868) particularly. With Griesinger, psychiatry was divorced with Romanticism, in which the philosophical thoughts were regarded as its foundation.

At the same time, the rationality, rather than the humanity that was first molded by French psychiatrists according to the history of psychiatry, will be emphasized in this study. Thence, the term ‘contention’ in the title of this chapter just refers to the relationship between different schools within the somatic-oriented faction which was guided by the rationalism (originating from France) and empiricism (originating from the United Kingdom) since the age of Enlightenment.

On the other hand, ‘German’ in ‘German psychiatry’ in the following study represents much broader meaning. Since ‘more than any other medical discipline, psychiatry and psychotherapy are deeply embedded in the culture and carry the imprint of the language in which they are practiced’. ‘Societies

and nations that share a common language demonstrate overlapping concepts of psychiatry and psychotherapy and despite some differences, a high degree of correspondence' (Wolpert, 2006). In addition, the geographical proximity between countries in central Europe facilitated the exchange of psychiatric ideas and practices; just like a high rate of inter-migration of intellectuals have contributed to the creation of a common scientific community.

Therefore, in the following research, German psychiatry refers to not only most of the achievements that were gained within the territory of contemporary Germany because the state was usually organized by the political will, instead of the common civilizations[17]; but also includes the contributions that were accumulated by a handful of German-speaking psychiatrists who were born or worked most of their lifetime in other countries within the central Europe, like Austria and Switzerland. In fact, these psychiatrists were deeply enlightened and even nurtured by psychiatric concepts that originated from Germany. At the same time, they maintained close contact with their collages in German universities around 1900. For instance, one of the typical examples that have been included in this chapter is the notable Swiss psychiatrist, Eugen Bleuler (1857-1939).

3.2 Brief review of major schools and relationships

Wilhelm Griesinger and 'from Psychiker to Somatiker'

With the rapid development of histology, pathology, physiology and pharmacology, a new type of clinical medicine and an increasing specialization with differentiation were developed. The publication of the famous textbook of <Pathologie und Therapie der psychischen Krankheiten> in 1861 (Griesinger, 1861) made Wilhelm Griesinger (1817-1868) to be regarded as the father of modern psychiatry. Based on abundant clinical experience, somatic orientation was determined and the organic basis of the

[17] Arnold Joseph Toynbee (1889-1975), a famous British historian, proposed in his 12-volume <A Study of History> (1934-1961) that the common civilization is the real historical unit, instead of the state-oriented concept.

brain was pointed out in the book. From then on, a tendency of scientific-materialistism occupied the intellectual circle, in which psychotherapy had been concerned.

Griesinger regarded the brain as responsible for all mental functions, and the mind was the sum of all the states of the brain. In addition, he called for a lasting reform of the psychiatric institutions and supported the ideas of non-restraint for patients. Further, taking Gheel in Belgium as model, he suggested the establishments 'similar to colonies' and the abolition of separation between acute and chronic wards. In his opinion, asylums should have the character of hospital and be with qualified medical management (Rössler, 1992). Griesinger called for the establishment of city asylums for mentally ill and the backing to house visits as well as the adequate out-patient aftercare, in order to protect the patients from alienation (Rössler et al., 1994). 'Since Griesinger, psychiatry underwent a transition towards a scientific direction. His paradigmatic models had greatly influence on the neurological-psychiatric concepts of his successors' (Wolpert, 2006).

Karl Ludwig Kahlbaum and nosology in Germany

In the history of psychiatry, despite an outstandingly good reputation in German academic world, Karl Ludwig Kahlbaum (1828-1899) was perhaps one of the earliest neglected figures by the outside world, partly because he had not working at universities (Lanczik, 1992)[18], the places where elites should have gathered together.

With the publication of his <Die Gruppirung der psychischen Krankheiten und die Einteilung der Seelenstdrungen> in 1863, Kahlbaum laid the foundations for general clinical research into psychopathology and nosology in Germany.

[18] Originally from Driesen in Brandenburg, Kahlbaum studied medicine, natural science and mathematics in Konigsberg, Würzburg, Leipzig and Berlin. He began to work at the East Prussian provincial mental institute of Allenberg, but he was unable to pursue an academic career because, at that time, the Prussian Ministry of Culture had not yet been persuaded of the necessity of establishing a psychiatric clinic at University of Konigsberg. Disappointed by this situation, Kahlbaum moved to a private mental institute in Gorlitz, Silesia in 1866, and, the following year, became its director.

His book was influenced by French empiricism, and was a reaction to Neumann's concept of an unitary psychosis (Neumann, 1859).

Kahlbaum provided the basis for the modern conceptualization of mental illness, as in the other branches of medicine, based on the essential features (symptom patterns) and associated features (age at onset, course, family history, and outcome). Pathological research should aim at uncovering the physical origin of these clinical features. His longstanding colleague, pupil and friend, Ewald Hecker (1879-1954) (Hecker, 1871b), had written that psychiatrists should not wait until the pathological basis of each syndrome had been discovered, but, instead, they should establish diagnostic categories in the light of careful clinical observation. This, actually, is what Kahlbaum achieved.

He was the first to distinguish between psychoses with and without organic etiology. This dichotomous conceptualization of endogenous and organic mental disorders has proven heuristically fruitful for psychiatric classification since its inception. He expanded psychiatric terminology by coining terms for newly described symptoms and syndromes. Among those were the terms paraphrenia, dysthymia, cyclothymia etc. However, it was only after his death that Kahlbaum gained international recognition for his concept of catatonia (das Spannungsirresein) (Kahlbaum, 1874). In 1871, Kahlbaum encouraged Ewald Hecker to publish on the concept of hebephrenia (das Jugendirresein) (Hecker, 1871a).

Although Kahlbaum worked outside German university psychiatry, his classification had a significant impact on the development of nosology in Germany, which could be discerned in the work of Kraepelin, Wernicke, Kleist and Leonhard (Lanczik, 1992).

Emil Kraepelin and the Munich School

When reviewing the history of psychiatry during the nineteenth century, one of the most famous figures, Emil Kraepelin (1856-1926), can never be despised.

Actually, most of the western psychiatric schools around 1900 shared the same origin: they were enlightened by the thought of Kraepelin more or less, either positive acceptance or negative rejection in whole or partially (Strömgren, 1980). What is more, after a hundred years, it looks indeed as if 'psychiatry still lives in a Kraepelin's world' (Berrios and Hauser, 1988). Maybe such argument is less rigorous, but at least Kraepelin's central role was highlighted. The assessment of him is still in hot debates around 2000 (Weber and Engstrom, 1997; Decker, 2007; Engstrom and Weber, 2007; Jablensky, 2007; Engstrom and Weber, 2005).

Kraepelin was well known due to his development of the psychiatric classification, especially the dichotomy of endogenous psychoses into the affective psychoses (acquired mental disability), the manic-depressive illness, and the prototype of schizophrenia (mental disability caused by predisposition), the dementia praecox, as early as 1899. He made his mark in his era with his <Lehrbuch der Psychiatrie> (Kraepelin, 1913) which included completed eight editions that witnessed his working experience in Dorpat, Heidelberg and Munich. 'The manuals are one of the foundations for Kraepelin's outstanding importance for the entire field of psychiatry to the present day. Derived from clinical views and observations and empirically tested over and over again and often adjusted according to new findings, the fundamentals of Kraepelin's systemic approach to psychiatric diseases still have unalterable validity' (Wolpert, 2006).

Compared with the early monographs, such as that of Richard von Krafft-Ebing (1840-1902) in 1879 (Krafft-Ebing, 1879), somatic causes of mental illness were first placed in the chapter on general etiology. Due to the state of knowledge at that time, the etiology was regarded as 'something we can't know' (Kraepelin, 1896). However, in contrast to the earlier nosographers, Kraepelin was the first to apply a longitudinal, lifetime approach to data collection and the description of psychiatric illness explicitly and systematically. The whole clinical profile was highly valued, and the disease course and outcome were emphasized. At the same time, the statistical methods in the analysis of clinical data were also stressed (Shorter, 1997).

However, the heritage of Kraepelin to psychiatry as a clinical and scientific discipline was beyond his compendiums. Kraepelin also promoted the forensic psychiatry (Kraepelin, 1907; Kraepelin, 1880) and the comparative cultural psychiatry (Jilek, 1995). The later was a starting point of modern trans-cultural psychiatry. To fight against the populace of alcohol and syphilis in Germany, a series of preventative strategies were advocated by Kraepelin and the idea of racial hygiene was introduced (Roelcke, 1997). In addition, influenced by Wilhelm Wundt (1832-1920), Kraepelin was one of the pioneers of the experimental and psychological research in psychiatry, which rendered him take a parallel view whenever dealing with the body and soul problem (Wolpert, 2006). It was corresponded with the Unicist Theory of Baruch de Spinoza (1632-1677), from the physiological perspective.

Moreover, in regard of his extraordinary position, Kraepelin brought together outstanding researchers of his time, included Alois Alzheimer (1864-1915), Franz Nissl (1860-1919), Pobert Gaupp (1870-1953), Ernst Rüdin (1874-1952) and Walter Spielmeyer (1879-1935), to name only the most important, in particular after the foundation of the German Research Institute of Psychiatry (der Deutsche Forschungsanstalt für Psychiatrie, now the Max-Plank Institute of Psychiatry in Munich). Although instructed by his mentor Johann Bernhard Aloys von Gudden (1824-1886), whose principle research focus was neuroanatomy, the Munich School was not founded in the sense that employees primarily had to work in the scientific area that represented the centre of scientific interest of their director.

In the German Research Institute of Psychiatry, a great deal of clinical and experimental work in different disciplines, such as the ‘Hilfswissenschaften’ of psychiatry, had been carried out (Hippius and Müller, 2008). The basic principle for genetic research in psychiatry was set up; a large-scale investigation of the epidemiology and heredity of degenerative disorders was performed (Roelcke, 1997), and the area of psychiatric epidemiology was developed later on. Part of the group of Kraepelin’s work became the starting point for modern pharmacopsychology and ultimately of pharmacopsychiatry.

Together with his co-workers, the psychiatric research institute in Munich became a model throughout the entire world for the organization of psychiatric basic research by employed multidisciplinary approaches (Jablensky, 2007; Wolpert, 2006), for example, the staining and microphotography of neurons and glia.

Carl Wernicke and the Breslau School

With numerous contributions in neurological field, such as Wernicke's encephalopathy, Carl Wernicke (1848-1905) transferred his interest in psychiatry only in 1885 when he succeeded Heinrich Neumann (1814-1884), who championed the concept of an unitary psychosis that was held by Griesinger, as the head of the Breslau Psychiatric Hospital (Krahl and Schifferdecker, 1998). The psychiatry of Carl Wernicke was founded on Griesinger's fundamental assertion that 'mental illnesses are illnesses of the brain' (Griesinger, 1861).

In addition to his work on aphasia (Wernicke, 1874), Carl Wernicke was one of the undeservedly forgotten or misread pioneers of somatic psychiatry. On the contrary to the accusation of cerebral mythology (die Gehirnmythologie) by Karl Jaspers (1883-1969) (Mayer-Gross et al., 1960), 'Wernicke stated countless times that mental illnesses are general illnesses of the brain and as such never give rise to localized symptoms' (Wolpert, 2006; Lanczik, 1988). The important point was not the identification of just another cerebral localization. Rather, it was Wernicke's general approach of explaining higher cognitive functions by the interaction of spatially distributed, but interconnected centers (Graves, 1997).

Wernicke used a modified form of Griesinger's psychic reflex arc (der psychische Reflexbogen) and explained psychiatric disorders with his concept of severance[19] hypothesis, a comprehensive neuropathological framework which was caused by unknown pathological process (Ungvari, 1993). In other

[19] Sejunction means disruption in the interconnections between different neural systems, thus giving rise to loss of function, hyperfunction and parafunction.

words, he held that mental illnesses were caused by interruptions in the continuity of association pathways, which he called ‘die Sejunktion’.

Wernicke believed that the symptomatology (contents of conscious representation) of mental illnesses should be deduced from the known properties of the brain; this was the only approach which could provide an encompassing vision and symptom classification which would be natural, essentially proven and completed (Wernicke, 1900).Therefore, Wernicke had adopted Kahlbaum’s principle of categorizing mental disorders in terms of the neurological concept of function (classification of functional psychoses) (Lanczik, 1988), for example, hyper-, hypo- and parafunction, which represented a radical departure from the tradition of Kraepelin.

‘In Wernicke’s opinion, one day it would be possible to discover the primary degenerative processes in the axons and nerve cells of the brain which are the source of mental illnesses’ (Wolpert, 2006). However, his premature death prevented him from mounting a challenge to the prevailing nosology of Kraepelin, by developing a comprehensive system of psychiatric diseases; and Wernicke’s major psychiatric work <Grundriss der Psychiatrie in Klinischen Vorlesungen> has not yet available in English.

Wernicke’s neurological orientation in psychiatry was carried further by his pupil Karl Kleist (1879-1960) who brought together described clinical syndromes and brain pathology into a coherent classification encompassing the whole range of psychiatric illnesses carefully. The most significant contribution of Kleist lied in his scheme of disorder of psychomotor and the concept of unipolar-bipolar dichotomy of affective disorders (Ungvari, 1993; Wolpert, 2006; Teichmann, 1990), which were all met with very little interest by his contemporary psychiatrists.

Karl Leonhard (1904-1988), as the second successor during the twentieth century (Franzek, 1990), incorporated Wernicke’s more complete descriptions of psychopathological phenomena with Kraepelin’s concept of psychiatric oriented course and outcome. Therefore, despite its direct linkage with

Wernicke and Kleist, Leonhard's classification, in which three main categories of endogenous psychoses: affective (uni- or bipolar type), cycloid and schizophrenic psychoses (systematic or unsystematic type) were proposed (Leonhard, 1979), 'remained an empirical and descriptive system based on painstakingly meticulous, longitudinal clinical observations yielding sharply delineated subtypes within the three major groupings of psychoses' (Ungvari, 1993). His system of description and classification remains valuable for investigators examining the psychopathology and other essential features of the psychoses.

Although yielding seminal insights, the widespread acceptance of Leonhard's classification with more than thirty different subtypes of endogenous psychoses faced many obstacles, especially when considering the widely adopted and user-friendly Kraepelin's system. The Breslau School[20] which was established by Carl Wernicke failed to find a corresponding physical basis for psychopathological phenomena. It weakened their theoretical position of physiopsychopathology seriously. As a consequence, their work has been largely ignored by Anglo-American psychiatry and casted little impact on the devising of modern classifications or operational diagnostic criteria (Lanczik, 1992).

Karl Bonhoeffer and the Berlin School

Karl Bonhoeffer (1868-1948) paved the way for his professional and scientific orientation when he began to work under Carl Wernicke since 1893; and till 1897 finished his habilitation. Born in Breslau School academically, Bonhoeffer became firmly integrated with the neurological, cerebropathological and psychopathological research orientation of his teacher, Carl Wernicke. Wernicke's premature death rendered Bonhoeffer to fill the vacancy of Breslau from 1904 to 1912 (Wolpert, 2006).

[20] The given name of 'Breslau School' in this study is not based on the geographical location on the map, and does not refer to the psychiatry in region of Poland.

He used a new concept for description and classification of symptomatic psychoses. The concept of acute exogenous reaction types (die akuten exogenen Reaktionstypen) was proposed as disease processes 'where one does not deal with a pathologic formation of certain functional systems but with a reaction of inherently healthy brains to damages that have their onset during the course of life' (Neumarker, 2001). In his lecture <Zur Frage der Klassifikation der symptomatischen Psychosen> in 1908 (Bonhoeffer, 1908) in Breslau, the distinctions between exogenous and endogenous psychoses were magnified significantly by the introduced concept. Bonhoeffer emphasized the symptoms of impaired consciousness, which characterized exogenous psychoses, such as delirium, in his opinion. His work provided clear evidence that psychopathological syndromes for a large variety of somatic disturbances are limited in number, and therefore inference of etiologically nonspecific binding was brought forward. His findings countered Kraepelin's assertion that psychiatric phenotypes identify disease entities, and presaged the modern view that these phenotypes are likely to be etiologically heterogeneous[21] (Ströhle et al., 2008). Moreover, Bonhoeffer went on to discuss the etiologically nonspecific binding and postulated an aetiological interlink for pathogenetic explanation of autotoxic aetiology (die Autointoxikationsätiologie) for symptomatic psychoses (Neumarker, 2001).

Bonhoeffer's concept of symptomatic psychoses (die akuten exogenen Reaktionstypen) had been criticized by Karl Gustav Specht (1916-1980) in 1913 (Specht, 1913), and partly accepted by Kraepelin in 1924 (Kraepelin, 1925); enhanced and enlarged by Eugen Bleuler (1857-1939) as 'psycho-organic syndrome' in 1916 (Bleuler, 1916), introduced by Kurt Schneider (1887-1967) as physically explicable psychoses (die körperlich begründbare Psychosen) in 1947 (Schneider, 1947); and as well as modified by Adolf Meyer (1866-1950), who formed a similar model, that of 'reaction types' (Lidz, 1966). Although Bonhoeffer's principal propositions continue to be reflected in the valid classification systems, such as the <International Classification of

[21] The Bonhoeffer paradigm was originated from Kahlbaum. Bonhoeffer observed that identical or similar clinical pictures do not necessarily share the same etiology and that their course and outcome may be completely different from each other.

Diseases 10th Edition, (ICD-10)> and the <Diagnostic and Statistical Manual of Mental Disorders 4th Edition, (DSM-IV)>, the root of such concept from Karl Bonhoeffer was not mentioned, and the conceptual evolution was ignored or forgotten in contemporary neuropsychiatric textbooks, especially those being from the Anglo-American realm (Neumarker, 2001).

In 1912 Bonhoeffer moved to Berlin, where he was elected chair of the Department of Psychiatry and Neurology at the Charité Hospital, succeeded his famous predecessors: Wilhelm Griesinger, Carl Westphal (1833-1890), Friedrich Jolly (1844-1904) and Theodor Ziehen (1862-1950). All of the predecessors personified a treasure of psychiatric and neurological, scientifically founded knowledge of relevance far beyond the boundaries of Berlin and their action was fully oriented to the principles of 'non-restraint'. Bonhoeffer was regarded as a genuine guarantor of this neuropsychiatric continuity (Wolpert, 2006).

A wide-ranging variety and versatility of psychiatric thought and action was a significant feature of the Berlin School under Bonhoeffer, whose outstanding team included Erwin Straus (1891-1975), Arthur Kronfeld (1886-1941), Paul Jossman (1891-1978), Walter Betzendahl (1896-1980) and Hugo Krayenbuehl (1902-1985). Volumes and books, including 245 publications that originated from Bonhoeffer's clinic during his time in office, provided documentary evidences to tremendous neuropsychiatric achievements which were far being from associated with a one-sided professional orientation. This may possible explained why Bonhoeffer never wrote a textbook or compendium on the entire area of psychiatry and neurology. It was Bonhoeffer's nature to believe in independence of opinions in science. Yet, none of his co-workers denied their indebtedness and commitment to the Bonhoeffer's tradition (Wolpert, 2006).

Eugen Bleuler and the Zürich School

Eugen Bleuler (1857-1939) was a Swiss psychiatrist but had deeply rooted in German psychiatric thought. He was trained under Bernhard von Gudden

(1824-1886) in Munich from 1884-1885 in the field of neuroanatomy. Then he became the director of the Psychiatric Clinic in Burghölzli (die psychiatrischen Klinik Burghölzli) in 1898, which was founded by Griesinger and led by German professors von Gudden and Eduard Hitzig (1875-1879) (Bleuler, 1991).

Bleuler is best known in the history of psychiatry for his 1911 book <Dementia praecox oder Gruppe der Schizophrenien> (Bleuler, 1911), in the preface of which, Bleuler referred directly to Kraepelin: The whole idea of the dementia praecox came from Kraepelin, the classification and the identification of the individual symptoms was particularly all from his work. Although, Bleuler he saw Kraepelin as his great teacher (Shorter, 1997), his contribution went beyond his modest statement in the preface to the book. He proposed the name schizophrenia in 1908; separated the symptoms into basic (The 4As: disorders of association, affectivity, ambivalence and autism) and accessory symptoms (e.g. hallucinations, delusions, alteration of the personality, etc.) according to clinical manifestations; divided symptoms into the key primary symptom (the loosening of associations), which was an expression of the still unknown somatic or cerebral illness processes, and secondary symptoms, which appeared as a reaction of the sick psyche to some inner or outer events, according to his own assumed biological etiology; accounted that paranoid dementia was not a stand-alone unit to dementia praecox; pointed that the outcome of schizophrenia was not always unfavorable and the therapy was not pointless; left the question open of whether or not schizophrenia was a disease entity. All the theories for dementia praecox (schizophrenia) were in opposition to those of Kraepelin. From the standpoint of psychopathology, Bleuler also enriched clinical description and introduced a few new concepts, like autism, ambivalence and negativism (Bleuler, 1911; Bleuler, 1916; Wolpert, 2006; Bleuler, 1991). However, as it was pointed by his son Manfred Bleuler (1903-1994) (Bleuler, 1991), it was difficult to research an understanding with his father because of a certain ambiguity of his concepts and his definitions which appeared to have a meaning only within his own complete theory.

On the other hand, the great opponent of Kraepelin, Sigmund Freud (1856-1939) who was recognized as the father of psychoanalysis and dynamic psychiatry, was given the same prominence in the preface of Bleuler's book in 1911. If the whole idea of dementia praecox originated from Kraepelin, Bleuler stated, an important part of enlarging the pathology further was nothing but the application of Freud's ideas to dementia praecox (Bleuler, 1911). Actually, an attempt was made to understand some symptoms dynamically, especially the secondary symptoms, according to Freud's psychoanalytic theory. For example, first among Bleuler's fundamental secondary symptoms were 'disorders of thinking resulting from the association difficulties', and he understood them in term of Freud's mechanisms of displacement, condensation and symbolization (Bleuler, 1911). There is no doubt that Bleuler believed the somatic foundation of psychoses. The key primary symptom 'loosening of associations' he proposed for instance, which amounted to fundamental splitting of the psyche, could be traced in part to Wernicke's concept of severance (die Sejunktion) and the 'association psychology' of Johann Friedrich Herbart (1776-1841) (Scharfetter, 2006; Dalzell, 2007). However, the belief in somatic foundation of psychoses did not prevent some ideas of Freud's psychoanalysis, like the unconscious and repression, were used as an important tool for the understanding of many symptoms in Bleuler's psychiatry. Bleuler evaluated that the work of Freud gave science a complete new shape in his psychiatric textbook in 1916, and further pointed out that psychopathology would not have made progress without these ideas, in spite of Freud's 'pan-sexuality' (exaggeration of sexuality) (Bleuler, 1916; Alexander and Selesnick, 1965).

Eugen Bleuler's theory of schizophrenia found a wide audience through the publication of his textbook <Lehrbuch der Psychiatrie> in 1916. 'Largely due to his grounding work, the Burghölzli clinic once became a Mecca for schizophrenia theory and research' (Wolpert, 2006). As the first university professor of psychiatry who introduced psychoanalytic theory and practice into his clinic, Bleuler made his numerous Burghölzli colleagues, e.g. Carl Gustav Jung (1875-1961), Ludwig Binswanger (1881-1966), become

awareness of Freud (Hell and Baur, 2006), when they kept the inheritance of German somatic psychiatry.

After Bleuler's death, the dialogue between psychiatry and psychoanalysis augured by Bleuler still continued at Burghölzli (Böker, 2006). The way pointed out by Bleuler for the Zürich School was not draw on unique Kraepelin or unique Freud, but on both of them.

Eugen Gaupp, Ernst Kretschmer and the Tübingen School

Robert Eugen Gaupp (1870-1953) and Ernst Kretschmer (1888-1964) were the central figures in this subsection since they were the representatives of the Tübingen School around 1900. Gaupp had worked with Carl Wernicke and Emil Kraepelin for two years respectively before he became the chair of psychiatry in Tübingen in 1906, which made him become associated with two kinds very different research approaches. However, Gaupp held a critical attitude toward them, and then developed his own standpoint. In a paper presented in 1903 on <Über die Grenzen psychiatrischer Erkenntnis>, he formulated on the basis of 'perception-theoretical and methodological considerations principles which have lost none their validity even today' and proclaimed that 'psychiatry was not only a branch of empirical medicine, but also had something to do with research into psychological understanding'. He also believed that mental illness was produced not by one but by several causes (Gaupp, 1903; Leonhardt, 2004). He also set up the first department of child psychiatry in Germany and wrote <Psychologie des Kindes> (Gaupp, 1910).

Further, Gaupp criticized the view that psychosis was the outcome of an 'exclusively process-oriented' and stressed the significance of the 'prepsychotic personality' in the psychopathogenesis. Through investigation of the famous case of Ernst Wagner, the delusional motivated murderer, he confirmed that the disorder of paranoia was an autonomous disorder differing from dementia praecox and was not a result from an organic process, but from an abnormal personality. Based on the discovery, Gaupp proposed

‘Katathymic’ theory of the pathogenesis of delusion, with which he created the preconditions for the concept of ‘idea of reference in oversensitive personalities’, which was extended to schizophrenic disorders and published as <Der sensitive Beziehungswahn>, later by Ernst Kretschmer in 1918 (Kretschmer, 1918). Moreover, Gaupp rejected the theory of Hermann Oppenheim (1858-1919), and asserted that neuroses were induced by reaction under the situation of extreme mental strain (Leonhardt, 2004). It was revolutionary that Gaupp had open mind to psychological causes of psychological disorders during that era in which psychiatry saw itself as a natural science.

In addition to developing the theory of Gaupp, Kretschmer was the first to use the term ‘multidimensional’ in 1919 in his article <Über psychogene Wahnbildung bei traumatischer Hirnschwäche>, in which psychic partial factors being responsible for the pathogenesis (not only for the manifestation) was emphasized (Kretschmer, 1919). In addition to diagnosis, Kretschmer’s concept of ‘multidimensional’ also was applied to therapeutic area, in which psychotherapy was advocated, but with critical detachment of empirically unverified construed types, such as that of Jaspers and Freud (Leonhardt, 2004). Another significant production of Kretschmer was the publication of <Körperbau und Charakter> in 1921 (Kretschmer, 1921), in which theory on constitutional body types and characters (typology) was proposed and the somatic factors in psychopathogenesis were stressed mechanically. However, Kretschmer’s typology was widely regarded as scientific disproved, although it is still of great topical interest at present.

The Tübingen School during the period of Gaupp and Kretschmer with their colleague like Alfred Storch (1888-1962), who spoke as early as 1926 about the ‘psychobiological structure of schizophrenia’ (Storch, 1926), had a special status within German psychiatry for their particular dealing with mental disorders, in particular with reference to the pathogenesis of delusion which paved the way for a ‘multidimensional’ approach for contemporary psychiatry. Even without radical nature in their paradigm and being criticized by Kraepelin as non-scientific and ‘practicing a speculative psychiatry’ (Leonhardt, 2004),

the Tübingen hospital carried out intensive psychotherapeutic activities for psychoses[22], even for schizophrenic patients since the early 1920s.

Karl Jaspers, Kurt Schneider and the Heidelberg School

Karl Theodor Jaspers (1883-1969) was one of the most important philosophers during the twentieth century; however, his activities as psychiatrist did not get enough attention outside the German-speaking world. It was just yet his scientific career, which began from the field of psychiatry, largely enlightened later basic position of his philosophical thought.

Influenced by the works of Wilhelm Dilthey (1833-1911) and Edmund Husserl (1859-1939) and Max Weber (1864-1920) (Janzarik et al., 1998), Jaspers introduced phenomenology into psychiatry and published his first edition of <Allgemeine Psychopathologie> in 1913, with keeping unrevised to the fourth edition in 1946 (Jaspers, 1946) in Heidelberg. In his book, Jaspers created phenomenological psychopathology (Ph PP) which was necessary because of the limitations of reductionism. He described the methodology of genetic understanding[23], which resulted in the establishment of phenomenological psychology. Contrary to the contemporary awareness of methodology being his major achievement (Huber, 1984), <Allgemeine Psychopathologie> ended with a synthesis of psychiatric nosography, which was largely drawn from the ideas of Kahlbaum and Kraepelin.

Around 1900, psychiatry, as a discipline, was still lack of a kind of general description and unified framework. The aim of Jaspers was to illustrate the way of interpretation and the approaches of research in psychiatry. He

[22] Robert Gaupp had open mind to psychoanalysis and Ernst Kretschmer was selected the president of the first psychotherapeutic society in Germany. Between the two world wars, Kretschmer developed the ‘two track standard methods’ which combined elements of psychodynamics and behavior therapy with relaxation techniques to form one complete whole.

[23] Understanding and explanation were described from the epistemic dimension. Jaspers characterises the basic distinction between understanding and explaining in <Allgemeine Psychopathologie> as following: we sink ourselves into the psychic situation and understand genetically by empathy how one psychic event emerges from another. We find by repeated experience that a number of phenomena are regularly linked together, and on this basis we explain causally.

distinguished the objective psychopathology, which could be explained in the same ways as the data in other scientific fields, such as the systematic observation of behavior and expression devised from Kraepelin's system, from the subjective psychopathology, which needed the approaches from the phenomenological psychology as a kind of beneficial supplement in order to getting more accurate comprehension, instead of superseding other approaches (Jaspers, 1946).

Thus, Karl Jaspers created a basic psychopathological framework for psychiatry, which rendered the detachment of psychiatry from neurology and weakened the natural science model of psychiatry. Methods from natural sciences for explanation (die Erklärung) and methods from humanities for understanding (das Verstehen) were not placed on the opposing positions with each other. Furthermore, 'the PhPP ensured that single methods of consideration and the aspects and partial cognitions gained by them, could not absolutely act as a model of universal validity' (Wolpert, 2006).

In Jaspers' approach, retrospection and self-report were employed for elucidation of the patient's own inner experiences; meanwhile, empathic understanding (die Einfühlung) could be used to the development of a personality, instead of cerebral-organic processes (Jaspers, 1946). Further, the differentiation of static understanding (das statische Verstehen) and genetic understanding (das genetisches Verstehen) could be considered as the basis of an attitude by psychiatrists. Thus, the subjective experience gained currency during the diagnosis process (Wolpert, 2006).

However, different from 'as if understanding'[24] (Jaspers, 1946) of psychoanalysis, there was the limitation of psychological understanding (die Grenzen des Verstehens) in Jaspers' psychiatry, which exactly existed at the break point that biological causal mechanism could be into play. According to Jaspers' dichotomy between explanation and understanding, all mental

[24] Jasper was very critical of psychoanalysis. He concluded 'it is a pseudo-faith, an enormous process of self-deception, conditioned by the age we live in, which bewitches its victims who find in it the satisfaction of their lives'.

events could be classified into two groups: development disorders and process disorders, which were clearly insisted by Kurt Schneider as fundamental distinction between psychopathy and psychoses[25] (Beumont, 1992).

The direct influence of Jaspers on German psychiatry was most obvious in the work of Kurt Schneider (1887-1967). In his publication <Klinische Psychopathologie> (Schneider, 2007), keeping with Jaspers, diagnosis that was based on the psychopathological picture especially the symptoms, instead of disease courses, was the foundation for the following prognosis, treatment and all expert intervention. Kraepelin's heritage was imperishable, but diagnosis was best researched by application of Jaspers' method. However, differing from Jaspers, Schneider held that spiritual events were essentially physical events; in Schneider' psychiatry the priority of somatic symptoms (e.g. delusion and hallucination) in diagnosis, due to more objective observation, was emphasized to be more important than the psychological symptoms (e.g. behavior and speech). In addition, Schneider was also concerned with differentiating schizophrenia from other types of psychoses, by listing the eleven kinds of psychotic symptoms that were all particular and specific characters of schizophrenia. These have become known as the first rank symptoms (FRS) (Beumont, 1992), that represented the emergence of an actionable diagnostic method, which based on clinical symptoms that could be observed, and the consensus could be easy to reach among observers through which.

Despite the attempting to live into the patient's own inner experiences and to formulate this experience as precisely as possible (Wolpert, 2006), the approach of Jasperian-Schneiderian was not detached from the somatic orientation. The Heidelberg School and its successors, like Gerd Huber (1921-2012), inherited and developed jaspers' phenomenological methods,

[25] Because of a philosophical degree under Max Scheler (1874-1928), in due course, Kurt Schneider applied 'meaningful relationships' from Scheler's theory of emotions to replace the understandable relationship for the endogenous depression.

and strived to depict and identify different mental disorders with concepts, such as ‘die Grenzen des Verstehens’.

Tension: Alfred Hoche for example

Placing Alfred Erich Hoche (1865-1943) alone at the end of this section is because he gained a reputation as an acute critic for Germany psychiatric thought around 1900, although he did not propose a great deal of original research ideas and had not established his own school.

His most-cited paper <Die Bedeutung der Symptomenkomplexe in der Psychiatrie> in 1912 was a theoretical examination of Kraepelin’s work, and of the relationship between mental symptoms and the brain. ‘Although not as extreme as Adolf Meyer (1866-1950) who chosen to disregard any common features which might exist among patients, Hoche argued that frequent changes in nomenclature and the description of large numbers of diagnostic subgroups were simply an attempt to cover up the bankruptcy of this approach’ (Hoche, 1991). On the contrary, Hoche used the term ‘symptom complex’ (der Symptomenkomplex) to describe these stereotyped modules of psychopathology. Furthermore, instead of approving Carl Wernicke’s theory of severance, Hoche kept with Karl Bonhoeffer’s concept of acute exogenous reaction types, believed that the symptom complexes could also be precipitated by physical illnesses. He advocated a conceptual level of ‘syndrome’ to intermediate between disease entities and individual symptoms, recognizing that the latter alone was of little use in creating diagnostic groups (Berrios and Dening, 1991).

Moreover, ‘whether the concepts of Hoche’s syndromes or Bonhoeffer’s reaction types helped to inspire a pessimistic approach to classification in particular and to biological psychiatric research in general (exemplified by the teachings of Adolf Meyer and even Sir Aubrey Julian Lewis (1900-1975)) is ripe for reinterpretation’ (Berrios and Dening, 1991). However, through recalling such little thought-provoking historical event, it makes more verified that, around 1900, the opinions advocated for psychopathology and

classification of mental illnesses in German psychiatry were far from consensus.

In the following survey of transmission path of psychiatric thought to China, the familiar perception, with the intertwined German psychiatry perspectives mentioned above, will be always aroused here or there through the lens of international knowledge transfer, although some of them were not widespread outside German speaking realm.

It is noteworthy that, in order to emphasize the rational management and highlight the relationship between psychiatry and society, Max Fischer advocated ‘extra-mural psychiatry’ in 1911. In 1919 he pointed out that psychiatry was becoming social science, even though the concept of ‘soziale Psychiatrie’ had never appeared in German psychiatry until the end of the nineteenth century. Even though psychological and sociological facts had been recognized, for instance by Jaspers and Bleuler, German psychiatry around 1900 had never rejected the anatomical and physiological foundations that were so crucial to its emergence as an academic discipline, and it benefited from the high regard in which it was held as a branch of medical science (Schmiedebach and Priebe, 2004).

Figure 2 shows the contention among different schools which were guided by rationalism and empiricism in German psychiatry around 1900. German somatic-oriented psychiatrists established their own systems and jointly promoted the development of psychiatry. However, the entire situation is far from harmonious unification.

.

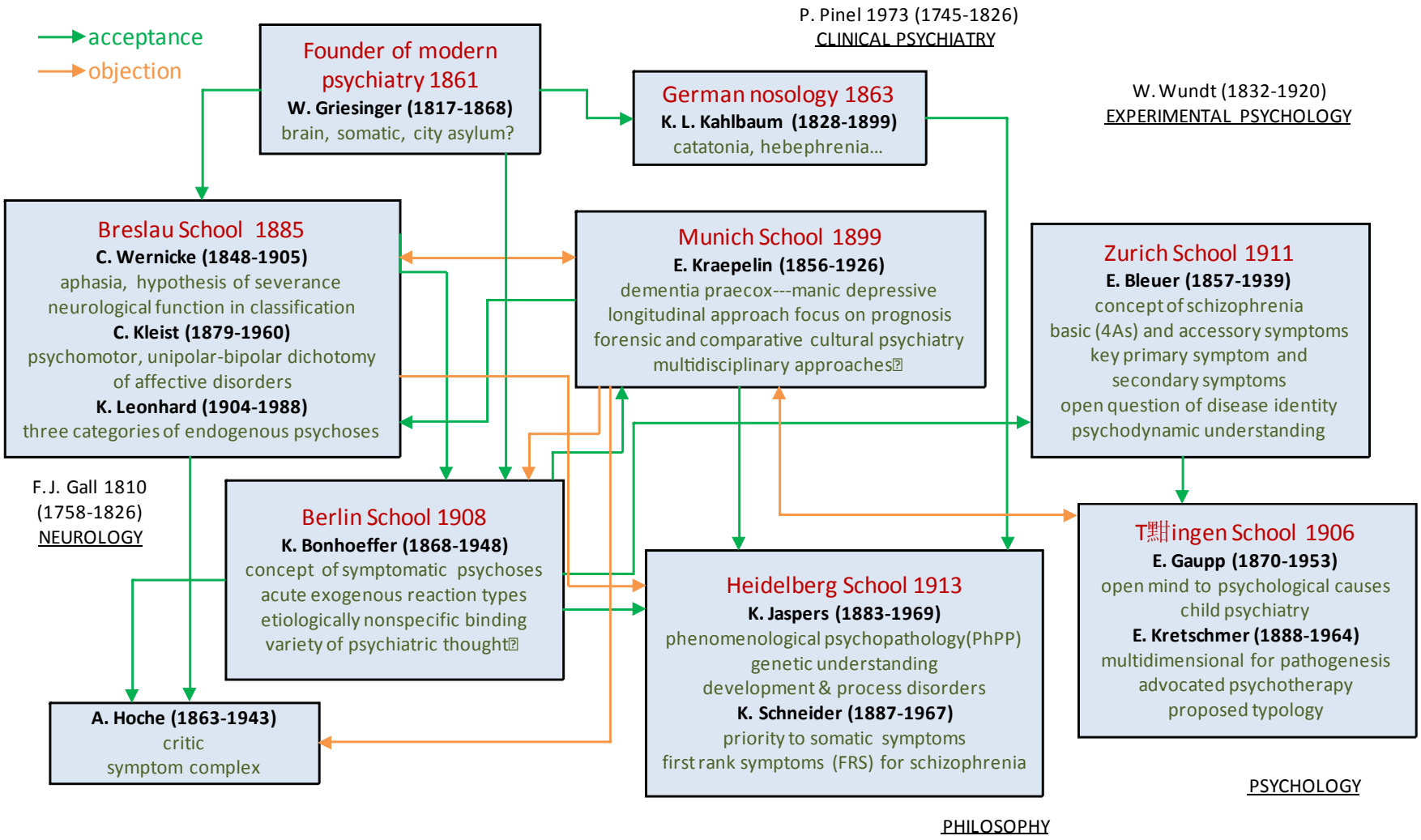

Figure 2 Contention in somatic-oriented German psychiatry around 1900

3.3 Shift of the pivotal center of modern psychiatry

In the 1950s, the sociologist John Desmond Bernal (1901-1971) gave the first description of the phenomenon of 'main area of scientific activity and its' change over time' in his famous book <Science in History> (Bernal, 1954). Since then, Japan's leading historian of science, Mitsutomo Yuasa (湯浅光朝) (1909-2005) discovered a quantitative regularity in the shifts of the world science center. His discovery is now known as the 'Yuasa phenomenon (湯浅現象)'[26] scientifically (Mitsutomo, 1974), which reveals the great leap and imbalance of world's scientific and technological development due to cultural upheaval, social change, economic growth, and rise of new disciplines as well as collective migration of scientists.

The formation of medical community across North Atlantic

According to Yuasa, during the past 400 years, the center of world scientific activities underwent five distinct shifts. The five shifts relayed themselves as the following sequence: Italy (1540-1610), England (1660-1730), France (1770-1830), and Germany (1830-1920), as well as the United States (since the 1920s). As a part of science, the development of modern medicine followed the general regularity and the overall level of scientific and technological development.

Specifically, the innovation or transformation of professional training mechanism played a crucial role. The transfer paths and the spatial distributions of academic centers of different disciplines substantially echoed with that of the general scientific center, only the specific time interval of which were slightly different. For example, the center of medical activity in Germany

[26] Mitsutomo Yuasa (湯浅光朝) (1909-2005) used scientific and technological achievements to measure a country's level of technological development. When the production of important scientific and technological achievements in a country during a certain period amounted more than a quarter of that of the whole world, then the country could be recognized as the contemporary world's center of science and technology activities.

lasted from the mid-nineteenth century to the 1930s (Zuo, 2010), which was a little later than that of general science.

Before the 1890s, the United States could be considered as the medical colony of France and Germany (Stevens, 1998). At the end of the nineteenth century, some Americans began to study medicine in Europe and were trained in German-speaking universities. Among them, the pathologist William Henry Welch (1850-1934), anatomist Franklin Paine Mall (1862-1917) and pharmacologist John Jacob Abel (1857-1938) created the Johns Hopkins Hospital in the USA, where rigorous clinical research and sophisticated experimental research was emphasized. Around 1900, the formation of the commonwealth of medicine across Europe and America was attained (Bynum, 1994).

Psychiatry in America before the 1940s

Specific to the situation in psychiatric field, the paradigms that underpin psychiatry today are still those that were largely formulated during the nineteenth century and the early twentieth century. This was an era of brilliant achievements within the history of psychiatry as a whole (Beumont, 1992). From the middle of the nineteenth century to around 1930, German psychiatry came to replace the French humanitarian genre as the dominant school of thought. With its strongly biological emphasis and a high degree of professionalization, it became the reference point for the field across the globe (Shorter, 1997). From 1933 to 1938, however, German psychiatry suffered a great loss as many psychiatrists immigrated to the United States. As a result, America soon became the pivotal center of psychiatric thought (Peters, 1988). Prior to the World War II (1939-1945), American psychiatry was biological in its focus, but this changed shortly after the war as the emphasis shifted toward a psychoanalytic approach (Sarason, 1988).

Despite these dynamics, the European school of thought continued to play a dominant role in America[27] until the end of 1930s. In fact, some research

[27] In this study, the term ‘America’ refers to the USA.

departments in America strictly followed the German tradition, which meant that there was hardly any American tradition in psychiatry (Barton, 1987; Shorter, 1997). Before the 1940s, there were only a few significant American innovations to speak of in the field. In 1965, Benjamin Rush (1746-1813) was recognized as the founder of American psychiatry by the American Psychiatric Association (APA). However, he did little to serve as a beacon for the future, but rather agreed with his European colleagues that the brain was the origin of mental illness (Shorter, 1997). The identification of a new form of neurosis, neurasthenia, by George Miller Beard (1839-1883) (Beard, 1869) and the rest cure were virtually the only American contributions to the emerging discipline. As noted by Smith Ely Jelliffe (1866-1945), an American psychiatrist who had studied with Emil Kraepelin, American psychiatry in the first quarter of the twentieth century was ‘preeminently Kraepelinian psychiatry’ (Brink and Jelliffe, 1933). The American contribution lay rather in its expansion of psychoanalysis and a new form of biologically-based psychiatry which began from the 1970s, which was featured by genetic clues and new drug therapy (Beumont, 1992; Shorter, 1997).

Corresponding with the view of Bynum mentioned above, between 1890 and 1914 ‘many of the great figures in German medicine began to explore the medical world on this side of the Atlantic,’ noted the historian Thomas N. Bonner (1923-2003) (Bonner, 1963), and they were responsible for sparking the interest of their students about opportunities in America. Adolf Meyer (1866-1950) was among the first of a small reverse migration of physicians from German-speaking countries to America that began in 1890. As the figure with an extraordinary personal influence in America from the 1910s to the 1940s, Meyer has been referred to as the ‘American Kraepelin’ (Shorter, 1997) because he introduced Kraepelin’s system in the Worcester asylum where he was a neuropathologist in 1896 (Meyer and Winters, 1951) and helped to spread Kraepelin’s views among the American scientific public (Peters, 1990). His rejection of Kraepelin’s nosology in later years led the country to psychoanalytic direction.

Although Meyer never achieved international renown and hardly any of his work has been translated into German, he always kept up a lively intellectual exchange with his colleagues in Germany as well as August Hoch in the McLean Hospital (Sutton, 1986), who had been trained in Europe and also helped to interpret Kraepelin's system to America academic field. Furthermore, with the effort of Charles W. Page, Henry Smith Noble and Diefendorf, Kraepelin's system 'slipped from the interpretive grasp of Hoch and Meyer and began a new, independent journey of transformation' in America (Noll, 2011).

After completing his doctorate under August Forel (1848-1931) in Zürich, Meyer was unable to find a university position in Europe. He immigrated to America from Switzerland in 1892 and opened a neurological practice with an emphasis on clinical neuropathology. When his mother recovered from severe depression rather miraculously, he shifted his interest to living subjects and later became a psychiatrist (Lidz, 1966). In his approach, he did not follow the German and Swiss physiological medical tradition that neglected the holistic human organism and subjective psychological issues. Instead, he proposed a psychobiological perspective in 1909 (Wolpert, 2006) that emphasized the importance of the personality structure and its reactions (examining how patients reacted to live events and the illnesses within their bodies) which contrasted with Kraepelin's concept of endogenous psychosis. Meyer believed that mental illness resulted from personality dysfunction rather than from the pathology of the brain.

However, given Meyer was always rather eclectic and absorbed ideas from a variety of sources, he never developed his own discrete school of thought or a cohort of disciples. In fact, he never published a comprehensive collection of his papers or a textbook during his lifetime (Peters, 1990). 'In the collected papers of Meyer, no name appears more frequently in the index than that of Kraepelin (Stephens et al., 1986). He failed to provide any kind of organized constructs and abstractions that could form the basis for future development or be used as reference points for psychotherapy and patient treatment.

Many of his students went on to make significant contributions to American psychiatry, though not necessarily as Meyerians. Few of them recognized his intellectual contribution to the field or their own work. Posthumous evaluations of Meyer's approach have also tended to label it as 'almost entirely sterile' (Double, 1990). Nonetheless, Adolf Meyer was a successful reformer and activist who was largely responsible for the pragmatic, instrumental, and pluralistic character of American psychiatry (Lidz, 1966; Beumont, 1992).

4. Indirect transmission of German psychiatry in China

The advances of modern medicine associated closely with the rise of the modern science in the nineteenth century. Most of the new doctrines, discoveries as well as technologies in natural science have been used to service for medical theory and practice, which helped to form an inevitable coerced status of modern medicine being bundled with scientific conceptions, when modern medicine was welcomed in China.

When investigating the reception of German psychiatric concepts in China, the specific environment in China cannot be despised. The spread and development of modern psychiatry in China was not an isolated activity either from inner or from outer culvert, which was consistent with the cognitive level for scientific knowledge in Chinese intelligentsia.

4.1 Historical background: wars, power relations and science

This section begins with a historical concept ‘western studies east-bound’ (*Xi Xue Dong Jian*, 西学东渐). The concept was proposed by the first America-returned Chinese scholar Wing Yung (*Hong Rong,* 容闳) (1828-1912) in his autobiography <My Life in China and America>. The concept referred to the spread of academic ideas from Europe and the United States to China (Yung, 2007). However, the first record of historical event that was related with this concept did not show its inception being in the nineteenth century. In fact, as early as the end of the sixteenth century, Matteo Ricci (1552-1610), a representative of Catholic missionaries, traveled from Italy to China (Ricci arrived in Macao in 1582), implementing the strategy of scientific missionary[28].

[28] Missionaries passed on great deal of western science and technology when spreading Christian doctrine in China.

His writing <西国记法> (*Xi Guo Ji Fa*, West Country Notation) contained biomedical knowledge which included the anatomical location of the brain and its function of memory, though not shaking a dime of the ancient classic <黄帝内经> (*Huang Di Nei Jing*, Yellow Emperor)[29] in China (Qu, 2005) at that time.

With the development of western technology of navigation, it was during the later Ming dynasty (*Ming Chao*, 明朝) (1368-1644) to the early Qing dynasty (*Qing Chao*, 清朝) (1644-1912)[30] that western science and technology began to be introduced by Jesuits to China step by step. The quantitative tools for medical testing of most valuable were invented in the nineteenth century, which was coincided with the time when the frequency of Christian activities in China were at their peak. The initial shocking by western technology to Chinese traditional culture did not happened in medical field, where the imported knowledge in China was actually outdated (Li, 1998), such as the humorism that was ever popular during the Medieval period. It was mathematical knowledge and measurement technologies, such as the astronomical calendar which was spread by a German missionary Johann Adam Schall von Bell (1591-1666), that helped to establish credibility in actual inspection and win recognition in Chinese society. They were so-called '*Xi Yang Qi Qi*, 西洋奇器' (western curious utensil) in that era.

On the one hand, during the late Ming dynasty (*Ming Chao*, 明朝), most of the missionaries in China were Jesuits. Although the missionary behaviors were in the overall context of expansion of western colonialism, the missionaries were dedicated pioneers for introducing modern western science to China together with the <Holly Bible> (Cao, 1999). Further, China was a sovereign state with its powerful strength and cultural confidence, unlike the regions which were vanquished during the Age of Discovery by Portugal and Spain

[29] It is an ancient Chinese medical classic that has been treated as the fundamental doctrinal source for Taditional Chinese Medicine. It is comparable in importance to <Charaka Samhita> of Ayurveda, the <Hippocratic Corpus> in Greek medicine or the works of Galen in Islamic and medieval European medicine.
[30] The later Ming dynasty (*Ming Chao*, 明朝) (1368-1644) to the early Qing dynasty (*Qing Chao*, 清朝) (1644-1912) refers to the period from the sixteenth century to the eighteenth century.

where these Jesuits originated from. Therefore, the cultural status of the subject and the object (the receptor) during the process of knowledge dissemination were of relatively equal, which rendered smoother absorption of western civilization by Chinese literati, without compromising their cultural dignity (Xiong, 2011). On the other hand, because modern western science was still in its creating stage and the Jesuits who were subjected to the restriction from religious activities, were not real scientists, western technologies that were imported during this period were not with full sense of modern western scientific yet (Bao, 1995).

Regarding of modern Chinese history, it was in the 1860s that the activities of massive importation of modern western science began, especially the system of natural science (Xiong, 2011). Since the <Convention of Peking> (*Bei Jing Tiao Yue*, 北京条约) signed in 1860, in the light of the provisions in the treaty, missionaries were permitted to move from coastal regions into inland. They had more chances to contact with the government and Chinese public closely. After the loss of the Opium Wars (*Ya Pian Zhan Zheng*, 鸦片战争) (the first war: 1839-1842, the second war: 1856-1860), British and French troops opened the door of seclusion in China with advanced military weapons, which was recognized as the most serious insult to Chinese ancestors. Following a series of military defeats and concessions to the foreign powers, in order to pursue a powerful nation, the Self-Strengthening[31] Movement (*Yang Wu Yun Dong*, 洋务运动) (1861-1895) was initiated, with introducing the advanced industrialization technologies as the priority, especially the manufacture of firearms. '*Shi Yi Zhi Chang Ji Yi Zhi Yi*, 师夷之长技以治夷', which meant learning merits from the foreigners in order to conquer the foreigners, proposed by *Yuan Wei* 魏源 (1794-1857) in his treatise <海国图志> (*Hai Guo Tu Zhi*, Illustrated Treatise on the Maritime Kingdoms)[32] was adopted as the slogan by government officials who were in favor of westernization in China.

[31] The concern with 'self-strengthening' (*Zi Qiang*, 自强) of China was firstly expressed by *Gui Fen Feng* 冯桂芬 (1809-1874) in a series of essays which were presented by him to *Guo Fan Zeng* 曾国藩 (1811-1872) in 1861.

[32] The treatise is regarded as the first significant Chinese work on the West and a good example of China's initial responses to the Anglo-Chinese First Opium War (1839-1842).

In particular, the Qing government sent one delegation to visit Germany in 1866. During the visit, the industrial civilization and Germanic culture impressed them a lot. In 1870, scholars who were sent to Germany with financial support from the government, mainly bearded the responsibility to learn military technologies (Zhou, 2004).

However, after the first Sino-Japanese War (1894-1895), it was not the issue of powerful nation but the crisis of national salvation that was on the historical stage. Not only the technology, but also the strength of their own culture began to be doubted by Chinese elites (Qu, 2005). As a result, Chinese elites became eager to learn more from the West in order to increase the standing of their homeland (Xu, 1995). At the same time, scientific knowledge and technologies in different fields, including medicine, although which was not the focus comparing with the emphasized industrial technologies, were first being brought to China by scientific missionaries (Wang, 1997), and then by the overseas-returned scholars. Consequently, modern psychiatry was introduced into China as a part or sub-discipline of western medicine.

In the later Qing dynasty (*Wan Qing*, 晚清) (1840-1911), due to the growing prosperity of the western world, most missionaries took the Eurocentric attitude to overlook at Chinese culture unconsciously, which increased the psychological distance, and enhanced the resistance between the subject and the recipient in the activities of communication (Xiong, 2011). On the other hand, the urging desire of being successful, the traditional belief in self-esteem and the newly generated complex of inferiority among Chinese elites led to the superficial and inadequate incorporation of foreign achievements inevitably (Liu, 1994).

Contradiction and confliction began to be escalated when two heterogeneous thoughts and cultures met in such historical background. In order to protect their own tradition, the Ti-Yong principle (*Zhong Ti Xi Yong*, 中体西用) was identified as the basic guiding ideology and was popular in China around 1900. The belief in Chinese tradition, including philosophical thoughts, traditional

culture and political system, was emphasized to be as the foundation and framework which should be always complied with during the process of learning from the West.

Through the constant self-restrospection by people with lofty ideals in China, the activities of utilizing and absorbing of different cultures together with inheriting and discarding of traditional culture had appeared gradually during the period of social transformations of long-standing. As of 1900 eve, the word ‘science’ (*Ke Xue*, 科学) was introduced from Japan (Duan, 2001) to replaced *Ge Zhi* 格致 (polytechnic) in China, which was originally proposed by Matteo Ricci to define nature science from the West. The word ‘science’ became popular in books and magazines quickly in the early twentieth century. The appearance of the term ‘science’ means trying to break with the traditional classics from the level of ideology thoroughly, and to pursue the freedom of thoughts (Li, 1995).

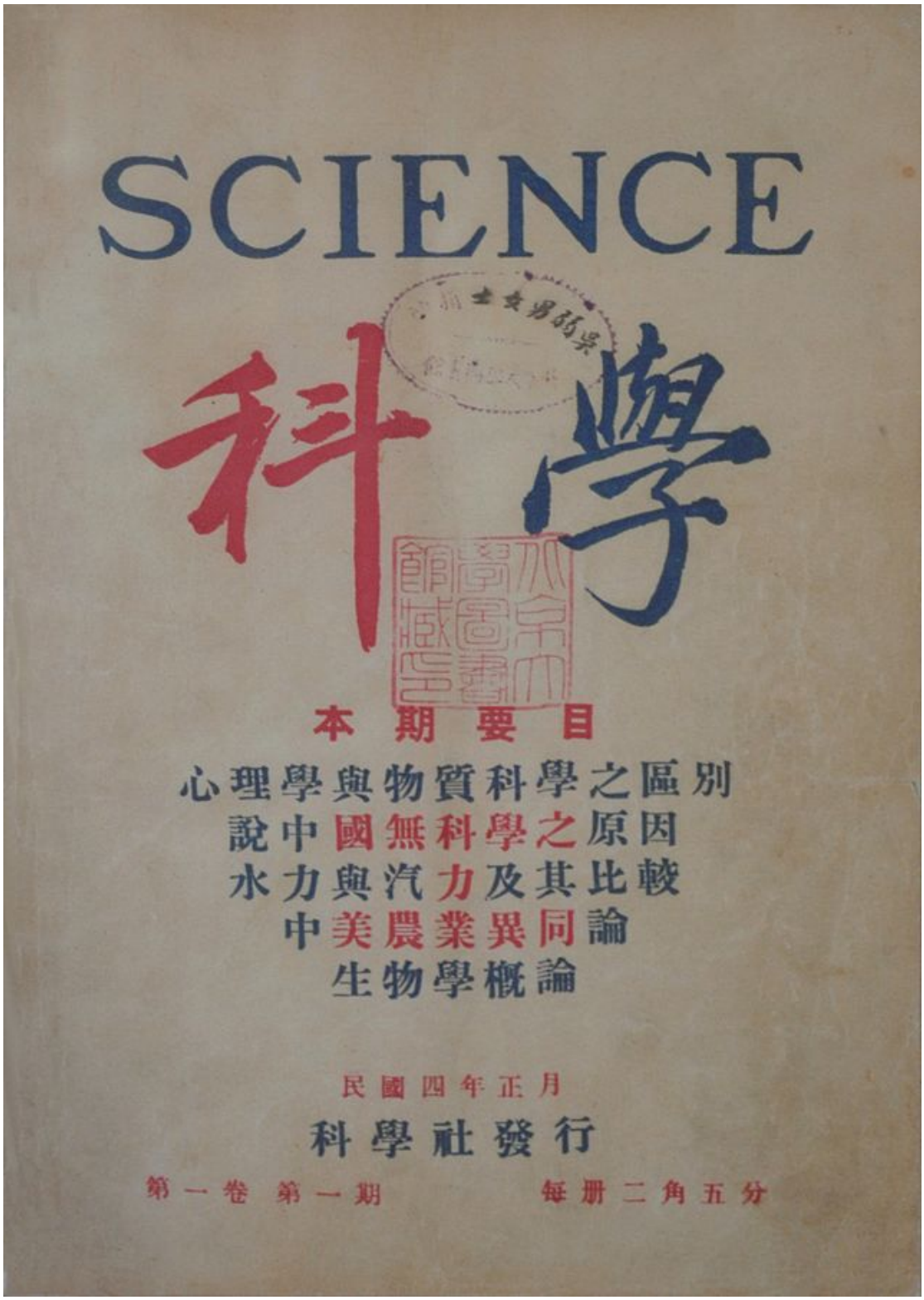

Figure 3 Chinese local magazine <科学> (Science) was first published in 1915

Note: <科学> (1915-1960) was released by the Science Society of China (*Zhong Guo Ke Xue She*, 中国科学社).The journal of the American Association for the Advancement of Science (AAAS) was as its reference template.

With the influence of the Reform Movement (*Wu Xu Bian Fa*, 戊戌变法) in 1898, which aimed at creating constitutional monarchy, and of the New Culture Movement (*Xin Wen Hua Yun Dong*, 新文化运动), which was lasted from the mid 1910s to 1920s, the understanding and acceptance of western intelligent achievements by modern Chinese society had experienced from artificial (technical) level to the systemic (social) level and then to the ideological (cultural) level (Wang, 1996).

Correspondingly, any era has its own buzzwords; the evolution of buzzwords can also reflect the psychological change by public in a society. From 1860, the name of western knowledge experienced the change from '*Yi Xue*, 夷学' (Barbarian School) to '*Xi Xue*, 西学' (Western School) to '*Xin Xue*, 新学' (Reformatory School) (Xiong, 2011), which is an epitome of decline in xenophobia in Chinese community for western knowledge around 1900.

4.2 The admission process of Western medical paradigm

The nineteenth century was the period in which western medicine encountered and collided with Chinese medicine. Western medicine had been introduced in China since the Ming dynasty (*Ming Chao*, 明朝) (1368-1644) and did not become a challenge to traditional medicine until the Qing dynasty (*Qing Chao*, 清朝) (1644-1912). The achievements of modern medicine came to China timely with promotion by missionaries, which made Chinese modern medicine was in the ranks of the world's medical simultaneous development when its inception.

Before the 1850s, western medicine had been recognized for its efficacy by Chinese society. Initially, accompanied by religious activities, missionaries, even though most of whom had not been professionally trained, delivered medicaments to Chinese people for free and implemented simple treatment voluntarily in order to relieve their ailments, which was called 'pillbox medicine' (*Yao Xiang Yi Xue*, 药箱医学) in Chinese history. Driven by the

desire to survive, two kinds of people would like to be treated in western style before its value had been recognized or been proved: poor people who could not offer the expenditure for medicament and treatment; and dying people who could not be healed by approaches from traditional medicine, even if they were very wealthy. For example, in the year of 1693, a Portuguese missionary Mgr Claudus de Visdelou (1656-1737) applied cinchona, the alkaloids of which are quinine and cinchonine, to treat malaria for Emperor *Kang Xi*, 康熙[33] (1654-1722). Rapidly recovery from malaria made fame for this exotic drug (Li, 1998; Cao, 1999). Among average people, the technology of vaccination for cowpox was introduced into China in 1805 and was quickly accepted by communities due to its efficacy, although it was considered to be extremely dangerous earlier in the West. In addition to new drug and vaccine, the successful implementation of surgeries which were based on the invention of anesthetics and disinfectants was the strongest cornerstone of western medicine being rooted in China. A fact can be as a reference to prove the rapid spread of western medicine. Charles Thomas Jackson (1805-1880) and William Thomas Green Morton (1819-1868) invented the anesthesia in 1846 in America; just one year later, a missionary doctor Peter Parker (1804-1835) applied this newest technology in Guangzhou Medical Board of Ophthalmology (*Xin Dou Lan Yi Ju*, 新豆栏医局) (found in 1835) in China (Li, 1998). Before the Opium War, there was hardly any confrontation between Chinese medicine and western medicine generally; western medicine was looked as a useful supplement to traditional medicine in China.

The 1850s was considered as a watershed, because in Chinese medical history, the five translations[34] by Benjamin Hobson (1816-1873) from 1851 to 1859 were widely considered as 'the first time that missionary doctor imparted western clinical essences into Chinese intelligentsia consciously and systematically'. Together with <医林改错> (*Yi Lin Gai Cuo*, corrections on the

[33] *Kang Xi* 康熙 was a Chinese era name for the fourth emperor *Hiowan Ye* 爱新觉罗玄烨 of the Qing dynasty (*Qing Chao*, 清朝). A Chinese era name (*Nian Hao*, 年号) is the regnal year, reign period, or regnal title used when traditionally numbering years in an emperor's reign and naming certain Chinese rulers.

[34] The five translations included: <全体新论> (*Quan Ti Xin Lun*), <西医略论> (*Xi Yi Lue Lun*), <内科新说> (*Nei Ke Xin Shuo*) (two volumes) and <妇婴新说> (*Fu Ying Xin Shuo*).

errors of medical works) by an indigenous scholar *Qing Ren Wang* 王清任 (1768-1831) in 1830, which was written according to the knowledge from western autonomy in order to get rid of the stale and take in the fresh for traditional medicine, these works called the traditional ideas into question seriously and helped to promote western medical theories legitimately entering into China (Qu, 2005). However, unlike mathematics which was developing very smoothly after its introduction to China, western medicine maintained stronger cultural characters originating from its birthplace. Except the pure technological part, the development of western medicine in China was destined to go through a more tortuous path due to many embedded incompatible ideological conceptions (He, 2006).

If the appearance of new knowledge did not result in threat or collapse to the inherent one in the original system, it could usually be welcomed in easily. Before 1912, the two different medical systems coexisted in China but without intense conflicts. Traditional medicine still was the main body, yet western medicine acted as the supplement.

From the academic perspective, in the light of the Ti-Yong principle (*Zhong Ti Xi Yong*,中体西用), typical response to modern western medicine in China was trying to mix a small part of its knowledge into the system of traditional medicine, which was called the process of *Hui Tong* 汇通 (fusion). However, the real integration of the two different medical systems had never been attempted seriously.

On the contrary, western medicine as a whole in China was developed quickly. In 1865, Ernst Faber (*Zhi An Hua*, 花之安) (1839-1899), a German missionary, did a brief comparison on the establishment of medical accommodation between in the West and in the East in his book <自西徂东> (*Zi Xi Cu Dong*, from the West to the East) (Faber, 2002). He proposed that medical care outside family space should be developed. Hospital in western style, for example, should be founded for Chinese public. In 1850, there were only 10 church hospitals; in 1889, the number of western hospitals increased to 61.

And then, there were 363 western hospitals together with 244 clinical services at the beginning of the twentieth century (Unschuld, 1985). After 1900, many churches were subsidized by the Boxer Indemnity (*Geng Zi Pei Kuan*, 庚子赔款)[35] to rebuild modern hospitals in China. More importantly, next, a serious of comprehensive educational programs in western style was initiated in these church hospitals (*Jiao Hui Yi Yuan*, 教会医院). Western medicine was flourished step by step. China's first western medical school was opened in 1868 in Canton Pok Tsai Hospital (*Guang Dong Bo Ji Yi Yuan*, 广东博济医院) (built in 1859), the predecessor of which was Guangzhou Medical Board of Ophthalmology (*Xin Dou Lan Yi Ju*, 新豆栏医局) mentioned above (Li, 1998). In a survey in 1897, apprenticeship was established in two-third of 61 church hospitals (Li and Yan, 1990). During the 1910s, Peking Union Medical College (PUMC) (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) (built in 1906) and the medical college in Aurora University (*Zhen Dan Da Xue*, 震旦大学) (1903-1952) were established.

In addition to the church hospitals and educations, the translation of western medical books had also ushered its climax. With the introduction of foreign medical publications, missionary doctors also set up China Medical Missionary Association (*Zhong Guo Bo Yi Hui*, 中国博医会) in 1886 and published <博医会报> (*Bo Yi Hui Bao*, China Medical Missionary Journal) in 1887 in order to bear the task of standardization of medical terminology. Until 1913, China Medical Missionary Association (*Zhong Guo Bo Yi Hui*, 中国博医会) had published 38,200 medical books which belonged to 322 categories respectively (Cousland, 1913). Due to the absence of local professionals with knowledge in western medicine, the phenomenon of being interpreted by missionaries in the first place and then being compiled into Chinese by local scholars was very common, which was a special process in history when

[35] The Boxer Indemnity (*Geng Zi Pei Kuan*, 庚子赔款) came from one of the unequal treaties, the Boxer Protocol (*Geng Zi Tiao Yue*, 庚子条约) in 1901 between the Qing Empire of China and the Eight-Nation Alliance (Austria-Hungary, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States) that had provided military forces.

initial intimate contact happened between two different civilizations. From 1886 to 1912, the career of western medicine in China was mainly expanded by the foreign missionaries.

From the political perspective, *Gui Mao Xue Zhi* 癸卯学制, the first official system of organization of academic education in modern China was issued in 1903, referring to the standard of curriculums in contemporary western universities. In *Gui Mao Xue Zhi* 癸卯学制, western medical courses, such as anatomy and psychology, were first included in the syllabus in China. In 1905, the Qing government proposed to cancel *Ke Ju Kao Shi* 科举考试 (the imperial examination)[36], which symbolized the complete collapse of the traditional classics. Since then, the orthodox classics had no longer been regarded as the academic authority. However, it is noteworthy that it was political reformers who went at the forefront in the reform, rather than medical professionals. After the reform, a considerable number of scholars were sent to America, Europe and Japan, who became a generation of backbone strength for supporting western medicine in China later on. All of these events paved the way for western medicine to replace the indigenous one.

After 1912, the situation of Traditional Chinese Medicine turned to being worse. In 1913, the educational system in universities was reformed by the government of Republic of China. The principle of Japanese Meiji Restoration (明治維新) in 1860s was followed and traditional medicine was replaced by western medicine in academic educational system thoroughly (Li and Yan, 1990). The voice of criticism of traditional medicine came directly from the community of Chinese indigenous scholars who had received education in western style when they were overseas, such as *Yan Yu* 余岩 (1879-1954), who had devoted himself to learn western medicine in Japan. Along with the strong social influence brought by the prevalence of the concept ‘science’ (*Ke Xue*, 科学) mentioned in the chapter 4.1, Traditional Chinese Medicine lost its original legitimacy and was recognized as the synonymous of pseudo-science.

[36] The imperial examination was a civil service examination system in Imperial China to select candidates for the state bureaucracy.

The confusion and the following suggestion of 'scientization of traditional medicine' continued from the 1920s to the 1950s (Qu, 2005).

Compared with the decline of Traditional Chinese Medicine, western modern medicine demonstrated its strengths fully in China through showing the immediate effect by contemporary surgeries[37] and the obvious advantages by the knowledge of public health system[38]. During the first decade of the twentieth century, along with the establishment of China's first western medical society, the Chinese Medical Association (*Zhong Hua Yi Xue Hui*, 中华医学会) in 1915, western medicine had been widely accepted by Chinese society (He, 2006).

All in all, the position establishment of western medicine in China experienced the trilogy of 'Suspect → Try → Convince' (Xiong, 2011; He, 2006). In Chinese society, the strength of a kind of healing system not only relied on objective efficacy itself, but also depended on the ideology held by the social and political groups. The crucial issue is whether or not the outlook behind the healing system could be approved.

4.3 A brief history of modern psychiatry in China (1898-1978)

As described in the chapter 2, traditional medicine had dominated in China before western medicine was introduced systematically around 1900. Traditional Chinese Medicine was based on a natural philosophy that emphasized both the body and mind. In fact, mental illnesses were even described in ancient Chinese medical books more than 2,000 years ago. Until the Qing dynasty (*Qing Chao*, 清朝) (1644-1912), mental illnesses were treated separately from other medical illnesses and recorded as a sub-category, *Shen Zhi Men* 神志门 (see the chapter 2.1), in some traditional Chinese medical books, such as <证治准绳> (*Zheng Zhi Zhun Sheng*)

[37] The contemporary surgeries applied in China included cataract surgery, benign tumor resection, amputation surgery and trauma staunch bleeding & debridement, as well as removal of bladder stones etc.
[38] Such as the prevention and treatment for plague, for leprosy and for cholera.

(published in 1860) and <古今图书集成・医部全录> (*Gu Jin Tu Shu Ji Cheng - Yi Bu Quan Lu*) (published in 1934). However, psychiatry did not develop into an independent branch within traditional medicine until the late nineteenth century when western approaches to psychiatry were introduced into China (Xia and Zhang, 1981; Xu, 1995).

The purpose of this brief narrative historical statement in this section is in order to help to grasp the rhythms or paces of the development of modern psychiatry in China accurately. Since the academic concepts were the focus of this study, details will be discussed and compared associating with related translations and publications as well as clinical therapies.

The first period: from 1898 to 1949

In the late nineteenth century, American and British missionaries transported western psychiatry to China and established the first asylum, which was usually recognized as the inception of modern psychiatry in China. These missionaries obtained trust from Chinese public by sponsoring charitable activities, teaching scientific knowledge and publishing books, as well as saving lives. The first Chinese asylum, the John G. Kerr Refuge, was established in *Guang Zhou* 广州 in 1898 by a Christian American, John Glasgow Kerr (1824-1901). He was a medical missionary who had graduated from Jefferson Medical College in Philadelphia and came to China as part of an American Presbyterian mission. More asylums and psychiatric clinics were then opened successively in major cities, such as *Bei Jing* 北京[39] (1906), *Shang Hai* 上海 (1935), *Cheng Du* 成都 (1944), and *Nan Jing* 南京 (1947).

There were also special asylums deployed for the wars. In 1904, Japan started a war against Russia over control of Northeast Asia, which resulted in the partial occupation of the southern and northern parts of Northeast China by Japan and Russia, respectively. These two powers established institutions to care for the mental health of their veterans and immigrants in the major

[39] *Bei Jing* 北京 had been ever renamed as *Bei Ping* 北平 from 1928 to 1948.

cities within their areas of control. A Japanese clinic was opened in *Shen Yang* 沈阳 (1914), a Japanese hospital for the insane in *Da Lian* 大连 (1935), and a Russian asylum in *Harbin* 哈尔滨 (1910). It is worth noting that in the late nineteenth century, Japanese and Russian psychiatry mainly followed the German school, particularly influenced by Emil Kraepelin (1856-1926) (Utena and Niwa, 1992; Hashimoto, 2013; Korolenko and Kensin, 2002).

Given the urgency of reformation of the public health and elimination of the infectious diseases during the period of Republic (1912-1949), mental illness had not been looked as a kind of imperative disease and was largely marginalized by the authorities. Due to the lack of awareness and the situation of barely clothed and fed, mental illness had not been recognized as a kind of disease by Chinese public. In China, psychiatry was usually the last choice for medical students because the field was not well-respected like it was in Germany. As of 1947, according to the census of the health department of the Republic of China, there were only 6 mental hospitals in mainland China, all of which were located in major cities. At the time, there were 895 beds available for the mentally ill, which only accounted for 1.8% of the total number of beds in Chinese hospitals (Cheng, 1948b). Indeed, before 1949, there were only 50 trained psychiatrists who actually remained in the profession (Young and Chang, 1983). Moreover, there were only a few nurses who had any kind of special psychiatric training (Bowman, 1948).

Psychiatric teaching was first carried out by foreign doctors. Andrew H. Woods (1872-1956), an American, offered the first formal courses in western psychiatry in *Guang Zhou* 广州 in 1910. He was appointed professor of Neuropsychiatry at Peking Union Medical College (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) in 1919 and offered the first neuropsychiatry courses in 1922. Shortly thereafter, in 1928, the first neuropsychiatric department was established at Peking Union Medical College (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) (Chen, 2010). His example was then followed by R. S. Lyman (1891-1959) from John Hopkins Hospital, who visited many universities in China to teach psychiatry and train practitioners. Around this

time, Fanny Gisela Halpern (*Fen Han*, 韩芬) (1899-1952) from Vienna also taught neuropsychiatry and a little psychopathology at Shanghai Medical College (*Shang Hai Yi Ke Da Xue*, 上海医科大学) as well as St. John's Medical College (*Sheng Yue Han Da Xue Yi Xue Yuan*, 圣约翰大学医学院) in *Shang Hai* 上海 (Young and Chang, 1983; Westbrook, 1953). Collectively, these western professionals trained the first cohort of Chinese neuropsychiatrists and encouraged some of them to study abroad between the 1920s and the 1940s. Beginning in the mid-1930s, courses in neuropsychiatry were being offered by western-trained Chinese neuropsychiatrists, such as *Min Yu Ling* 凌敏猷 (1902-1991) and *You Qi Huang* 黄友岐 (1907-1993) in *Chang Sha* 长沙 as of 1934, and *Yu Lin Cheng* 程玉麐 (1905-1993) in *Nan Jing* 南京 as of 1936. Other Chinese scholars followed in the years to come.

However, before 1949, only a few medical colleges offered courses in psychiatry. The courses were offered irregularly and most of the teachers worked only part time and the exchange of experience within China was rare (Xia and Zhang, 1981).

Prior to 1949, there was also no any psychiatric association or journal in China. Before 1949, no more than ten translations or monographs related to psychiatry had been published (Luo and Niu, 2003), and only few psychiatric articles appeared in general medical journals, such as <中华医学杂志> (*Zhong Hua Yi Xue Za Zhi*, Chinese Medical Journal). Also, there was very a little scientific research being done in the field at the time in China (Young and Chang, 1983). *Zong Hua Su* 粟宗华 (1904-1970) and *Ying Kui Xu* 许英魁 (1905-1966), for example, published their research in neuroanatomy and neuropathology in an international English-language journal <Archive of Neurology and Psychiatry> around 1940. According to Pearson, both the practice and further development of Chinese psychiatry was somewhat hindered not only due to the lack of properly trained personnel, but also limited financial resources (Pearson, 1991).

The second period: from 1950 to 1978

Along with the calming down of the political chaos, modern psychiatry in China set its sail after 1949 and ran aground in its territorial waters for around ten years due to non-academic reason.

The social transformation had significant influence on psychiatry in China. Prior to 1949, health conditions were extremely poor with unregulated prevalence prostitution. The incidence of syphilis took accounted for 10-15% of the psychiatric inpatients. After the policy of banning brothels and of offering free treatment which were issued by government, the incidence of syphilis gradually declined to no more than 1% of inpatients. The same situation happened to the status of opium addicts in China by implementing the strategy of forbidding drug addiction (Xia and Zhang, 1981; Young and Chang, 1983).

During this period, most of the prominent neuropsychiatrists in the country had been trained in China (Xu, 1995). The Chinese Medical Society of Neuropsychiatry (*Zhong Hua Yi Xue Hui Shen Jing Jing Shen Ke Xue Hui*, 中华医学会神经精神科学会) was established in August 1951, which was the most important and the most influential academic group for Chinese psychiatrists. The first professional journal <中华神经精神杂志> (*Zhong Hua Shen Jing Jing Shen Za Zhi*, Chinese Journal of Neurology and Psychiatry) appeared in 1955, and the first formal classification of psychiatric diseases in China was proposed 3 years later. ‘By the end of 1959, 62 new psychiatric hospitals were established in 21 provinces and autonomous regions in China, which took account for 19 times the number in pre-liberation. The number of psychiatrists increased to 16 times that of pre-liberation and the number of nurses in psychiatric field multiplied itself 20 times’ (Xia and Zhang, 1981; Young and Chang, 1983). Also, universal censuses on mental ill were carried out in some regions, in order to surveillance the epidemiologic status. Further, the institutes that committed to preventing and controlling mental diseases, were established successively in some administrative regions, for example in

Shang Hai 上海. The ultimate goal was to form a network of psychiatric hospitals, clinics and house calls throughout the country which was the important strategy of psychiatric services being extended from the provinces to the communities in China (Xu, 1989).

From the mid-1950s to the mid-1960s, an unified syllabus[40] for medical education in college was issued by National Ministry of Health (*Guo Jia Wei Sheng Bu*, 国家卫生部). However, during the early period of Peoples Republic of China, the number of medical graduates was inadequate and the demand for professionals in general medicine and surgical division was always the first to be considered. Actually, most of the domestic doctors who were able to practice western medicine graduated from medical school in charged by foreign church or returned from overseas, received training in western style. The shortage of professionals who graduated from native accredited university resulted in various professional schools came into being. Therefore, the group of *Yi Shi* 医士 (an outmoded title for doctor in relatively lower level), who just received practical training for 3 years after junior high school and accessed little theoretical knowledge, formed the backbone clinical team for mentally ill. Along with the lack of certification systems for specialists, such an embarrassing situation continued to the 1980s (Xu, 1996). 'As for research, project on biological psychiatry was carried out with emphasis on clinical work'. For example, at the beginning of the 1960s, study on cytogenetic and familial transmissibility of mental disorders was started up in *Shang Hai* 上海. At the same time, biochemistry research in psychiatry was conducted in several major cities and the properties of psychotropic drugs were studied in Chinese Academy of Medical Science (Xia and Zhang, 1981).

However, during the period of Cultural Revolution (*Wen Hua Da Ge Ming*, 文化大革命)[41] (1966-1976), the ultra-left ideology seriously interfered with

[40] According to the syllabus, only 72 hours were scheduled for medical student in college for psychiatric courses.

[41] The Cultural Revolution (*Wen Hua Da Ge Ming*, 文化大革命) was a social-political movement that took place in the People's Republic of China. Set into motion by *Ze Dong Mao* 毛泽东 (1893-1976), the Chairman of the Communist Party of China. Its stated goal

Chinese psychiatry. Universities and research centers were forcibly closed. The teaching hours in psychiatry was reduced and was soon incorporated into that of general medicine (Xu, 1996). Publication of psychiatric journals was not permitted. Standard treatments, such as chlorpromazine, insulin coma and electronic shock, were abandoned and research on biological psychiatry was stopped. 'The ultra-left point of view regarding mental illness was that mental illness was the result of incorrect political thoughts, and crazy people were precisely selfish persons who were in conflict with the society severely. Therefore, political education should be adopted in the process of treatment' (Young and Chang, 1983).

Further, in the light of prevailing negative attitude toward western medicine, doctors were unable to change such situation because they feared of being punished. For years, the development and status of psychiatry in other countries could not be learned. The actionable diagnostic criteria developed in Anglo-American psychiatry and based on the achievement of German psychiatrists, especially the concepts of Kraepelin and Schneider, for example the Feighner Criteria proposed by the Washington University in St. Louis, Missouri in 1972 which was usually looked as the turning point of boycott to psychoanalysis (de Leon, 2013), and the research diagnostic criteria (RDC) with emphasis on cross-section information rather than longitudinal profile information by Robert Leopold Spitzer (1932-) in 1975, were not introduced in China timely. Therefore, their importance as pioneers of the later formulation of the <Diagnostic and Statistical Manual of Mental Disorders 3rd Edition, (DSM-III)> was not recognized in China opportunely, in which the concept 'multidimensional' proposed by Kretschmer was adopted as the new form of 'a multiaxial system' for the first time.

Although acupuncture and traditional medication remained being emphasized, but clinical practice and experimentation were still on their last leg, the

---

was to preserve 'true' communist ideology in the country by purging remnants of capitalist and traditional elements from Chinese society, and to re-impose Maoist thought as the dominant ideology within the party. The revolution marked the return of *Ze Dong Mao* 毛泽东 to a position of power after the Great Leap Forward (*Da Yue Jin*, 大跃进).

research result ‘were not so encouraging as those of modern therapies’ (Young and Chang, 1983). Only after the downfall of the Gang of Four (*Si Ren Bang*, 四人帮)[42] in 1976, modern psychiatry in China was revived and international intelligent exchange became active again.

In 1978, the Second National Symposium on Neurology and Psychiatry[43] was held in *Nan Jing* 南京. At this meeting, ‘the classification of psychiatric diseases, the activity of mental health, the integration of traditional medication with western medicine, the prevention of relapse of schizophrenia as well as many other issues, such as the prospects of psychiatry in China, academic theories and research program, were discussed’ (Xia and Zhang, 1981).

All in all, through the narrative historical statement, it is easy to find that psychiatric research work in China from 1898 to 1978 had not been carried out comprehensively and a corresponding scientific and standardized system had not yet established, partly due to the marginalized situation and turbulent social circumstances. Modern psychiatry in China had not entered into the independent stage until 1978, and had not broken out from the influence of introduced western thoughts.

4.4 Transmission of German psychiatry through indirect channels

It has been fully clarified previously that modern psychiatry in China was founded on the basis of intellectual contributions originating from western countries. Even though many brilliant psychiatric concepts were created in Europe during this period, especially in Germany, direct and significant

[42] The Gang of Four (*Si Ren Bang*, 四人帮) was a political faction composed of four Chinese Communist Party officials. They came to prominence during the Cultural Revolution (*Wen Hua Da Ge Ming*, 文化大革命) (1966-1976) and were later charged with a series of treasonous crimes. The Gang’s leading figure was *Qing Jiang* 江青 (1914-1991). The other three members were *Chun Qiao Zhang* 张春桥 (1917-2005), *Wen Yuan Yao* 姚文元 (1931-2005), and *Hong Wen Wang* 王洪文 (1973 -1976).

[43] The First National Symposium on Neurology and Psychiatry was held in *Guang Zhou* 广州 in 1963. In 1966, a National Seminar on Scientific Research on Mental Illness was held in *Cheng Du* 成都, in which the experience and achievements of research was summed up.

academic exchanges between China and Germany in the field of psychiatry were rarely established, and related reports were also scarce.

The first asylum was established in 1898, which was recognized as the onset of modern psychiatry in China. However, during 1898 to 1978, the exchange of ideas was restricted. This was one of the crucial reasons which gave rise to the fact that contact with German psychiatric concepts only occurred indirectly. After lengthy and frequent periods of political unrest, China started opening up in 1978, and cooperation with western countries increased. Also, due to multiple reasons, such as the geographical distance and the fact that the German language was not as popular as English in modern China, there was a time difference between the departure and the arrival of psychiatric knowledge transmission through such a long journey. Obviously, this delay and the indirect route entailed unpredictable remodelling.

Further, unlike the dichotomy of Kraepelin which was placed under the spotlight when it appeared, widely-discussed and recognized guiding theories in Chinese psychiatry had not been proposed or implemented until 1989, when the first version of <China's classification and diagnostic criteria of mental disorders (CCMD)> was issued. Therefore, a long-term perspective is required for the discussion of acceptance or rejection of German psychiatric thoughts of this period in China.

Few direct exchanges

From 1898 to 1978, in addition to *Ji Lin* 林几 (1897-1951) who introduced forensic psychiatry in the 1930s (Wang and Chang, 2009), almost no German psychiatric concepts came to China through a direct route. Apart from very few individual academic communications (few Chinese scholars studied neurological or neuropathological subjects in Germany), none of the complete psychiatric masterpieces from the German-speaking area which were created around 1900 have been translated and directly compiled into Chinese.

Before 1949, some bilingual periodicals (German and Chinese) which specialized in translating and introducing German medical progresses, such as <Medizin und Kultur> (*De Hua Yue Kan*, 德华月刊) (published from 1941 to 1945), <Tung-Chi Medizinische Monatsschrift> (*Tong Ji Yi Xue Yue Kan*, 同济医学月刊) (published from 1936 to 1941), <*Xin Tong De* 新同德> (published from 1924 to 1925), also reported about a small extent of the progress occurring in psychiatry. From the articles translated directly from German, China scholars could gain a small impression of famous contemporary psychiatrists and the basics of their theories. However, these journals were usually published on a quarterly basis, yet in unsteady intervals. The content of articles in these journals lacked references to each other. This was not conducive to a systematic introduction of the origin and the context of new ideas.

From 1949 to 1978, three professional journals appeared in China. The first professional journal <中华神经精神杂志> (*Zhong Hua Shen Jing Jing Shen Za Zhi*, Chinese Journal of Neurology and Psychiatry) was founded in 1955 (see the chapter 4.3), the second was the <国外医学: 精神病学分册> (*Guo Wai Yi Xue: Jing Shen Bing Xue Fen Ce*, Foreign Medical Sciences: Section of Psychiatry) in 1974 and the following was the <中国神经精神疾病杂志> (*Zhong Guo Shen Jing Jing Shen Za Zhi,* Chinese Journal of Nervous and Mental Diseases) which was issued in 1975. However, the first and the third of these periodicals focused more on the theme of neurology and neurosurgery. Only the second journal pursued the aim of regularly translating the latest developments in psychiatry from different foreign languages, and only few reports included fragments of the historical achievements related to Germany.

That is to say, the direct communication and translation activities from 1898 to 1978 were insufficient and unsystematic. The sporadic application of direct manner made it difficult for Chinese native scholars to depict a panoramic view of German psychiatry around 1900.

The United States help German psychiatry rooted in China

As the brief history of the period from 1898 to 1949 in the chapter 4.3 illustrated, there is one point should be taken into account. Most of the westerners who helped bring psychiatry to China were either born or educated in America. All of them had a medical degree and had been trained in fields like anatomy, neurology, or neuropathology. Correspondingly, the courses they offered in mainland China related to psychiatry were almost all said to be neuropsychiatric in their orientation (Westbrook, 1953). The use of foreign terms seemed for the time also being to be unavoidable in neuropsychiatry, as in other branches of medicine, especially in connection with its anatomic and physiological aspects (Lyman, 1937). Thus, from its inception, Chinese practitioners approached psychiatry from a biological perspective rather than a psychological one.

Historians convince that psychoanalytic theory was warmly embraced by American psychiatry; however, in China, psychoanalytic theory did not spread in medical field initially. Instead, as part of a new trend in art and literature, psychoanalytic theory came to China via a Japanese channel. Consequently, the influence and popularity of psychoanalytic theory was largely limited to the realm of Chinese literature and literary criticism from the 1920s to the 1930s (Shi, 2008).

The most influential Chinese scholars in psychiatry (*Yu Lin Wei* 魏毓麟 (1899-1967), *Zhi Liang Gui* 桂质良 (1900-1956), *Zong Hua Su* 粟宗华, *Yu Lin Cheng* 程玉麐, *Ying Kui Xu* 许英魁, *Min Yu Ling* 凌敏猷) received western medical training in China in the 1920s and 1930s. Their education was largely rooted in the somatic perspective that was prominent among scholars in Germany during the second half of the nineteenth century (Xu, 1996). After completing their studies in China, they were encouraged by the foreign scholars mentioned above for their further education in the West. Among them, in 1931 and 1938 respectively, *Cheng* and *Xu* went to the German Institute for Psychiatric Research in Munich, which was directed by Emil Kraepelin (1856-1926) until 1926. Kurt Schneider (1887-1967) later became the director of the

clinical section of this institute. Both *Cheng* and *Xu* also later went on to America for further training. In the 1940s, *You Qi Huang* 黄友岐, *Zheng Yi Wu* 伍正谊 (1912-1996), *Zhen Yi Xia* 夏镇夷 (1915-2004), and *Guo Tai Tao* 陶国泰 (1916-) studied at various universities in America in the neurology or neuropathology departments (Chen, 2010). These pioneers studied abroad for neuropathology, neurology or psychiatry, but not for psychoanalysis. When they returned from abroad, they went on to make vital contributions to the development of neuropsychiatric research in mainland China.

In the early years of psychiatric training in China, not only were most of the teachers foreigners, but also the textbooks were written in foreign languages. The most famous textbooks were English translations of German originals. For example, in the 1940s, there was the sixth edition of <Lehrbuch der Psychiatrie> by Emil Kraepelin and translated by Allen Ross Diefendorf (1871-1943) as well as the fourth edition of a textbook on psychiatry written by Eugen Bleuler, that was translated by Abraham Arden Brill (1874-1948) (Young and Chang, 1983). Both these translators worked and were educated in America. Especially, both of them had been students of Adolf Meyer (1866-1950), considered by American psychiatrists to be one of their most illustrious predecessors and a crucial link between Europe and America. Furthermore Dr. Robert P. K. Wang, another student of Meyer took on the difficult task of providing official Chinese translations for neuropsychiatry terms (Lyman, 1937).

American's contribution to modern psychiatry in China cannot be ignored. American missionaries and physicians came to China and helped establish the first mental institutions and research facilities; they also trained China's first native professionals and sent them to study abroad. They thus planted the roots of modern psychiatry in China in a very practical sense. However, in order to fully assess the achievements of the American school of psychiatry in China, the actual content of what was being taught and being relayed across the oceans has to be examined as well.

Combine with the analysis of ‘psychiatry in America before the 1940s’ in the chapter 3.3, it can be concluded that China encountered the European psychiatric heritage by the way of a bridge named ‘America’.

5. Investigation through the lens of international knowledge transfer

Chinese psychiatry in the modern sense came from the West. Given the little direct academic exchanges, the leading role of translation and publication of introduced foreign books and literatures about western modern psychiatry in China should be analyzed carefully. As for what kind of foreign psychiatric ideas had been adopted, it could be revealed by the way of examining the results of selections and translations during the process of learning from the West, compared with the original publications by Chinese native scholars in the same era.

This chapter narrates the process and analyzes the impact of psychiatric knowledge transmission through four different channels (countries)[44], discusses the reasons why the somatic or biologic orientation had been adhered to for a long time, and why different or even mutually exclusive research approaches and results were more or less followed simultaneously. Further, this chapter also explores the grounds why the related philosophical explanations were rejected by Chinese psychiatrists and why the various German psychiatric schools had been kept unfamiliar with until the era of economic reform in China commenced. In-depth comparative research is based on the academic publications which were introduced and produced in China between 1898 and 1978. The adopted and discussed publications in this chapter were all identified as the standard textbooks or guidebooks in different historical periods by Chinese psychiatric community.

[44] Specifically, the so-called indirect way which was mentioned in the chapter 4.4 entailed that German psychiatric thought was transmitted to China through other countries, which acted as internal hubs. The four main hubs were America, Japan, the Soviet Union and Great Britain. These nations played distinctive roles, inflecting content during the act of translation and transmission.

5.1 Importation: influential writings from different channels

The role of pivot languages (see the chapter 1.3 for conceptual definition) in Chinese-European interaction, especially in the field of written translation, has been noted by a certain number of studies. Japanese, Russia and English were recognized as the main pivot languages, through which the information between China and Europe passed (St. André and Peng, 2012). This discovery echoes exactly with the four different channels (countries) discussed here.

As illustrated previously, the power relations were changed around 1860s in China. Translation is often embedded with asymmetrical power relations between the colonizer and the colonized one. All the imported writings in China in this section were related to a process of indirect written translation and selection. What was translated by the several mediators and what was selected finally by the Chinese elites? ‘From the point of view of a cultural anthropologist or a cultural historian, translation reveals with unusual clarity what one culture finds of interest in another, or more exactly what groups from one culture find of interest in another’ (Burke and Hsia, 2007). ‘The choices of items for translation reflect the priorities of the recipient cultures; through ‘refraction’, a more appropriate metaphor might be made’ (Lefevere, 1992).

The United States

In the late nineteenth century, pioneering American missionaries transported Western psychiatric ideas to China. As the pivotal centre of psychiatric thoughts after 1900 (Peters, 1988), America helped to plant the roots of modern psychiatry in China in a very practical sense. Adolf Meyer (1866-1950), with his extraordinary personal influence, introduced and spread Kraepelin’s system in Anglo-American world (Shorter, 1997; Noll, 2011). Then, with the help of Meyer’s teaching and his disciples, Kraepelin’s system and the tradition of German descriptive psychiatry were transmitted to China (Li and Schmiedebach, 2015).

Three books from America cannot be ignored due to their impact to modern psychiatry in China. In the 1940s, the best known were English translations of German books, for example, Kraepelin (Kraepelin, 1902) and Bleuler (Bleuler, 1924) (Young and Chang, 1983) (see the corresponding details in the chapter 4.4). During the later 1970s, the <Comprehensive Textbook of Psychiatry> (Freedman et al., 1967), which was published in 1967 in America and was edited by Alfred M Freedman (1917-2011) and Harold I Kaplan (1928-1998), generated the most attention in China (Xu, 1989).

It is no doubt that the first two books reflected the opinion of German psychiatry. Even though the Swiss-born psychiatrist Bleuler was known for placing a new emphasis on psychiatric symptoms which revised Kraepelin's system (Hoenig, 1983). Bleuler's representative work of schizophrenia in 1911, <Dementia Praecox oder Gruppe der Schizophrenien> (Bleuler, 1911), was not translated into English until the 1950s. The content of the fourth edition of his textbook was still largely based on the descriptive achievements of Kraepelins.

As for the third book, the <Comprehensive Textbook of Psychiatry>, 'it is an encyclopedic coverage of all aspects of psychiatry, neurology, and related areas by 174 American experts' (Ayd, 1967). 'Commitment to any one approach would be unwise at this time' and 'authors committed different theoretical models or schools of thought'. Therefore, 'eclectic orientation' and 'comprehensive scope' were pursed throughout this volume. Psychoanalysis was no longer the highlight in this book although it was ever overwhelming in America. Conversely, to compensate for the weakness of 'pragmatism' in America psychiatry, 'the development of theoretical model' and 'the presentation of adequate clinical description' as well as 'the importance of classification schemes' were stressed (Freedman et al., 1967).

Japan

In Japan, German medicine was introduced and the influence of Traditional Chinese Medicine was excluded under the help of Germany during the Meiji

Restoration (明治維新) (1860-1880). Shuzo Kure (呉秀三) (1865-1932) appreciated the theories of Kraepelin in Heidelberg and opposed the theory of psychoanalysis of Sigmund Freud (1856-1939). When Shuzo returned to Japan, the domination of the Kraepelinians in Japanese psychiatry was assured. He was the founder of psychiatry in Japan, and many of his students later entered into prominent positions of Japanese psychiatry. As a result, 'the Germanization of psychiatry' in Japanese medical institutions was almost complete by the beginning of the twentieth century (Hamanaka and Berrios, 2003; Hashimoto, 2013). A circumstantial evidence is that, 'during the Japanese rule of Korea (1911-1945), the major trend of psychiatry was German descriptive psychiatry adopted by Japan' (Hamanaka and Berrios, 2003).

Since the Meiji Restoration (明治維新) (1860-1880) in Japan, great progress has been made in science, education and culture. Desiring to rescue the crisis of Chinese national, a wave of studying in Japan was set off on the land of China, especially during the period from the Hundred Days Reform Movement (*Wu Xu Bian Fa*, 戊戌変法) in 1898 to the Hsin-hai Revolution (*Xin Hai Ge Ming*, 辛亥革命) in 1911. Studying in Japan was identified in China as the largest overseas migration of students in the early twentieth century. Following the example of Japan was also recognised as the shortcut for learning from the West (Zhao and Xing, 2003).

The frequent cultural exchanges between China and Japan were violently disrupted by the Pacific War (1941-1945) and Japan's invasion of China in the 1930s. Actually, with regard to psychiatry, the direct communication was rare. Translation from Japanese psychiatric books, which were edited largely on the basis of the original German writings, was the main way to import knowledge rather than professional personnel studying there.

Among the medical books translated from Japanese, most of the psychiatric books (only a few in totals) have been written with terminological notes entirely in German. Due to the chaotic management of copyrights in that

period, the original authors of these books cannot be identified from the translated version. However, it is not difficult to infer the impression of Kraepelinians from the content of these books. In 1940, *Fu Bao Ding* 丁福保 (1874-1952) translated and edited the <最新精神病学> (The Latest Psychiatry) into Chinese (Kozo and Sugita, 1940), which was compiled in 1923 by two Japanese psychiatrists, Mitsuzo Shimoda (下田浩三) (1885-1978) and Naoki Sugita (直樹杉田) (1887-1949). In the preface of this book, it was noted that 'in the German medical profession great importance is attributed to somatic reasons…' (Kozo and Sugita, 1923). *Zu Cheng Wang* 王祖承 (1941-), one of the contemporary famous psychiatrists in China, mentioned in his commemorational writing for *Ding* in 2001 (Wang, 2001), 'it is especially surprising that most of the terminologies recorded in the translated book are exactly what we are using today'.

Soviet Union

Germany and Russia had been maintaining close intellectual exchange were historical neighbours for a while in psychiatric history. Russian psychiatry before 1917 had drawn upon the ideas and clinical practice from Europe, in particular from Germany. Many Russian psychiatrists graduated from or studied in Germany. The mentally ill from rich families were often treated in German psychiatric clinics. From 1886 to 1891, Kraepelin worked as a Professor at Dorpat University (now Tartu in Estonia), and his conception of 'dementia praecox' was accepted as a disease entity there. The influence of German psychiatry on the outlook of Russian psychiatrists was extremely strong (Korolenko and Kensin, 2002; Steinberg and Angermeyer, 2001).

During the Russo-Japanese War (1904-1905), Wilhelm Stieda, a student of Kraepelin, worked in a small psychiatric hospital in Harbin which was established by the Red Cross Society. But the hospital just played the role of temporary shelter and transfer station for mentally ill Russian soldiers to Russia, with almost no attached physicians (Hashimoto, 2013). Actually, Russian-Soviet psychiatry brought great influence to China only in 1950s due to the shared political belief of Marxist ideology.

In the 1950s, learning from the Soviet Union was a significant trend, and it even spread to the medical field, particularly in psychiatry. The Chinese translation of a textbook, which was written by Vasilij A. Giljarovskij (1876-1959) in 1954, was published in China in 1957 (Giliarovskii, 1957) and was taught at universities. The emphasis of symptomatology and the organic basis of mental illness were significant in the book, with the Pavlovian view of the aetiology of neuroses and functional psychoses. Actually, the impact of the opinion from the 'continental Europe' reflected by the content of this book on Chinese psychiatry was far deeper than 'the indoctrination of Pavlov's theory' (Xu, 1989).

Vasilij A. Giljarovskij indeed supported the teachings of brain pathology. He read Kraepelin's views on dementia praecox and emphasized the functions of heredity. He adopted the clinical observation method and trusted the value of the degeneration originating from the 'bourgeois western psychiatrists', particular the 'Kraepelianism and Kretschmerianism', the typical successors of 'Morganism-Weismannism'[45]. However, things had been changed after the 1951 Moscow Session, in which the order of Joseph Stalin (1878-1953) to institutionalize the theory of higher nervous activity of Pavlov was accentuated as the final word. Under the political pressure of the development of a 'new Soviet psychiatry', certain influential Soviet psychiatrists, including Vasilij A. Giljarovskij, promised to work within the framework of Pavlov's theory of higher nervous activity, and promised to avoid western influence. Thus, psychiatric thought linked with the genetic factors and eugenics were excluded and prohibited. Actually, Giljarovskij failed to develop psychiatry on the basis of Pavlov's physiological teachings which do inspired scientific work but did not provide ready recipes for psychiatry. He misrepresented Pavlov's teaching by referring to it as 'mechanistic' before 1951 and then he

[45] The saying 'Mendelism-Morganism-Weismannism' came from Trofim Lysenko (1898-1976), who denied the Mendelian genetic theory in an overbearing manner. With the help of political forces from the Soviet Union government, Lysenko defiantly maintained the acquired character. In order to obtain the results in line with the political ideology, the mean of political persecution was employed against academic opponents during the Soviet period.

succumbed to political pressure and pretended that all was well in psychiatry (Windholz, 1999; Korolenko and Kensin, 2002).

Vasilij A. Giljarovskij's textbook was the first psychiatric textbook in People's Republic of China and was a 'must-read' book for professionals. Through this textbook, which also included Pavlov's theory of conditioned reflex as well as Korsakoff's syndrome, 'many rising psychiatrists learnt what hallucination, delusion and other psychotic symptoms were, recognized some particular and external performance from disturbances of emotion and will; learned the specific operations and the clinical efficacy of chlorpromazine, electric shock, insulin shock therapy as well as fever therapy and sleep therapy etc.' (Wang, 2010). Under the protective umbrella of 'pathophysiology of superior nervous system', the achievements of clinical observation and the methods of treatments from Europe were still propagated to China.

Despite referring to some concepts of European psychiatry, the political interference in Soviet psychiatry was obvious in this book and cannot be ignored. In particular, this was applied to the chapter on psychiatric history. Only the history of Russian-Soviet psychiatry was narrated but without any developmental records of Europe, not to mention sorting and exploring the origin and context of modern psychiatry in the West from a broad perspective (Wang, 2006).

Fortunately, the similar political ideology did not lead to the long-term prevalence or wide recognition of Lysenkoism for psychiatry as a discipline in China, although 'advanced experience' from the Soviet Union was always to be followed during that period. Along with the Hundred Flowers Campaign (*Bai Hua Yun Dong*, 百花运动)[46], which was launched in 1956 by the Chinese government and was designed to serve the flourishing of the arts and the promotion of the sciences, the lopsided influence of Lysenkoism and the

[46] The Hundred Flowers Campaign (*Bai Hua Yun Dong*, 百花运动), was a period in 1956 in the People's Republic of China during which the Communist Party of China (CPC) encouraged its citizens to openly express their opinions of the communist regime. Differing views and solutions to national policy were encouraged based on the famous expression by the Chairman *Ze Dong Mao* 毛泽东 (1893-1976).

mechanical application of Pavlov's theories were restricted and weakened from the political and cultural perspectives.

Great Britain

From the mid-nineteenth century to the 1950s, Britain had not made much brilliant contributions to psychiatry (Berrios and Dening, 1991). However, British psychiatrists kept frequent contact with the continental Europe and America. Refugees expelled by the Nazis brought the concepts of Karl Jaspers (1883-1969) and Kurt Schneider (1887-1967) from Germany to England and introduced psychoanalysis to America (de Leon, 2013; de Leon, 2014). At the same time, Adolf Meyer in America also had some influence on England.

Two books came from Britain were respectively popular in China from the 1950s to the 1960s and indirectly strengthened the psychiatric concepts produced in Germany. The first was the fifth edition of <A textbook of Psychiatry>, first edited by David Kennedy Henderson (1884-1965) and Robert Dick Gillespie (1897-1945) in 1927, which was popular in the 1950s in China. 'To Adolf Meyer' was written in the preface of this book, from which it is not difficult to recognize the special relationship that existed between the two authors and Meyer. Actually, Henderson and Gillespie were all Meyer's disciples and were impressed by his 'forceful personality' and saw Meyer's contribution in a 'balanced way' (Gelder, 2003). However, Meyer's academic thinking has been discussed and evaluated as minimal by historians in the past ten years (Peters, 1990; Double, 1990; Lidz, 1966; Shorter, 1997; Noll, 2011).

In this book, Meyer's packaging of Kraepelin's nosology was once again demonstrated. Moreover, positive comments were passed on to Bleuler of his broader and less ominous conception of schizophrenia and of paranoia. From dementia praecox to schizophrenic reaction type and from manic depressive psychosis to affective reaction type (reaction type was the alternative in this book of Meyer's suffix 'ergasia' which referred to 'function or the total behavior

of the individual') (Henderson and Gillespie, 1947), 'the dire prognosis associated with Kraepelin's term is the only justification given by Henderson' for the decision to rename the condition (Noll, 2011). However, due to its fantastical nature and the lack of a truly distinctive and coherent identity or research programme, this amalgamation did not significantly impair the dissemination of Kraepelin's system.

The second book was the first modern British psychiatric textbook <Clinical Psychiatry> edited by Wilhelm (Willy) Mayer-Gross (1889-1961) in 1954, along with Eliot Slater (1904-1983) and Martin Roth (1955-). News of its publication in 1955 was spotted by Chinese psychiatrists through the <Korsakov Journal of Neurology and Psychiatry> (in Russian) in the Soviet Union. The second edition in 1960 of this book was translated and published in 1963 in China (Mayer-Gross et al., 1963) even though the original authors had not informed their consent. The circulation of this book caused quite a sensation in China, through which Chinese audiences first became aware of the general global status of psychiatry and the fact that various schools existed, and realized that the theories of Pavlov were just 'a tip of the iceberg' (Wang, 2006). It was a collection of modern psychiatric theories and therapies with an emphasis on descriptive psychiatric schools and was especially influenced by the concepts of Kraepelin, Bleuler, Karl Jaspers and Kurt Schneider. The criticism of dynamic psychiatry in the book, especially directed against Meyer and Freud, was obvious.

'Much of the psychiatric literature of today owes its existence to the possibility of playing with words and concepts'. 'This (referring to the ideas expressed by Theodore Lidz (1910-2001), who was one of Meyer's disciples) is a perfectly fair expression of a viewpoint which is still prevalent in American psychiatry and has made considerable headway in Britain and Scandinavian countries. Nevertheless it is not valid'… Further, 'the study of a personal history in isolation does not enable the physician to distinguish between true causal relations and false fortuitous ones'. 'It would be best to abandon altogether that process of indoctrination which is called a teaching analysis' (referring to psychoanalysis) (Mayer-Gross et al., 1960; Mayer-Gross et al., 1963).

However, the fact that Mayer-Gross emigrated from Germany to Britain in the 1930s and was one of the outstanding representatives of the Heidelberg School in Germany has been hardly recognized and discussed in China.

Together with the book of Vasilij A. Giljarovskij in 1950s, the strong somatic view and the descriptive methods originating from Germany cast a long-lasting influence upon modern psychiatry in China until the end of the 1970s (Xu, 1989).

5.2 Presentation: milestones writings and achievements in China

<Psychopathological Terminology> in 1937

After the mid-nineteenth century, with the increasing number of hospitals founded by the Christian church and western medical schools, the influence of western medicine gradually expanded in China. The number of western medical books from different channels also grew rapidly. The Scientific Term Review Activities (*Ke Xue Ming Ci Shen Cha Huo Dong*, 科学名词审查活动) (1915-1949) came into being under these circumstances. It aimed at determining the harmonization and standardization of scientific terms for various specialties which belonged to medical science (Zhang, 1996; Wen, 2006). <精神病理学名词> (*Jing Shen Bing Li Xue Ming Ci*, Psychopathological Terminology) (Zhao, 1937) was published by the National Ministry of Education in 1937, representing the result of standard nomenclature in China's psychiatry. This glossary was the first official publication on psychiatry in China and could be recognized as the summarization of the acceptance of the modern imported western psychiatric concepts.

It is a multi-language controlled glossary, including German, English, French, Japanese and Chinese. It is worth noting that all the terms included in the glossary were left in German and nearly 30% of these terms lacked English, French or Japanese names. According to the symptoms and names of diseases, more than 1,100 terms were organized in the following sixteen groups: general terms, disturbances of perception, disturbances of consciousness, disturbances of memory, disturbances of association,

disturbances of affection, disturbances of will & behaviour, disturbances of impulsion, amentia & hallucinosis, dementia & fatuity, oligophrenia, epilepsy, mania & melancholia & depression, hysteria & neurasthenia, psychosis & psychopathy, neurosis.

精神病理學名詞 1

I. 一般名詞

號碼	德名	英名	法名	日譯	決定名
1	Psychiatrie; Irrenheilkunde; Seelenheilkunde	Psychiatria; Psychiatry	Psychiatrie	精神病學	精神病學
2	Psychopathologie; Abnormale Psychologie	Psychopathology; Abnormal psychology	Psychologie pathologique; Psychologie anormale	精神病學, 變態心理學	精神病理學, 變態心理學
3	Medizinische Psychologie	Medical psychology	Psychologie médicale	醫學心理學	醫[學]心理學
4	Dysphrenie; Seelenstoerung; Geistesstoerung; Psychische Stoerung	Dysphrenia; Mental disturbance; Mental disorder; Mental aberration	Dysphrénie	精神障礙, 精神病	精神障礙, 神智障礙
5	Dysphrenia neuralgica	Dysphrenia neuralgica	Dysphrénie névralgique	神經痛性精神異常	神經痛性精神障礙
6	Psychische Anomalie	Mental anomaly	Mentalité anormale	精神異常	精神異常
7	Psychische Schwaeche; Geistesschwaeche	Mental weakness; Weakness of mind	Débilité mentale	精神薄弱, 精神耗弱	精神薄弱

Figure 4 A sample in <精神病理学名词> in 1937 with multi-languages controlled view

Note: In this sample, there are seven terminologies. Each row represents only one academic term. From left to right are German name, English name, French name, Japanese name and Chinese name of the term. The final Chinese name was defined according to the front loanwords.

The frame of the dichotomy, as well as most of the iconic terms associated with Kraepelin and descriptive psychiatry in Germany, such as ‘autointoxication psychosis’, were reflected and recorded. The term ‘atypical psychoses’, was not recorded in this official publication, which denoted a group of illnesses other than schizophrenia or manic-depressive psychosis in French or Japanese terminology. It seems that Chinese psychiatrists held more positive attitude toward Kraepelin’s system. As for Adolf Meyer mentioned above, one of the packagers and reformers (related topics will be discussed in the chapter 5.5) of Kraepelin’s system, the nomenclatures of Meyer, such as ‘ergasiology’ or ‘pathergasias’ or even ‘parergasia’ which were

terms coined by Meyer in the mid-1920s and were intended by him to replace schizophrenia in clinical usage, were not really recognized and recorded in the glossary. The concept of ‘premorbid personality’ emphasized by August Hoch (1868-1951), an America psychiatrist who tried to modify and reinterpret Kraepelin’s system to American academic field, was also excluded. Moreover, the term ‘schizophrenia’ was recorded under the group titled ‘dementia & fatuity’ and since, after all, the glossary was not a nosological system, ‘melancholia’ had not been excluded from manic & depressive disorder. All of these details, of how the terms were excluded and admitted, unconsciously exposed the propensity of Chinese psychiatric practitioners in general understanding of mental illness in China, although no official classification and diagnostic criteria were issued during that era.

The first draft classification of mentally ill in 1958

The first session of the conference of prevention and treatment of mental illness was convened by the government in China. Advocated by the Ministry of Health and organized by the province of *Jiang Su* 江苏 in June 1958 in *Nan Jing* 南京 (Li, 2011), it convened most nationwide elites and experts in the field of psychiatry. The delegation consisted of approximately one hundred people from all parts of the country. Many of the delegates were the leaders of local mental hospitals. At this conference, along with the proposal of a national census for psychiatric diseases in order to investigate the prevalence and the incidence, the first draft classification of the mentally ill was proposed. This classification (the draft) was the seed of independent classification in China in terms of the scheme of modern psychiatry, and was distributed throughout China for trial. Although not being announced in official publications, it has been cited by many Chinese psychiatric textbooks and could represent the collective wisdom of the senior generation of indigenous psychiatrists in China.

As already mentioned above, the tendency of learning from the Soviet Union in China was particularly significant for psychiatry in the historical context of the 1950s. ‘This draft was developed according to the classification in the

textbook of Vasilij A. Giljarovskij (1876-1959) and the principle of the nosology was based on the etiology', recorded in the first note among the total of three notes (just over 100 words) in the draft. So the draft was a modified version of the classification that came from Russian-Soviet psychiatry, which was greatly influenced by the continental European, especially German, psychiatry.

Moreover, due to the fact that early Chinese psychiatrists were also proficient in neurology and the materialist ideology that came from the Soviet Union, they showed an innate tendency to emphasize the somatic factors. According to the analysis of Achim Thom (1935-2010), a contemporary medical historian and philosopher, 'Marxism psychiatry', which tried to combine the theory of dialectical materialism with modern science, was based on two basic premises. The first one was that spiritual phenomenon was linked to the nervous system and the brain. The second one was that individual spiritual phenomenon reflected the reality of the world and their relationships. Briefly, material determinism and social determinism were the fundamental characteristics of this type of psychopathology (Thom, 1968).

Following such explanations, it is not surprising that the idealism represented by Freud, the common counterpart of somatic psychiatry and materialism, was firmly considered to 'hinder the development of psychiatry in the scope of medicine' (Wu, 1953). Therefore, the somatic view was inevitably reflected in the draft. According to the data from the first meeting of prevention and treatment of mental illness held in *Nan Jing* 南京, the number of the psychiatric hospitals reached approximately 70 and the number of beds for the mentally ill totalled approximately 11,000 by 1958. The treatment mode of outpatient and inpatient care had been widely implemented (Xu, 1995).

A total of fourteen categories of disease were proposed in the draft (Tao, 1996). There were further subcategories in ten of the fourteen categories. However, the draft was too general. The obvious drawback was the absence of definitions of the various categories, so the ranges and the boundaries between categories were not clear. Approaches which took the local

conditions into account and paid attention to cultural differences were barely reflected. According to the descriptions of the respective subcategories, the comparison with those of Kraepelin in 1899 and the corresponding relationship between the major categories are as follows (see Table 2):

Table 2 Comparison of classifications and the correspondence relationships between the major categories

The draft of Chinese classification in 1958	The textbook of Kraepelin in 1889
传染性精神病 (infection psychoses)	infection psychoses
中毒性精神病 (intoxication psychosis)	intoxication psychosis
脑外伤性精神病 (brain traumatic psychosis)	organic dementias
脑肿瘤时精神障碍 (brain tumor psychosis)	
脑血管疾患时精神障碍 (cerebra vascular psychosis)	
躯体疾患时精神障碍 (psychosis associated with physical illness)	thyroigenous psychosis
更年期精神病 (menopausal psychosis)	involution psychoses
老年期精神病 (senile psychosis)	
精神分裂症 (schizophrenia)	dementia praecox
躁狂抑郁性精神病 (manic-depressive insanity)	manic-depressive insanity
癫痫(epileptic insanity)	epileptic insanity
心因性精神病 (psychogenic psychosis)	psychogenic neuroses
	exhaustion psychoses
	paranoia
病态人格 (psychopathic personalities)	psychopathic personalities
精神发育不全 (defective mental development)	defective mental development
------	constitutional psychopathic states
	dementia paralytica

Note: The original names in the draft of classification in 1958 were all in Chinese, English names were translated and given by authors.

It is worth noting that the <Diagnostic and Statistical Manual of Mental Disorders 1st Edition, (DSM-I)> issued by the American Psychiatric Association (APA) in 1952, which was deeply influenced by Meyer and psychoanalysis, seemed to make almost no impact on the first draft classification in China although America acted as one of the most important channels and had the most frequent exchanges in this field. For instance, the 'schizotypal personality disorder' has never been accepted officially in China, which was iconic and original term of DSM. Further, the concept of 'neurasthenia' as a disease entity was introduced by the American neurologist, George Miller Beard (1839-1883), who tried to postulate an aetiology between modern life and the 'new' disease, was retained and allocated as one of the subcategories of psychogenic psychosis corresponding with the group of exhaustion psychoses in Kraepelins' nosological categories.

In 1979, referring to the <International Statistical Classification of Diseases and Related Health Problems 8th and 9th Revision, (ICD-8, ICD-9)> issued in 1965 and 1975 respectively, a new draft of classification was developed, but with only minor changes compared to the draft in 1958. First, the eight categories of organic psychosis in the 1958 version were merged into two major categories; second, menopause psychosis was renamed as menopause depression and was reclassified under the affective psychosis category; third, neurosis was extracted from psychogenic psychosis and was recognized as an independent category; fourth, childhood psychiatry was supplemented (Xu and Xia, 1989). Actually, until the third version of Chinese Classification of Mental Disorders, the CCMD-3, published in 2001, some iconic terms, like 'dissocial personality disorder'[47] and 'schizotypal disorder' in ICD-10, had never been accepted.

Influential books by local scholars, 1950s-1960s

Even though custodian care for the mentally ill was introduced as early as 1898, the landmark of the establishment of modern psychiatric hospitals in China where teaching and research as well as clinical practice were

[47] Only its subgroup, the 'antisocial personality disorder', was accepted.

integrated and gradually driven by the external forces was the foundation of the psychiatric teaching hospital of Peking Union Medical College (PUMC) (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) from 1932 to 1933 (Grau, 2014). Before 1949, the independent development of psychiatry was slow. There were almost no psychiatric works with unique insights and broad circulation in China, and most of the publications were translations. *Zhi Liang Gui* 桂质良 (1900-1956), the first female psychiatrist and the first to address the issue of children's mental health in China, published a small booklet in 1932. The first small book of psychiatry in China, with about twenty thousand words, was entitled <现代精神病学> (*Xian Dai Jing Shen Bing Xue,* Modern Psychiatry) (Gui, 1932). Meyer's nomenclature could only be detected in this booklet, and the dichotomy from Kraepelin was adopted as the framework. Because this booklet was published before the appearance of <精神病理学名词> (*Jing Shen Bing Li Xue Ming Ci,* Psychopathological Terminology) mentioned above, so 'the terms were settled by the author herself' (Wang, 2011). From the layout designed by *Gui*, it seemed that the suffix '反应类型' (referred to the 'reaction type') did not trigger major conflicts with the classification from Kraepelin.

From 1949 to 1978, relatively few publications appeared in the psychiatric field compared to other medical specialties. Due to the urgency to control the spread of infectious and parasitic diseases, and in order to improve universal health conditions with limited resources, the status of psychiatry was inevitably marginalized. Several local psychiatric books were identified as influential and contributing to the development of modern psychiatry in China. The first was the <精神病学概论> (*Jing Shen Bing Xue Gai Lun*, An Introduction to Psychiatry) written by *Zong Hua Su* 粟宗华 (1904-1970) in 1951 (Su, 1951), which was also the first groundbreaking work with patient cases from Chinese local clinical practices used as a textbook in China. 'In addition to schizophrenia and manic-depression in traditional textbooks, some others like doubting psychosis and menopause depressive psychosis were also discussed. In the aspect of organic mental disorders, toxic (including infectious) psychosis and brain injury psychosis as well as paralyzed

psychosis were described'. 'Psychotic symptoms and mental status examination, shock therapy and psychosurgery were included' (Chen et al., 1992).

Among these 'advanced technologies', prefrontal lobotomy was first performed by *Su* in 1938 to a refractory psychiatric patient and was ceased before its wide promotion in China due to the negative feedback expressed in a long-term follow-up study for surgery patients from the West in the 1950s. It should be noted that *Su* said he was a faithful disciple of Meyers and strictly followed his teaching. However, the contour of Kraepelin's nosology could be detected from his book, rather than Meyer's terms.

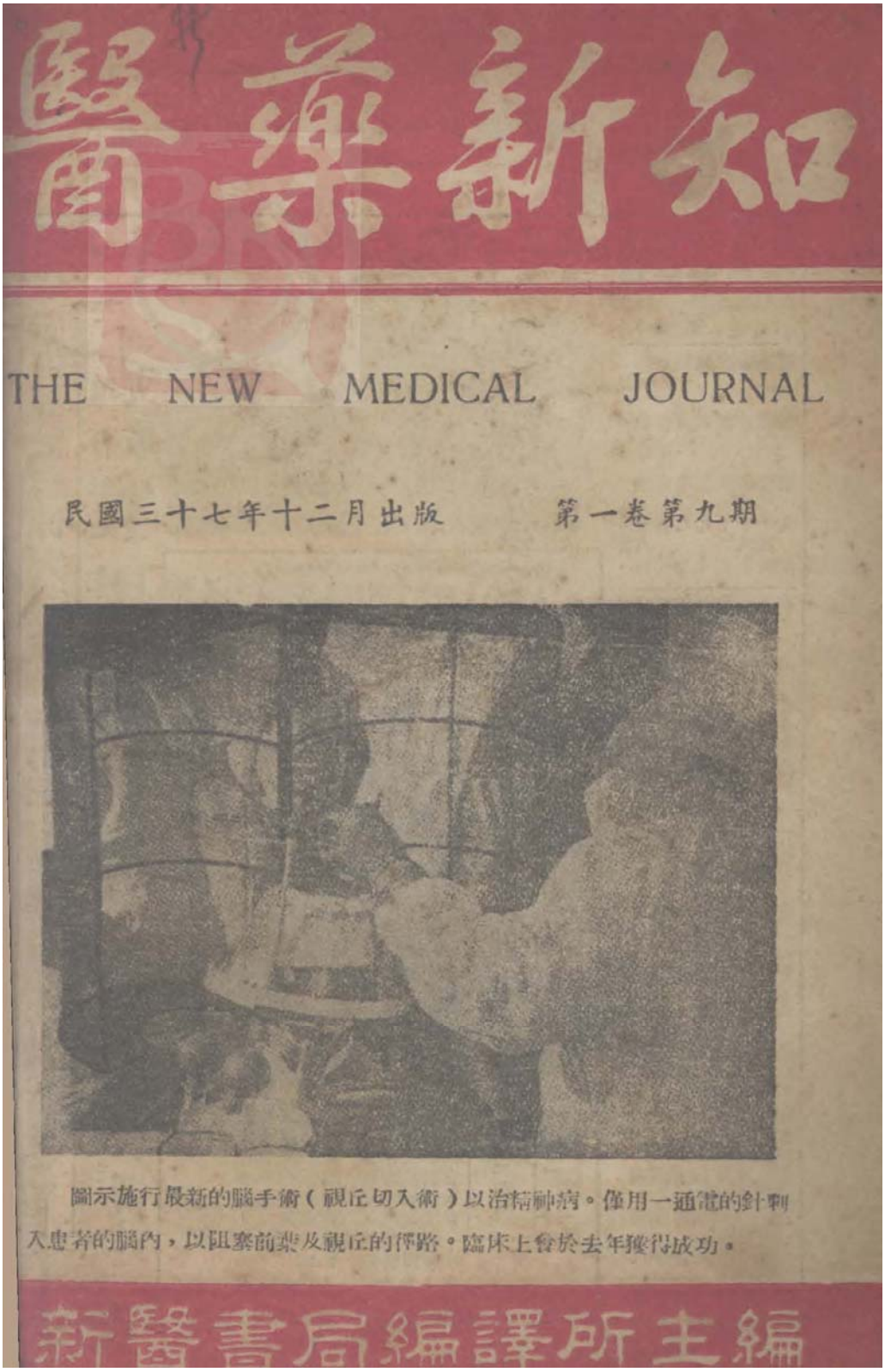

Figure 5 Thalamotomy was introduced on the cover page of a Chinese journal in 1948

Note: Thalamotomy was an invasive procedure associated with Parkinson's disease. From the original illustration in Chinese at the lower end of this picture, thalamotomy was recognized to be used to treat psychosis.

From the 1950s, some published books were widespread and were used as textbooks. For example, the <神经精神病学> (*Shen Jing Jing Shen Bing Xue*, Neuropsychiatry) (Wang and Cao, 1958) edited by *Zhi Yuan Wang* 王芷沅 and *Tian Xiang Cao* 曹天祥 in 1958 for the secondary medical school, the <精神病学> (*Jing Shen Bing Xue*, Psychiatry) (Liu, 1961) by *Chang Yong Liu* 刘昌永 (1914-) in 1961 for medical colleges as well as the <精神病学> (*Jing Shen Bing Xue*, Psychiatry) (Nanjing, 1960) edited by the Neuropsychiatric Disease Hospital in Nan Jing (*Nan Jing Shen Jing Jing Shen Bing Yi Yuan*, 南京神经精神病医院)[48] in 1960.

From the nosological aspect, compared to the draft in 1958, no large difference existed in these books. The descriptive approach and the symptomatology in psychiatry as well as various classic therapy methods from Europe were included and discussed for clinical practice. However, due to political reasons, Pavlov's theory of higher nervous activity became an overwhelming mainstream in medicine and was added into almost all the books of the 1950s for the purpose of explanting the etiology from a materialistic perspective, 'just like its idealist counterpart in America, Freud was mentioned in each chapter in psychiatric books' (Xu, 1989). In addition to the theory of Pavlov, drug prolonged sleep therapy and electric sleep therapy from Russian-Soviet psychiatry were also recorded. As for the 1960s, only Philippe Pinel (1745-1826), who was recorded as the pioneer of advocating humanitarian attitude towards the mentally ill, Kraepelin and Pavlov were emphasized in the syllabus of psychiatry for historical memorabilia.

Especially, the textbook <精神病学> (*Jing Shen Bing Xue*, Psychiatry) (Liu, 1964) which was edited by *Xie He Liu* 刘协和 (1928-) in Si Chuan Medical School (*Si Chuan Yi Xue Yuan*, 四川医学院) in 1964 was considered as the turning point of modern psychiatry being freed from the solo worship to Pavlov. In this book, 'certain pages introduce the biological psychiatry of Europe and

[48] Now the Nan Jing Brain Hospital (*Nan Jing Nao Ke Yi Yuan*, 南京脑科医院).

America as well as German clinical psychiatry and psychopathology' (Xia and Zhang, 1981).

From 1966 to 1976, the major attitude towards western medicine, whether European, American or Soviet Union, was negative due to the Cultural Revolution (1966-1976) (*Wen Hua Da Ge Ming*, 文化大革命). The academic exchange was stopped and the advancement of psychiatry in the West could not be timely accessed.

<China Medical Encyclopaedia: Psychiatry Volume> compiled since 1978

The compiled series of <中华医学百科全书> (*Zhong Hua Yi Xue Bai Ke Quan Shu*, China Medical Encyclopaedia) was a milestone work for 'the development of basic constructions for health care and medical science in China'. The preparatory meeting for the psychiatric volume was held in April 1978. More than thirty editorial departments and almost all well-known experts, professors and key members were involved in the compilation project. After four years, the psychiatry volume was published. It can be considered as the most authoritative reference in Chinese psychiatry during the era. Of course, it can also be recognized as a summary of acceptance and rejection of the psychiatric concepts from the West.

In the volume, psychiatry was definitely defined as a branch of medical science, 'the aim of which was doing the research about the disease causes, pathogenesis, clinical features, disease course and outcomes, prevention and therapy measures' (Lou, 1982). A strong biological orientation was presented, and mental illnesses were distinguished as various disease entities rather than reaction types. The causes of diseases were condensed into three groups: organic factors for organic psychosis, unclear factors for schizophrenia and manic-depression, physical quality and environmental factors for psychopathic personality and neurosis. However, as for the chapter on the history of psychiatry, the most famous and influential psychiatrists in the world were mentioned only briefly. It only included Philippe Pinel (1745-1826), Jean Martin Charcot (1825-1893), Pierre Janet (1859-1947), Sigmund

Freud (1856-1939), Emil Kraepelin (1856-1926), Eugen Bleuler (1857-1939) and Adolf Meyer (1866-1950), regardless of whether their ideas were accepted in China or not.

The rejection of dynamic psychiatry was merciless in this volume. Some comments were as follows: ‘The theory of Freud was never accepted in China, especially for his sexual instinct and libido theory’; ‘The psychoanalysis was almost never used in China’; ‘The terminology of Meyer was made of weird words and lack of practical meaning’; ‘Meyer’s thoughts cast no good guidance to clinical practice and should have been consigned to history’ (Lou, 1982).

For the phenomenological school, to which Schneider and Mayer-Gross etc. belonged, just like the first-class symptoms proposed by Schneider, the contribution of descriptions and summarization of various psychiatric symptoms and psychopathological states in the <Allgemeine Psychopathologie>, which was compiled by Karl Jaspers (1883-1969), received a warm welcome in China.

Even though the relationship between psychiatry and philosophy was recognized, the philosophical explanation for psychosis was rejected: ‘Jaspers was a famous existential philosopher[49] in the world, however, a tendency of too much philosophical explanation could be detected in the last version of <Allgemeine Psychopathologie>’; ‘Critical perspective is necessary for such an entangled state of phenomenological description and philosophical explanation’ (Lou, 1982).

5.3 Acceptation of bio-somatic psychiatry

As mentioned in the chapter 4.2, during the introduction of modern western medicine to China, practical effectiveness was a key factor in the acceptance

[49] Karl Jaspers favored the existential philosophy (die Existenzphilosophie) advocated in Germany, which dealed with general anthropological questions and made him strictly distinguisged from the existentialism (der Existanzialismus) by Jean-Paul Sartre (1905-1980) in France.

of specific disciplines and methods by the Chinese medical community. Modern anatomy, physiology, pathology and even surgery, were thus recognized and accepted shortly before and after the establishment of the Republic of China. The process of 'Suspect→Try→Convince' (Xiong, 2011) that western medicine underwent in China had been completed for the most part before modern psychiatry emerged on the scene. This meant that the way had been paved for modern psychiatry to make inroads in the Chinese medical landscape as other branches of medicine had already been accepted.

Around 1900 in China, there was a lack of breakthroughs in the treatment of psychosis in contrast to the advances taking place in other branches of medicine (Pearson, 1991). But, since the close relationship between mental illnesses and cerebral pathology had already been well established, psychiatry in China put down its roots in neurology. Medical academics in China were convinced that Chinese psychiatry would benefit from its close association with the rest of western medicine. So the welcome of bio-somatic psychiatric concepts in Chinese authoritative written records could be seen as just going with the flow of the process.

In addition, modern psychiatry was also applied as a branch of medicine when it came to China, but it was clinical psychiatry that received the most attention. As early as 1912, J. Allen Hofmann reported on cases of psychosis at the John G. Kerr Refuge using Kraepelin's classification (Hofmann, 1912). Additionally, Georg Schaltenbrand (1897-1979)[50], the only German neurologist on record to come to China during this time, described and analyzed the patients in the Peking Union Medical College (PUMC) (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) according to Kraepelin's classification in an article that he published in 1931 (Schaltenbrand, 1931); Schaltenbrand had come to China in 1928 to work as an associate neurologist at PUMC. Thus, in the first half of the twentieth century, Kraepelin's dichotomy and his

[50] Georg Schaltenbrand (1897-1979) was a German neurologist known for his work on cerebrospinal fluid. In 1928, he provided training at the Peking Union Medical College (PUMC) (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院).

aetiological-prognostic approach were considered reasonably helpful by psychiatrists working in China.

Further, pragmatic thinking from America, which pervaded in the Chinese medical world during the first half of the twentieth century, accelerated the actual use of diagnosis and therapy methods even before the theoretical ideas behind them were digested by scholars in this field systematically. For instance, effective measures such as fever therapy, protracted narcosis, sedative drugs, psychotherapeutic interviews and occupational therapy were used for selected patients in the 1920s and 1930s (Lyman, 1937; Young and Chang, 1983). Furthermore, the so-called Mental Status Examination (MSE) was considered to be a crucial diagnostic step (Lyman, 1937). Prefrontal lobotomy, for example, was firstly performed in 1938 by *Zong Hua Su* 粟宗华 (1904-1970) (Wang, 2005). In the 1950s, electroencephalogram (EEG), electroconvulsive therapy (ECT) or electroshock therapy, biofeedback, lithium, insulin coma therapy, and chlorpromazine were also in general use (Young and Chang, 1983; Liu, 2012). With the disappearance of paralytic dementia (the related policy of banning brothels and offering free treatment in order to control syphilis were discussed in the chapter 4.3), fever therapy had been longer in use after the 1950s. Since emerge of psychiatric drugs, insulin coma therapy was abandoned in most psychiatric hospitals. Due to the political reasons brought by the campaign of Great Leap Forward (*Da Yue Jin*, 大跃进)[51] in 1958 and the following Cultural Revolution (*Wen Hua Da Ge Ming*, 文化大革命) (1966-1976) introduced before, electroconvulsive therapy was interrupted for employment in many hospitals. However, in term of uncontrollable stupor symptoms and severe suicide caused by depression, it was reinstated soon (Xu, 1995).

Finally, the idea that mental illnesses are diseases of the brain, which reflected the entirely somatic-orientated psychiatry of Wilhelm Griesinger (1817-1868) and Carl Wernicke (1848-1905) in Germany, although was not

[51] The campaign aimed to rapidly transform the country from an agrarian economy into a socialist society through rapid industrialization and collectivization.

exactly as same as, but was echoed with the Chinese saying *Xin Zhu Shen Ming* 心主神明 (it was explained in detail in the chapter 2.2). In Traditional Chinese Medicine, each emotion was thought to be related to a specific organ in the body, which meant that any emotional disturbance was thought to originate from a corresponding organ. Illnesses characterized by unusual or unconventional behavior were thus treated similarly to somatic manifestations. Consequently, it is not surprising that, as Lyman pointed out, 'there was no antagonism between neurology and psychiatry for a long period of time in China' (Lyman, 1937). Further, from the methodological point of view, Traditional Chinese Medicine also relied on observations and descriptions for both diagnosis and treatment. Although it has not been discussed in depth whether clinical presentation or prognostic implication should receive more attention, the classification of mental illnesses in Traditional Chinese Medicine was also based on a catalog of symptoms associated with the concept of a disease pattern (as mentioned in the chapter 2.2). A few records of the symptoms and syndromes of mental illnesses were quite similar to the descriptions of them in modern psychiatry (Tseng, 1973).

Thus, observation and description in psychiatry, as represented by Emil Kraepelin, Eugen Bleuler, Kurt Schneider and the other German psychiatrists was not difficult for Chinese scholars to understand and accept because they were still greatly influenced by traditional medicine, despite their owing modern medical training in western style.

5.4 Rejection of psycho-dynamic psychiatry

It should be noted that psychoanalysis, which was largely welcomed by American psychiatrists, had not been generally recognized as one of the main achievements in the psychiatric field in that era because it was far removed from the popular concept of 'science' (科学) (see details in the chapter 4.1). As psychoanalytic theories could not be proved or disproved by experimental data or consistent clinical observation, it was considered a matter of personal opinion, as for whether it should be accepted by practitioners or not. Consequently, it was not seen as an applicable treatment method in China.

Further, the final rejection of dynamic psychiatry was largely due to the political circumstances in that era. From this aspect, psychoanalysis had a very unfortunate fate in China. It had been nipped in the bud at almost every historical stage in various political climaxes, for example, the scientific thoughts against pseudo science before 1949[52] (Tao, 2010), the complete exclusion of psychology and sociology by Russia in the 1950s, the proposition against the bourgeois liberalization between 1966 and 1976, the new form of biologically-based psychiatry which began in America from the 1970s etc. Such social realities were entirely not conductive to the roots and growth of psychoanalysis. Moreover, just like the two side of a scales, the decline of psychoanalysis under these historical contexts paved the way for the development of its biological-orientated counterpart in China (Chang et al., 2005).

So far, just two figures with the academic background of psychoanalysis were recorded before 1978. The first one is Bingham Dai (*Bing Heng Dai*, 戴秉衡) (1899-1996), who was a native Chinese and was deeply influenced by Harry Stack Sullivan (1892-1949) and Karen Horney (1885-1952) while studying for a doctorate in Sociology in Chicago. Dai was the first Chinese psychoanalytically trained psychotherapist. However, he never practiced psychoanalysis and failed to establish his own orientation locally. He left for America after staying in China from 1935 to 1939. The second one is a Jew from Austria, Adolf Josef Storfer (1888-1944), who published a public newspaper in the German language called <*Gelbe Post*> (*Huang Bao*, 黄报) to introduce Freud thought indirectly in China while escaping the anti-Semitic Vienna to *Shang Hai* 上海 during 1939 to 1941 (Blowers, 2004; Varvin and Gerlach, 2011).

Sigmund Freud (1856-1939), the founder of psychoanalysis, summarized and generalized the information and data on patients he gathered and boldly

[52] Taking political events into account, around 1929, even Traditional Chinese Medicine was increasingly labeled as a pseudo-science by the western medical community in China, of which unstructured psychotherapy was already being practiced widely.

extended his result to the whole human behavior. The result was that so many far-fetched and sweeping cases conversely undermined its credibility. Even Freud's students, like Carl Gustav Jung (1875-1961), Alfred Adler (1870-1937), also left Freudian group to found their own theories. The cultural background between China and the West was too different, especially the gap in the theoretical aspects of philosophy, politics, religion, culture and the humanities, which affect people's outlook on life and values obviously. So a different guiding theory combined with the characteristics of Chinese culture for psychological treatment became a prerequisite.

In addition to the rejection of psychoanalysis as a whole, Bleuler's psychiatry, in which Kraepelin and Freud were to be merged, was appreciated in China largely due to its contribution of rich clinical descriptions based on the tradition of German psychiatry. Chinese psychiatrists attributed equal importance to both the physical and emotional symptoms. The belief was that the symptoms were related to each other while not originating from each other. In fact, they were seen as coming from the same origin, the brain dysfunction.

The famous contemporary psychiatrists *De Sen Yang* 杨德森 (1929-) and *Ming Yuan Zhang* 张明沅 took neurasthenia as an instance and delivered their comments on the concepts of Bleuler in 1983: 'How can it be known which set of symptoms is primary and which is secondary?' (Young and Chang, 1983). Such kind of commentary made people who have intelligence of history inevitably reminiscent of Alfred Hoche's 'symptom complex' and the standpoint of Karl Jaspers (1883-1969) who try to introduce phenomenological method in order to reveal the subjective experience. The rejection to distinguish primary and secondary symptoms was also due to the complex of 'science' (*Ke Xue*, 科学) that emerged around 1900 eve (see chapter 4.1). When talking about the changes of the diagnostic concept of schizophrenia, Chinese psychiatrists evaluated as the following: The speculation of psychodynamic 'mechanisms which were applied to collate psychiatric symptoms in Bleuler's psychiatry was indeed a deviation from

Kraepelin's intuitive and the synthesized conceptions tended to be arbitrary and idealistic from the epistemological perspective' (Miao and Yang, 1997).

Although unaccepted in the field of psychiatry, psychoanalysis did cast a great influence on the creative trend of China's contemporary literature as one of the representations of the new cultural phenomenon from the West, especially from the 1920s to the 1930s (Shi, 2008). The influence mainly lied in the following two aspects: one was about its artistic representation, stressing the revelation from personality psychology, especially mental activities associated with sex and abnormal personality; the other one was about its content, underscoring the exploration of free sex and the emancipation of women, which not only gave impetus to the formation and growth of China's contemporary literature, but also acted as a vital sign to differ itself from Chinese ancient literatures (Li, 2010). The situation was similar with that in Germany. Although recommended by Bleuler, Freud never received the Nobel Prize for Medicine. On the contrary, he received the top German literary award, the Goethe Prize (der Goethepreis der Stadt Frankfurt am Main), in 1930 (Wortis, 1992; de Leon, 2013).

5.5 Changes during the indirect transmission

As comparison and analysis above, western psychiatry was introduced to China mainly by Anglo-American way before 1978. However, the process of ideas adoption was not a process of entire replication, but rather a process of active selection and acceptation. It is no doubt that German bio-somatic psychiatry had been appreciated in China until 1978, although the embedded philosophical explanation received little interests. Despite the fact that there was little direct contact between Chinese and German psychiatry from 1898 to 1978, a process of cultural adaptation took place in which the 'German wine' was kept, but the 'glittering Anglo-American label on the bottle' was stripped away.

Along with the real transforms which were brought by western modern psychiatry, there are some topics that should have received their deserved

attention by any rigorous historical research, such as misunderstanding. It seemed that after a long time and through so many different channels some of the names of psychiatrists who contributed to the basic methods and concepts for German psychiatry around 1900 were forgotten or even of unknown. The German psychiatry was recognized in China incomprehensively.

Ideological and institutional changes

Recalling the contents in the chapter 2 and in the chapter 4.3, before 1898, there was little awareness of mental illness among the Chinese public and the mental anguish received just little attention. No attempt had been made in China to create specialized places for confinement of insane; the mentally ill were simply guarded at home. The strong tradition of familial guardianship and the stigma attached to mental illness in Chinese culture prevented the independent development of their own trusteeship system in China (He, 2002). A respectable person was generally considered to be will not suffer from such kind of disease. Mentally ill was often considered as incurable, which resulted in being constrained temporarily and, sometimes, even losing the personal future. There was almost no information or statistical data about the prevalence of mental illness in China (Cheng, 1948b). In view of the situation, Ernst Faber (*Zhi An Hua*, 花之安) (1839-1899), a German missionary, took the United Kingdom for instance, pointed out that there were more that 64,000 mentally ill in 1878 and half of them had been treated successfully, in order to advocate the establishment of asylum for insane in China as soon as possible (Faber, 2002).

As previously described, it can be concluded that the disposition of the mentally ill with criminal tendency in China before 1989 was also far from satisfactory. The institutes of local law enforcement could only get involved in such matters when the family could not hold on to the threshold of security. In fact, it is quite telling that physicians did not play a significant role in the discourse on criminal insanity during the later Qing dynasty (*Wan Qing*, 晚清)

(1840-1911) (Ng, 1990). The concept of ‘forensic psychiatry’ was only in the 1930s first brought to China (Wang and Chang, 2009).

The introduction of European knowledge and practices, including moral therapy, regular schedule of activities for patients, effective treatments, asylums and hospitals in major cities, and modern psychiatric settings for teaching and research in universities, thus sparked major ideological and institutional transforms in Chinese medical field.

Meyer’s Teachings in China

As the representative of the first generation of Chinese practitioners in this field, *Zhi Liang Gui* 桂质良 (1900-1956) and *Zong Hua Su* 粟宗华 (1904-1970), for example, went to Johns Hopkins to work with Adolf Meyer (1866-1950) from 1925 to 1929 and from 1935 to 1938, respectively. In 1947, *Zhen Yi Xia* 夏镇夷 (1915-2004) was trained at Cornell University where Meyer had been professor of psychiatry from 1904 to 1909. He studied with Oskar Diethelm (1897-1993) who was a student of Meyer. These Chinese pioneers all claimed that they were influenced by the American school of thought and by Adolf Meyer in particular. They maintained that psychiatry and neurology were inseparable. Correspondingly, a fundamental knowledge of neuroanatomy and neuropathology, as well as clinical neurological experience, were considered to be very important for a good psychiatrist in China (Liu, 2012).

This was exactly the same perspective that Meyer propagated in America when he began his career. But this was also actually the firm beliefs in Carl Wernicke’s psychiatry and the so-called Breslau School of neurology with him. However, as discussed in the chapter 5.2, Meyer’s later incomplete theory of psychobiology and his nomenclatures were not really recognized by Chinese professionals. The same holds true for Meyer’s use of the ‘reaction type’, which was an idea that was actually first proposed by Karl Bonhoeffer (1899-1957) in the form of acute exogenous reaction types (die akuten exogenen Reaktionstypen) in 1908 (elaborated in the chapter 3.2).

Around 1921, as a student of Adolf Meyer, R. S. Lyman (1891-1959) commented on the link between Meyer and Chinese psychiatry: ‘Some changes may have occurred in Meyer’s teachings when they were carried to China, but that does not break their claim to inheritance from him’; he also noted that ‘there has been increasing expression of appreciation for neuropsychiatric opinion in China’ (Lyman, 1937). Through the pluralistic character of American psychiatry and Adolf Meyer’s approach in particular, Chinese scholars encountered various theoretical perspectives coming from Europe, but filtered through an American lens. Chinese scholars adopted many aspects of Meyer’s method, such as his emphasis on the diversity of patients and the need to collect patients’ personal histories (Young and Chang, 1983; Lyman, 1937; Zhao, 1929), but these were actually ideas that had been proposed by European scholars, including Wilhelm Griesinger (1817-1868), Emil Kraepelin (1856-1926), and others. In fact, Adolf Meyer had adopted the practice of gathering facts of patients from Kraepelin (Wolpert, 2006; Kaplan et al., 1980).

As the Chinese university atmosphere was largely western-oriented and characterized by a pluralistic and instrumental way of thinking during this time (He, 2006), the eclectic and inclusive nature of Meyer’s teaching seemed to be just a matter of common sense for contemporary Chinese psychiatrists. In China, there was also a tradition of taking the practical portions of new kinds of knowledge and adapting them to fit the existing Chinese philosophical framework (Woo, 1991). Consequently, the acceptance of a new medical approach in China was largely dependent on its demonstrated effectiveness (He, 2006). The scientific tradition of German psychiatry and its medical paradigms was thus appreciated by Chinese scholars for its factuality as it rested on definite observations and descriptions as well as applicable guidelines and rules.

Finally, any arguments about the legacy of Adolf Meyer in Chinese psychiatry have to take into account the historical and political environment in which the field developed. Western medicine functioned much like a colonial influence in China. The term ‘German-Japanese medicine’ and its counterpart ‘Anglo-

American medicine' have been used frequently in the scene of Chinese medical history. In China, this interaction with western medical traditions not only resulted in disputes between Traditional Chinese Medicine and western medicine, but also reflected conflicts and tensions between various schools within the western medical community. The latter had more to do with differences in the channels of communication as well as regional particularities within China than it did with the actual scholarship and teachings involved (Jin, 1985).

When we pay close attention to the 'power relations' (see the definition in the chapter 1.3) between the West and the East, between 'German-Japanese medicine' and 'Anglo-American medicine' in that era, 'it is not a simple matter of complete dominance and the maintenance of the academic status quo; it takes personal agency to reshuffle power relationships and to create new grounds where new relations are possible' (St. André and Peng, 2012).

Somatic view: one-side understanding

The somatic view was emphasized in German psychiatry around 1900, but without neglecting the psychological or social factors. For example, Wilhelm Griesinger, who was one of the prominent leaders around 1865 and came from internal medicine, was not a body-soul dualist. Actually, he was in favor of the assumption of 'a clear unity of body and soul'. Griesinger's programme for psychiatric research was most clearly expressed in his critical review of a work by Maximilian Jacobi (1775-1858), in which both approaches 'based on observation' and the 'unity of soul and body' were noted (Hirschmüller and Whitrow, 1999).

Further, he claimed that asylums should not be established in remote rural areas and that community care was the most important method to help patients with chronic mental illnesses. 'City asylums' and 'a need-oriented system' were proposed first by Griesinger in 1868 (Rössler et al., 1994). In China, asylums were established in large cities from the very beginning, which exactly corresponded with the proposal of Griesinger thirty years earlier.

However, Griesinger was famous in China for advocating that mental illnesses are diseases of the brain. His idea of combining physiological and psychological elements in a theory of mental illness that was based on clinical research was not broadly known. Therefore, the somatic view as etiological foundation has never meant that without any consideration the influence from social and psychological perspectives.

Kraepelin-centric: What had been lost?

Emil Kraepelin has been recognized as the central figure in German psychiatry by Chinese scholars, along with his integration of different concepts from his predecessors in both France and Germany (Li, 2005). However, the forerunner of the descriptive approach in Germany, Karl Ludwig Kahlbaum (1828-1899), was rarely mentioned and received little attention in China.

In addition to Kahlbaum, Karl Bonhoeffer, who first described the group of organic psychoses as acute exogenous reaction types (die akuten exogenen Reaktionstypen) seemed to be forgotten on the transmission way. These renaming and reforming processes of this concept by Bleuler in 1916 and by Schneider in 1947 (details were summarized in the chapter 3.2) may have been the cause of their oblivion.

Further, Carl Wernicke (1848-1905), Karl Kleist (1879-1960) and Karl Leonhard (1904-1988) with a neurological focus as the basis (Ungvari, 1993) were not recognized as another distinct German psychiatric school to Kraepelin and Bleuler or Kurt Schneider (1887-1967). Obviously, the evaluation of ‘cerebral mythology’ (die Gehirnmythologie) by Karl Jaspers (1883-1969) helped to eliminate Wernicke’s theory although his concept severance (die Sejunktion) was a pioneer to Bleuler’s splitting theory (Mayer-Gross et al., 1960).

Moreover, Ernst Kretschmer (1888-1964) became famous in China mainly for his studies on the relationship between physical and mental constitutional

types, which was rejected later and considered as metaphysical. The fact that Kretschmer was also the first to propose the term ‘multidimensional’ won less acclaim or remained even unknown, although nowadays its alternative form is familiar to almost all psychiatrists in China through the DSM-III.

The phenomenological approach or empathy associated with Jaspers, attempting to delve into the patient’s own inner experiences and to formulate this experience as precisely as possible, hardly ever aroused lively discussions in China before 1978. Karl Jaspers has been become known widely only as a pure philosopher among Chinese academic circle.

In China, Kraepelin was described not only as the central figure but also as the final unifier, who ended classification chaos in Europe. Around 1900, Kraepelin’s system did generate a high degree of attention in foreign countries, especially in America However, as summarized in the chapter 3.2, around 1900 in Germany, there were various schools which represented different intentions and perspectives, and the opinions of classification far from constituting a consensus. Therefore, many fragments existed vivid in the history of psychiatry had not been given enough attention and even been ignored thoroughly outside of Europe.

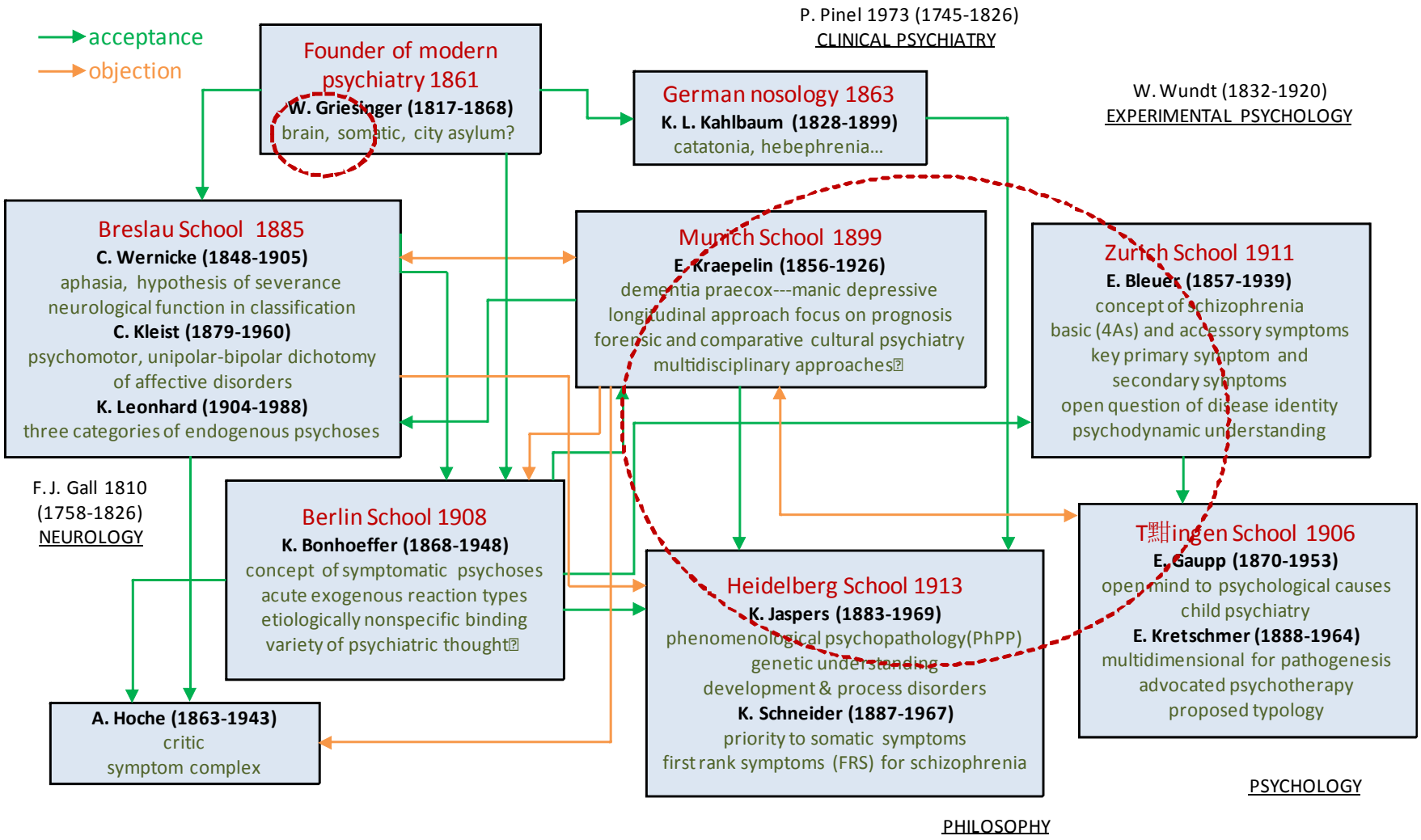

Figure 6 Conception of German psychiatric concepts around 1900 in China (content inside the two circles with dotted line)

Incomplete transmission and the 'packaging'

Although Kraepelin was appreciated in China, his academic thoughts were not comprehensively understood. In the eighth version of his textbook, Kraepelin did accept the term 'schizophrenia' as a clinical term. Dementia praecox was still regarded as a kind of disease, but with further added subtypes. He also began to pay attention to the influence of personality. However, Americans did not continue reading the work of Kraepelin, instead turning to Bleuler, although Bleuler was not popular in Europe in that era. Actually, the English translation of Kraepelin's textbook in 1899 was the last popular version in the English-speaking world. The three subtypes of dementia praecox in the sixth version of Kraepelin's textbook were the final signals to America (Noll, 2011).

Further, the experimental psychology appreciated by Kraepelin had been proved to be a false attachment to psychiatric research on both sides of the Atlantic in the early decades of the twentieth century. Since America was one of the important channels through which China encountered western thoughts during that era, developments in America were a great chance to bring corresponding influence to China. In fact, the eighth version of Kraepelin's textbook had also never been distributed in China, and the experimental psychological approach emphasized by Kraepelin had remained broadly unknown.

As mentioned in the chapter 4.4 and 5.1, Kraepelin's system was conveyed to China through 'conceptualization packaging' by Meyer's 'new' nomenclature. Actually, except for the Henry Psychiatric Clinic of Johns Hopkins Hospital, Meyer's nomenclature about his proposed 'ergasia system' and his original scheme was never used in other places in America (Noll, 2011; Gelder, 2003). An analysis of the data of follow-up studies at the Clinic between 1913 and 1940 was conducted in 1986. It demonstrated that, 'in many cases, where a Meyerian ergasiology diagnosis was given it was accompanied by a more conventional diagnosis.' Further, through four 7-year eras, 'the sizeable difference in rated discharge status (the different percentages of unimproved

to the admitted numbers) between schizophrenic and affective disorders patients obviously supports Kraepelin's prognostic nosology to which Meyer so vigorously objected. It is to Meyer's credit that, as a critic of Kraepelin's pessimism, he remained undismayed by the large percentage of schizophrenics rated unimproved at discharge.' (Stephens et al., 1986). 'Simply changing the names of these groups did nothing to improve the prognosis of the patients. Perhaps it was wise for Meyer and his colleagues to leave these data in a locked closet' (Noll, 2011). Meyer's nomenclature was received and considered to be 'a broader and more elastic concept' in Anglo-American psychiatry for many reasons (Gelder, 2003). However, the principle of Kraepelin's nosology had never been thoroughly changed.

In the Soviet Union, the new packaging form of Kraepelin's thinking could be called 'politicized packaging'. During the early 1950s, when China's relations with the Soviet Union were close, learning from Europe and America was forbidden and the higher nervous activity of Pavlov was considered the basic theory. But the climax of this wave receded till the 1960s, when all the western doctrines received criticism and the subject 'digging in the treasure trove of Tradition Chinese Medicine' returned to the spotlight (Xu, 1989). Anyway, it seemed that Kraepelin's nosology and his prognosis related concepts with Pavlov's theory, which responsible for explaining the etiology in psychiatry books, had been coexisted peaceful in China for almost five years. Schizophrenia and neurasthenia were the two most common mental illnesses in the 1950s in China. Given the background of clarification of the pathological and physiological mechanism for neurosis by the dog model of experimental neurosis, Pavlov's conditioned reflex theory was considered as 'one size fits to all' and was then used to explain the etiologic and pathogenesis of the two main diseases. However, the related clinical and experimental research in China was absent. Some preliminary researches on the nervous types ended up with nothing definited in the 1960s due to the enduring popularity of the Pavlov doctrine (Xu, 1995).

5.6 Standpoint of Chinese psychiatrists

Effects brought by language and geography

The appreciation of Kraepelinians and the choice of somatic or biological orientation in China did not only reflect the preference of the psychiatrists themselves, but also was a result of joint actions of multiply factors.

First, language was one of the important factors. The achievements of German psychiatry were introduced into China largely by the way of indirect compilation, rather than direct translation from German to Chinese. English was the most popular foreign language among Chinese local psychiatrists, followed by Japanese (Xu and Xia, 1989). After the Sino-Japanese War (1894-1895), the attention to Japanese-German translation works was only increased temporarily. In the 1950s, some psychiatrists could also understand the Russian language; however, with the gradual deterioration of bilateral relations, this tendency declined quickly in the 1960s in China. In general, the English translation of German works was the key in China.

Some important works received little attention due to the language barrier. For example, Wernicke's work in 1900 has never been translated into English. The English version of Karl Leonhard's monograph appeared in 1979. Further, as for descriptive psychopathology, two significant representative works in Europe had little impact on English-speaking psychiatry for lack of translation in time. So far, the <Eléments de sémiologie et de clinique mentales>[53] by a French psychiatrist Philippe Chaslin (1857-1923) in 1912 had not its English version. Karl Jasper's <Allgemeine Psychopathologie>, was first accessible for the Chinese audience as a Japanese translation that appeared in 1953 (Utena and Niwa, 1992) and an English version did not appear until 1963 owing in part to 'untranslatable German concepts printed in italics' (Havens, 1967) and 'its' completely different philosophy' for American readers (Peters, 1988). Another reported reason was that Adolf Meyer in particular did nothing to promulgate Jaspers' ideas in America (Beumont, 1992). Although 'the first

[53] The title can probably be translated as <Elements of Mental Semiology and Symptoms>.

version when it came out in 1913 did much to clear the air for the successful development of scientific psychiatry in Germany, France, Holland and Scandinavia between the two wars' (Mayer-Gross et al., 1960). So the preference of specific German psychiatric works by the English-speaking audiences and the interim period for translation seriously influenced the acceptance in China.

Secondly, geographical distance combined with culture and language played a crucial role. Given the long history of Sino-Japanese exchanges, common cultural and scientific fields were unconsciously formed. In the process of the standardization of psychiatric terms which originated in the West, frequent exchanges between Japan and China could be detected.

Neologisms, which were invented by Japanese and were imported into China later on, exerted a tremendous cultural influence. In Japanese and Chinese, many contemporary characters or terms share exactly the same writing style, with only the pronunciations differing from each other. Although criticized by many Chinese scholars[54] as cultural invasion due to the complex of exnophobia after the Sino-Japanese war in 1895, most of the terms with Japanese origins (loanwords from Japan) began to be incorporated into Chinese modern language during the 1920s (St. André and Peng, 2012). For example, the Japanese character 精神分裂症[55] (phonetic in furigana: せいしんぶんれつしょう), the corresponding term of 'schizophrenia' in Japanese, was issued officially in 1933 in Japan. In 1934, the Japanese term 精神分裂症 was accepted by China in the same written style, but with different pronunciation (phonetic in pinyin: *Jing Shen Fen Lie Zheng*). It has to be emphasized that the '*Zheng* 症'[56] in Chinese was seriously ill-defined. Moreover, the 'Morita Therapy' (森田療法) developed by Masatake Morita (森

[54] Some of the famous representatives included *Zhi Dong Zhang* 张之洞 (1837-1909), *Fu Yan* 严复(1854-1921), *Shu Lin* 林纾 (1852-1924).
[55] Because of its hint of fatalism, now it has been renamed as '統合失調症' in Japan since 2002.
[56] As a suffix here, '*Zheng* 症' has the similar meaning with the term of 'disease', but it refers more to clinical signs of disease.

田正馬) (1874-1938) in 1919, although inspired by psychoanalysis, was actually based on Mahayana Buddhism, which was introduced from China together with Confucianism thoughts (Wu et al., 1998). Compared with psychoanalysis, the belief of letting nature take its course and doing what one ought to do, which was the essence in Morita therapy, showed much more sympathy with the thought of China's Taoism and Buddhism. Maybe it was one of the reasons why Morita therapy was easier to accept in China.

Unknown to different schools

Before 1949, Chinese scholars only had fragmented and inconsistent contact with various western psychiatric theories. For example, *Cheng*, one of the main figures mentioned above who studied both in Germany and American in 1930s, pointed out in his editorial in 1925 that 'psychoanalysis represented the European school while Adolf Meyer represented the English-American school' (Cheng, 1948a). It was not until the 1960s, with the publication of a Chinese translation of Wilhelm (Willy) Mayer-Gross's <Clinical Psychiatry>, which had been discussed in the chapter 5.1, that the Chinese audience became aware of the contention status among different schools in the field. Given that the Chinese version was published without the warrant of the original author, it probably would have been quite surprising for Mayer-Gross to hear that his book created quite a sensation in China as it 'brought in a fresh wind' (Wang, 2006).

So far, most of the contemporary Chinese psychiatrists are not thoroughly aware of how many schools existed in German psychiatry around 1900, not to mention the different philosophical thoughts that these schools attached to respectively. The reasons for such a situation are manifold.

Two historical events which occurred around 1900, as illustrated in the chapter 4.1, contribute to it. During the Self-Strengthening Movement (*Yang Wu Yun Dong*, 洋务运动) (1861-1895), in order to protect Chinese tradition, the Ti-Yong principle (*Zhong Ti Xi Yong*, 中体西用) was identified as the basic principle. That is to say, Chinese moral obligations and propagations acted as

the essence, and should not be discarded or casted aside, while the introduced industrial technology and the applicable intellectual achievements were regarded as inferior things and just suitable for utility purposes.

In the deep thought of *Hong Zhang Li* 李鸿章 (1823-1901), who was important active figure in the westernization faction (*Yang Wu Pai*, 洋务派)[57], the belief was still held by him that '*Zhong Guo Wen Wu Zhi Du, Shi Shi Yuan Chu Xi Ren Zhi Shang*, 中国文武制度, 事事远出西人之上', which meant that Chinese civil management and military system are far beyond that of Westerners. *Zhi Dong Zhang* 张之洞 (1837-1909) as another crucial figure from this faction, also wrote in his famous <劝学篇> (*Quan Xue Pian*, The Only Hope of China): '*Zhong Xue Zhi Shen Xin, Xi Xue Ying Shi Shi*, 中学治身心, 西学应世事', which was consistent with the Ti-Yong principle (see chapter 4.1)'. For Chinese side, western weapon left an indelible impression and advanced technology was appreciated. However, this was insufficient to prove the superiority of western culture. So their value was utilitarianism during the process of 'western studies east-bound'. Spiritual values behind science represented by various technologies had not been detected.

In fact, the extend of initial cultural infiltration was the most significant difference between the 'Ti-Yong principle' in China and the 'Japanese spirit and western techniques' (和魂洋才) issued during the Meiji Restoration (明治維新) (c. 1860s-1880s), the exhaustive westernization reform movement in Japan. The ideological and institutional parts from the West did not fall within the scope of primary learning guidelines in China during that era.

Even though western medicine was not the focus of the Self-Strengthening Movement, it is not surprising, under the influence of such a guiding ideology, that the ideological foundation of different psychiatric schools in Germany which were based on the European enlightenment and a long lasting philosophical tradition and had always discussed central issues such as

[57] The counter part was conservative faction (*Bao Shou Pai*, 保守派).

individual, freedom, self-confidence, generation of knowledge etc., had not received a similar degree of attention as its practical counterpart by Chinese psychiatrists around 1900.

Moreover, another historical event was the 'Enlightenment in China', the New Culture Movement (*Xin Wen Hua Yun Dong*, 新文化运动) of the mid 1910s and the 1920s, which was mainly based on the theory of Charles de Secondat, Baron de Montesquieu (1689-1755) in France. Even though *De Xian Sheng* 德先生 (Mr. Science) and *Sai Xian Sheng* 赛先生 (Mr. Democracy) was the slogan, the 'Enlightenment in China' failed to address the essence of individual spiritual interior, which was exactly the core issue of the Enlightenment in Germany, as explained by Immanuel Kant (1724-1804). The four cardinal principles[58] of Confucius (*Kong Zi*, 孔子) (551 BC-479 BC)[59] and Mencius (*Meng Zi*, 孟子) (372 BC-289 BC)[60] has not been surpassed and the later Enlightenment characterized by 'boldly using the power of the human intellect in order to come out of the immature state incurred by themselves' (Kant, 1959) never took root in China.

Although individual dignity, individual rights, individual experiences and individual actions are the most important in German Enlightenment with focus on the liberation of personality, salvation was the most urgent issue during that era in China. Because China and France shared the similar historical mission of overthrowing feudal monarchy and pursuing human equality as well as establishing social contract and legal state in their own unified

[58] The four cardinal principles referred to '*Fei Li Mo Shi, Fei Li Mo Ting, Fei Li Mo Yan, Fei Li Mo Wen*, 非礼莫视, 非礼莫听, 非礼莫言, 非礼莫行'. It means that anything that does not comply with the traditional rules and codes should not be seen, listened, said and practiced.

[59] Confucius (*Kong Zi*, 孔子) (551 BC-479 BC) was a Chinese teacher, editor, politician, and philosopher of the Spring and Autumn period (*Chun Qiu Shi Qi*, 春秋时期) (770 BC-476 BC) of Chinese history. The philosophy of Confucius emphasized personal and governmental morality, correctness of social relationships, justice and sincerity.

[60] Mencius (*Meng Zi*, 孟子) (372 BC-289 BC) was a Chinese philosopher who is the most famous Confucian after Confucius himself.

countries during their movements respectively[61]. From the ideological level, China was influence largely by French ideas, especially the radical thought of Jean-Jacques Rousseau (1712-1778) which was embedded in French Revolution (1789-1799) and emphasized citizenship and people's sovereignty.

In addition, the fact that the pragmatism originating from America was also advocated during the movement should not be underestimated. It was similar to and correspondence with *Shi Yong Li Xing* 实用理性 (pragmatic rationalism)[62], and *Shi Gong Zhi Xue* 事功之学 (utilitarianism)[63] emphasized by *Yong Kang Xue Pai* 永康学派 and *Yong Jia Xue Pai* 永嘉学派[64] which was popular during the Song and Yuan dynasties (*Song Yuan Shi QI*, 宋元时期) (960-1368). Along with such important philosophical thought, especially the widely accepted 'instrumentalism' of John Dewey (1859-1952), the distinguishing of contemporary theories and different classifications for or against those of Kraepelin's seemed not as important as learning the latest technologies and therapies, even in contemporary China. Such a situation could be analogized with the Marxism in China. The Marxism was appreciated in China mainly as a guide in order to solve the real problems which existed in China, instead of being viewed as an academic genre[65].

The prevalence of pragmatism also contributed to the special status of intellectuals in modern China. *Ze Dong Mao* 毛泽东 (1893-1976) had said:

---

[61] In Germany, compared with France, political efforts in enlightenment were relatively insiginificant. The historical mission in German enlightenment was to enhance national consciousness and cultural identity and promote the unity of German nation.

[62] *Shi Yong Li Xing* 实用理性 meat that it was not necessary to argue the philosophical issues which were difficult to reach consensus. The most important was how to deal with the associated problems in the reality properly.

[63] The counterpart was *Shi Xing Shen Mei* 诗性审美 (poetic aesthetics) which was advocated by *Dong Zhe Xue Pai* 东浙学派.

[64] *Yong Kang Xue Pai* 永康学派 and *Yong Jia Xue Pai* 永嘉学派 belonged to the Neo-Confucian school (*Xin Ru Jia Xue Pai*, 新儒家学派).

[65] Practice emphasized in Marxism was much like the behaviour was stressed in Chinese traditional philosophy, which may be one of the reasons why the Marxism was easier to be accepted and to be re-explained in China. It is worth noted that <实践论> (*Shi Jian Lun*, On Practice) by *Ze Dong Mao* 毛泽东 (1893-1976) in 1937 and the slogan 'practice is the sole criterion for testing truth' advocated in 1978, which was first presented in the later years of Stalin by communist party of the Soviet Union, both reflected the tendency of pragmatic interpretation of Marxism in China.

Intellectual is like a hair which more or less attaches to a piece of skin (There were three ‘skins’ in initial period of People’s republic of China: bureaucratic capitalism, comprador capitalism, and proletariat). Chinese intellectual originated from bourgeoisie, because usually only the children from wealthy family could have opportunity to be educated when China was under the feudal rule. After proletariat came to power, Chinese intellectuals were supposed to be united with proletariat (workers, peasants, soldiers) and serve for socialist modernization. The stereotype of rationality was reinforced. From 1951 to 1952, thought reform of Chinese intellectuals (ideological remolding or or ideological reform) was initiated by the Communist Party of China in order to avoid the impact from legacy of feudalism and capitalism. Therefore, such identity of technical experts for physicians, expecially for psychiatrists, might restrict them to make independent critical thinking for medical paradigm to some extent.

Finally, when the aspect of scientific transfer between countries and cultures (Matusiewicz and Smyczek, 2014; Cho et al., 2013) is examined, a cross-over perception of psychiatric knowledge and concepts among European countries can be detected while the transfer to China was a unidirectional process. Among the European countries there was a vivid exchange of psychiatric ideas around 1900. Some countries implemented the concepts of others and vice versa. Europe can be regarded as a common cultural and scientific field. In China on the contrary, no relevant cooperative scientific networks were established between the West and the East (Lin and Tsai, 2014). From the year of 1898 to 1978, the frequency of scientific importations was much higher than the corresponding exportations in China. As analyzed above, China took the second-hand ideas of western psychiatry without taking the chance to express their own experiences in return. This was assumed to be another crucial reason why Chinese psychiatrists were not familiar with the different concepts and schools in the West.

Meanwhile, most of the European psychiatrists did not show any interest in the Chinese situation around 1900 for profound historical reasons. The pioneers of German Enlightenment before Kant, Gottfried Wilhelm Leibniz

(1646-1716), Christian Wolff (1979-1754) and Georg Bernhard Bilfinger (1693-1750) had published works or delivered speeches about China in a positive attitude. In their eyes, the practical spirit from Chinese thought, the long history of Chinese culture, the mild and colourful of Chinese society and the rationality and stability of Chinese politics, were exactly desired in Europe. China had become a reference text for the early modern Europe after the confessional period[66] (Fuchs, 2006).

However, along with the maturing of the Enlightenment thought, since Immanuel Kant, most German philosophers turned to an attitude characterised by the anti-'appreciation of China'. Kant's theory of freedom became not only the criteria for evaluation of social reality in Europe, but also the theoretical blueprint for the construction of the dream of and a future for Europe. Further, from the perspective of the new generation of philosophers, like Georg Wilhelm Friedrich Hegel (1770-1831), and in the light of Kant's theory of freedom, Chinese society was no longer the model for the future of mankind. On the contrary, due to the autocracy and the centralization, the 'mode of China' had already become the eyesore that should be get rid of immediately, just like the social reality in early modern Europe, although the contemporary philosophy in Germany has been receiving sustained concern by Chinese intellectuals.

When talking about emotion and mood associated with psychoses, *Su* lamented in his special manuscript in magazine of <西风> (*Xi Fen*): 'foreigners living in our country, in addition to appreciation of delicious foods and sincere servants, anything else seem to have no value for them' (Su, 1946). Some foreign experts, who decided to settle down in China during that era, usually had their own hidden secrets or difficulties. For instance, the first foreign psychiatric expert in China, Fanny Gisela Halpern (*Fen Han*, 韩芬) (1899-1952), who came from German-Austrian psychiatry, decided to move to China because it was very difficult for a Jewish woman to find a faculty place in the

[66] Referred to the Thirty Years' War, which was a series of wars in Central Europe from 1618 to 1648.

European psychiatric field which was dominated by men in that era (Grau, 2014).

6. Comparison of psychiatric professionalization in Germany and China

As an independent discipline, owning its unique paradigm is prerequisite. The implication of a discipline paradigm refers to two different levels, the research level and the social functional level (Wu, 2002), on both of which the discipline was constructed and was consolidated. On the one hand, the aim of the construction on research level lied in the formation of a specialized knowledgeable or ideological tradition (or an intellectual tradition[67]), in order to promoting mutual recognition among peers, and training successors for academic prosperity. On the other hand, the purpose of the construction on social functional level is to form an academic community, where the teaching and researching units, professional journals and associations, academic conferences etc. were activated. Through investigation from the social functional level, the profile of professionalization process of a discipline could be detected.

6.1 Timeline of professionalization process

Linkage existed inherently between the establishment of knowledgeable tradition and the process of professionalization. The former plays a decisive role, because any institutional arrangement requires a preconceived knowledge-based tradition (Wu, 2002). Assuming that psychoanalysis of Freud was accepted in China, and then the profile of the professionalization process would be quite different.

During the process of 'western studies east-bound' (*Xi Xue Dong Jian*, 西学东渐) (see the chapter 4.1 for details), since western discourses dominated the

[67] Intellectual referred to different meanings in different contexts. As for a disciplinary paradigm, 'knowledge' or 'ideology' is proper. The usage of 'rational' or 'intellectual' seems to be inaccurate.

academic mainstream essentially, the modern medical professionalization in China had to copy western design and structure to some extend inevitably. As a branch of modern medicine, psychiatry was not an exception. As previously discussed, psychiatric ideas during the nineteenth century originated in Europe. Germany as one of the members of the continental Europe not only witnessed its development path, but also played the role of active steersman. However, in China, from the very beginning the process was totally passive. It was taken over by the local professionals only from the mid-twentieth century gradually.

In previous chapters, the reception of the somatic-biological psychiatry or dynamic-psychological psychiatry had been discussed in details. For modern psychiatry, Germany and China appreciated the same academic orientation on the research level, which provides the comparability of the timeline of professionalization on their social functional levels (see Table 3).

Table 3 Timeline of the professionalization of psychiatry

The first……	Germany	Mainland China[68]
Lecture & Training	1811	1910*
Professional journal	1844	1955
Professional organization	1864	1951
Teaching & research unit in University	1865	1928
National official classification	1899*	1958

Notes: The first lecture with its emphasis on clinical guidance on mental diseases was given in 1905 at the College of Medicine at *Hong Kong* 香港. From the South, modern psychiatric teaching was first transferred to *Bei Jing* 北京 in the North of China, and then to the other regions, such as *Si Chuan* 四川, *Shang Hai* 上海, *Nan Jing* 南京 in the East of China (Wong, 1950). As for the national official classification, there was no unified reorganization in Germany, so the most influential Kraepelin's nosology is adopted here for the comparison with China.

As for the process of professionalization in China, most of the key historical events had been already summarized in the chapter 4.3, which will not be narrated again in this section. However, as for the process of psychiatric professionalization in Germany, several related historical events that have not been mentioned in previous chapters are necessary to be introduced in advance. Johann Christian August Heinroth (1773-1843) was a figure who

[68] Although *Tai Wan* 台湾 and *Hong Kong* 香港 shared the same cultural tradition before the twentieth century, the independent development of psychiatry in the two places were earlier and quicker than Mainland China. From 1945 to 1949, temporally being united with Mainland China, *Tai Wan* 台湾 was as a part of the Republic of China. After 1949, it was again separated from Mainland China. From 1842 to 1997, *Hong Kong* 香港 became the colony of the United Kingdom; from 1941 to 1945, *Hong Kong* 香港 was short-term occupied by Japan. Either from the perspective of standardization or from the perspective of scientific rationality, psychiatry in *Hong Kong* 香港 was higher than Mainland China. Psychiatry in *Tai Wan* 台湾 was initiated during the period that was under Japanese rule (1895-1945). It was famous for the Taipei Model (*Tai Bei Mo Shi*, 台北模式) which was launched from 1976 and was created by *Ying Kun Ye* 叶英堃 (1924-). *Zong Yi Lin* 林宗义 (1920-2010) introduced psychoanalysis into *Tai Wan* 台湾. *Zhu Zhang Chen* 陈珠璋 (1922-) made drama group therapy become the main model of psychotherapy in *Tai Wan* 台湾. The Neuropsychiatric Association of the Republic of China (*Zhong Hua Min Guo Shen Jing Jing Shen Yi Xue Hui*, 中华民国神经精神医学会) was established in 1961. In *Hong Kong* 香港, the professional certification system was relatively more perfect. Only when passing the 'FHKAM psychiatry' (*Yuan Shi Zi Ge Kao Shi*, 院士资格考核), could the professional qualification be issued. In April 1968, the Hong Kong Psychiatric Association (*Xiang Gang Jing Shen Ke Yi Xue Hui*, 香港精神科医学会), which was founded in 1976, was identified as one of the members of the World Psychiatric Association (WPA).

was associated with romantic psychiatry in Germany (see chapter 3.1). On the 21st October in 1811, he was appointed as the first professor (associate professor) in psychiatric field in Europe (Steinberg, 2004), and he delivered the first lecture in psychiatry. The first professional journal of psychiatry, <Allgemeine Zeitschrift für Psychiatrie>, in Germany appeared in 1844. The first professional organization for psychiatry in Germany, 'Verein der Deutschen Irrenärzte', was founded in 1864, and was renamed in 1903 as 'Deutscher Verein für Psychiatrie (DVP)'. The first research & teaching (R&T) unit in university was established in 1865 in Berlin by Wilhelm Griesinger (1817-1868). Further, according to the degree of influence, Kraepelin's nosology in 1899 is taken as the representative for the national official classification in Germany in this comparison, although the fact is that the unified classification of psychoses in Germany had not appeared before 1900.

From the Table 3, the first impression will be that the professionalization of psychiatry in Mainland China was lagged behind that in Germany for nearly one century. Further analysis will be delivered with profound explanations as following.

6.2 Development path

First, the process of psychiatric professionalization in Germany from 1811 to 1899 witnessed the conversion from romantic psychiatry to somatic psychiatry. Heinroth's speciality in 1811 was psychotherapy. His position was upgraded in 1819 as fellow professorship for medicine in general, but not for psychiatry in particular. As the first professor in Germany, Heinroth was actually one of the pupils of Jean-Étienne Dominique Esquirol (1772-1840), who was a favourite student of Philippe Pinel (1745-1826) and famous for his thesis in 1805. In Esquirol's thesis, the passions were considered as causes, symptoms and means of curing for insanity. During the later decades, the orientation of psychiatry in Germany turned to somatic. So the first professor of psychiatry could not be seen as the founder of German psychiatry in the classical sense. However, in China, as discussed in the chapter 4.3, The American named Andrew H. Woods (1872-1956) offered the first formal

course in neuropsychiatry in 1910 and was appointed as professor at Peking Union Medical College (PUMC) (*Bei Jing Xie He Yi Xue Yuan*, 北京协和医学院) in 1919. From the very beginning, psychiatry in China was following the neurological path.

Second, like the first lecture or training, the same situation happened to the professional journal in Germany, which marked the transition from asylum psychiatry to university psychiatry. <Allgemeine Zeitschrift für Psychiatrie> was founded by Heinrich Philipp August Damerow (1798-1866), Carl Friedrich Flemming (1799-1880) und Christian Friedrich Wilhelm Roller (1802-1878), who were the representatives of 'die Anstaltspsychiatrie', instead of 'die Universitätspsychiatrie'. 'In fact, as any perusal of the early volumes of the journal, they produced reams of statistical information throughout the 1850s and the 1860s. Whether it was in planning new asylums or in writing up reports of newly built ones, alienists had tried to establish a conceivable aspect of both asylum life and of their patients disorders' (Weber and Engstrom, 1997). In 1867, Griesinger created a flagship journal with neurological orientation, <Archiv für Psychiatrie und Nervenkrankheiten>, which made pale of the old magazine and also marked the establishment of German new psychiatry with scientific character. Compared with that in China, the first journal <中华神经精神杂志> (*Zhong Hua Shen Jing Jing Shen Za Zhi*, Chinese Journal of Neurology and Psychiatry) was foundered by the local psychiatrists in universities. It could be seen for the title obviously that the first psychiatric journal in China is more similar with that by Griesinger, in term of the guiding ideology.

Third, as for the aspect of research & teaching (R&T) unit in university, the similar unit established in China was late for around sixty years to that in Germany. However, in the light of indirect transmission of psychiatric thoughts and marginalized situation of psychiatry in China, the reaction and acceptation of such working style was not slow. Through investigation of the history of Anglo-American psychiatry, the lag for establishing research & teaching (R&T) unit in university to that in Germany is obvious. There was no any psychiatric

institute for R&T in the United Kingdom in 1904. Only in 1907, an asylum in Griesinger's model was planned and it was completed only in 1923. In the United State, the first psychiatric clinic in German style was created by Adolf Meyer (1881-1929) at Johns Hopkins Hospital in 1913, completely taking Kraepelin's psychiatric clinic in Munich for the prototype (Shorter, 1997). Recalling the historical events, the first asylum in China was established in 1898; shortly thereafter, the first R&T unit for psychiatry was established in 1928. It can be seen that the modus of asylums in China was just a kind of inferior form of psychiatric institutions, or the prototype of hospitals with the character of trusteeship. There were no local physicians in asylums, so the status of contention between different groups of alienists in Germany did not existed in China around 1900. Without any kind of financial support from authorities and intellectual constructions, asylum psychiatry in China, if it really existed, could not compete with the corresponding academism from the year of 1898 to 1928. Along with the modus of R&T unit was widely accepted, the old asylums of mentally ill in China were transformed and then renamed as 'mental hospitals' and were cooperated with or merged into medical universities smoothly.

The asylum psychiatry in Germany, in which the infrastructure construction and organizational management became the main missions, was all along lack of academic infiltration, in particular, lack of the academic knowledge transmitted through indirect path, in which the academic thought which has been written down was much easier and longer to be preserved. Some of leaders of the asylums were outstanding scientists at that time and were eager to read the papers of their collegues from the universities; however, this kind of aspiration was usually wishful and unilateral thinking. Further, for the consideration of humanism, it is reasonable that the proposal of establishment of asylums in China was proposed by foreign missionaries. However, it is also reasonable that the humanitarian beginning became in turn a stumbling block later for its consanguinity with western modern psychiatry that achieved its prosperity and development in Chinese universities. Because the donation from private was the main source of economy, asylums for mentally ill were more associated with charitable relief instead of the development of science.

Therefore, it could be concluded that it was the university psychiatry in Germany brought deeper influence to modern psychiatry in China, as which has been discussed in the chapter 5.3, and the influence of asylum psychiatry in Germany on China can almost to be forgotten.

Fourth, in the light of German psychiatry being as one of the leading forces in the history of modern psychiatry in the West, the unprecedented development path must be complex and tortuous. In term of the compared points, it took around ninety years to walk through the road. However, when modern psychiatry was introduced to China, there was no competition between physiological and psychological approaches, which had been the big case in other countries, such as America, where the orientation of psychiatry had been groping among the somatic-psychological-biological jungles. On the contrary, the neuropsychiatric perspective had been stick to throughout its entire development in China. Most were readily available; just selection and imitation without original design or modification at its inception really helped to save a great deal of energies. With foreign missionaries and physicians participating in, the process of professionalization in China was developed more smoothly, and less controversial. For example, psychiatrists in China did not need to do anything to fight for their professional status, because the necessity and certainty of their positions were defined logically along with the introduction of new ideas.

Last but not least, there were no pivotal and heroic figures in China, like Griesinger or Kraepelin in Germany. Foreign missionaries or physicians acted more as preachers rather than scholars for academic concepts due to their limited professional training in psychiatry. For local psychiatrists in China, various ideas in German psychiatry were all brand new and need to be spent time on for careful digestion and serious absorption. After 1949, under the influence of Marxism ideology, scholars during that era usually showed rare unorthodox characters with the distinctive individuality. In an environment with frequent political turmoil, collective wisdom had been stressed repeatedly. Due to several grounds discussed above, under the premise of compliance with the national wide circumstance, original creation or insightful

improvement which committed to bourgeois liberalization were almost impossible before 1978.

6.3 Social & cultural analysis

Around 1900, stark contrast could be detected between the prosperity in German psychiatry and the marginalization of modern psychiatry in China. For example, in 1911, there were 16 clinics in Griesinger style and 1,400 psychiatrists in Germany. Either from the absolute number or from the relative rate in accordance with proportion of the population, the situations in China and in Germany were worlds apart.

Medical education and professional admittance

In Germany around 1900, asylum psychiatrists were eager to be honoured. They kept dry vigour to show the management level in asylums had researched the required medical standard. The honorary title of ‘der Geheimrat (G.R.)’ issued by cabinet helped to promote the patients caring in asylums before 1900. Moreover, as early as the year of 1623, Giulio Aleni (*Ru Lue Ai*, 艾儒略) (1582-1649), a Jesuit missionary from Italy, recorded in his book <职方外纪> (*Zhi Fang Wai Ji*) that medicine was one of four major disciplines in Europe during that era. Medical students in universities were all compulsory to learn medicine and philosophy for six years (He, 2006).

After the nineteenth century, the degree system for physicians began to be emphasized gradually. The tradition of ‘die Doctorarbeit’ and ‘die Habilitation’ in German universities, together with ample funds from the government, ensured psychiatry at universities in the scientific leading position till 1933 (Shorter, 1997).

In China, objective and impartial certification systems for physicians and specialists were missing (mentioned in the chapter 4.3). As for selection of medical professionals, working experience, rather than advanced qualifications always got attention. During the Qing dynasty (*Qing Chao*, 清朝)

(1616-1912), in the so-called *Tai Yi Yuan* 太医院 (the imperial academy of medicine), the medical teachers[69] were chosen from the fallers[70] in the imperial examination (*Ke Ju Kao Shi*, 科举考试) to teach traditional medicine to their children or the eunuchs (*Huan Guan*, 宦官)[71] who worked in the *Yu Yao Fang* 御药房 (the imperial pharmacy) . After the Opium War (*Ya Pian Zhan Zheng*, 鸦片战争) (the first war: 1839-1842, the second war: 1856-1860), due to the shortage of funds, the system was corrupt gradually. Around 1900, becoming apprenticeship and inheritation of family business were the two main ways to receive education of traditional medicine in China. Generally, a famous doctor had a renowned senior doctor as his teacher. It is very common that the thoughts and practices of their teacher were delivered for generations.

In addition, a family, which was known for medicine and had trained famous doctors for several generations, was called *Shi Yi Zhi Jia* 世医之家. There was a Chinese saying since ancient time: '*Yi Bu San Shi, Bu Fu Qi Yao*, 医不三世, 不服其药', which meant that please do not take the herbs which was prescribed by the doctor who came from a family without medical inheritances at least for three generations, from which it could be seen how important was a doctor's family background and life experience, instead of the acquired qualifications, in China. A famous Jesuit named Matteo Ricci (1552-1610) during the late Ming dynasty (*Ming Chao*, 明朝) (1368-1644) had already noticed this deep-rooted cultural phenomenon: 'Even if a doctor practiced medicine with a medical qualification or academic degree[72] in western style,

[69] They usually included *Yu Yi* 御医 and *Li Mu* 吏目.
[70] The winner in the examination will be as candidates for the state bureaucracy.
[71] In ancient China, the eunuch (*Huan Guan*, 宦官) referred to a man, who had been castrated, and serviced for the imperial family as a servant in charge of the family chores, but was not allowed participating in the national government.
[72] The first degree system in the history of China was recorded in the late Qing dynasty (*Wan Qing*, 晚清) (1840-1911) in four levels: *Fu Sheng* 附生, *Gong Sheng* 贡生, *Ju Ren* 举人, *Jin Shi* 进士. Further, *Xue Shi* 学士 and *Bo Shi* 博士 are contemporary Chinese names of the bachelor's and doctoral titles from the West, However, in ancient China, *Xue Shi* 学士 and *Bo Shi* 博士 were only the titles for government officials actually, such as *Nei Ge Xue Shi* 内阁学士 and *Wu Jing Bo Shi* 五经博士, instead of referring to any degree in academic circle or in the scientific sense.

he would not be more authoritative or more respectable than the other indigenous doctors who had not such kind of qualification or degree' (Gallagher and Ricci, 1942).

A cultural background about natural science had never existed in China. Health system was totally institutionalized based on the new medical ideology from different cultures. The establishment of professional admittance and the re-planning of medical education was also not a piece of cake. Further, due to being at different development stages of productivity respectively, the social concerns would be different. 'The growth of health services in psychiatry has been slower than the other medical fields. This might reflect the relatively low priority which was allotted to mental illnesses. After all, there was an enormous burden of infectious and parasitic diseases that had been always attempting to be removed thoroughly in China' (Hillier, 1983). When the basic requirements have not been met, people usually have not extra energy to be used for other things. In other words, when a person has not enough to eat, he will not consider what colour of neckties should be on tonight, not to mention the honour, like 'der Geheimrat (G.R.)' in Germany, which does not work for an immature profession in the political unrest China. Therefore, the 'Cinderella' situation of a new discipline in China before 1978 was not a surprising.

Medical security and health insurance

From the perspective of social security, there are fundamental differences in health welfare between the 'medical welfare model' in Germany and the 'medical relief model' in China around 1900. The specific content and coverage of health care system influenced the behaviour of medical seeking directly. As mentioned above, the poor people were more willing to try free medicaments in western style which could be provided by foreign missionaries. The implementation of health welfare also influenced the development of psychiatry outside the academic circle, which could offer further explanation about the marginalized status of modern psychiatry before 1978 in China, particularly in clinical practice.

Germany was the leader among the developed countries to establish a universal health insurance system. After the unification of Germany in 1871, medical security was first to be considered by the government of German Empire (das Deutsches Kaiserreich) (1871-1918). In 1881, according to the <Goldenen Edikt>, Bismarck Government issued a famous draft about health insurance (das Krankenversicherungsgesetz). In the following year, the draft was approved by the congress. In 1884, the accident insurance act (das Unfallversicherungsgesetz) was issued. In 1889, the invalidity and old people insurance act (das Invaliditäts-und Altersversicherungsgesetz) was approved. The three legislations constituted a unified insurance code (die Reichsversicherungsordnung) in 1911. In the same year, the staff insurance (die Angestelltenversicherung) was promulgated by the government. So far, the coverage of health insurance in Germany was extended to professional groups and rural areas; and the health insurance was executed with the same standard wherever. Therefore, before the completion of capitalist industrialization, a health insurance system to benefit the entire population with uniformed standard had been established in Germany.

In China, the circumstance of medical care was completely not equalized. During the Qing dynasty (*Qing Chao*, 清朝) (1616-1912), people were divided into four stratums according to strict hierarchy: The royal family, the dignitary, the civilian and the special people (artisans, sergeant, prisoner, etc.). Different stratums were correspondence with different types of welfare respectively. The description of medical security for dignitaries and civilians was included in the customary law (*Xi Guan Fa*, 习惯法). The regulation of medical security for dignitaries was relatively sound, with proper regulations in almost all aspects.

However, as for the main body of the populations, the administration of medical security for civilians was largely based on the family unit and self-

relief. *Feng Qin Shi Yao* 奉亲侍药[73] and *Yang Lao Ji Gu* 养老济孤[74] were the core principles, which was called: *Li Jao Yi Yao Xi Guan Fa* 礼教医药习惯法 (the Confucianism medical custom Law). It is worth noting that, the fundamental starting point of *Yang Lao Ji Gu* 养老济孤 was not to prevent and eliminate poverty in the society thoroughly, but only to ensure the residents to have a basic survival and living condition as much as possible. Further, *Feng Qin Shi Yao* 奉亲侍药 usually resulted in the reality of stronger contact between relatives, and the resistance of external intervention into family. Actually, in the <大清律例> (*Da Qing Lü Li*, Qing Code), no specified legal norms were recorded to regulate medical security for civilians. By imperial edict, reverse ban as well as moral education, social habits regulated by the ethical principles were taken into high attitude, like the status of law in the West, in order to maintain the normal individual behaviour associated with medical care.

In 1912, Yat-sen Sun (*Wen Sun*, 孙文) (1866-1925), the leader of the Republic of China (1912-1949), first announced to follow the strategy from western countries and decide to adopt the revenue from the government of Kuomintang (*Guo Min Dang*, 国民党) to protect vulnerable people's lives, which was actually based on the concept of 'social relief'. During the 1930s to the 1940s, *Gong Yi Zhi Du* 公医制度 (the public health system) was carried out[75], the aim of which was to reduce the mortality and control the infectious diseases. Mental illness was not the point. According to the original conceive in *Gong Yi Zhi Du* 公医制度, regardless of suffering from what kind of diseases, citizen could obtain reasonable medical rights, which was fundamentally different with the donation from charitable institutions. However, despite being written into the constitution during that era, *Gong Yi Zhi Du* 公医

[73] *Feng Qin Shi Yao* 奉亲侍药 means that when the elder relatives were sick, it was the younger generation in the family who always had the responsibility to invite doctors to home and seek medical treatment for them.
[74] *Yang Lao Ji Gu* 养老济孤 means that the ruler was obligated to provide basic medical care when widows, orphans and helpless civilians were sick.
[75] The point of view that the government must play a role in health care might be largely due to the influence from Keynesianism or political centralization.

制度 had only a short life, and was disappeared soon due to various economic and social grounds.

From the 1950s to the 1980s, *Nong Cun He Zuo Yi Liao Zhi Du* 农村合作医疗制度 (the rural cooperative medical care system) was the basic form for health care for farmers[76], which was invented by farmers themselves. In case of little financial support from the government, the farmers decided to help each other spontaneous to provide the most basic medical security for members in their communities, through collective and individual investment which was called *Cou Fen Zi* 凑份子[77]. The establishment of real health care system with the focus on social health insurance in whole or in part being undertaken by government only began in the late 1990s in China.

Therefore, since the economic burden and demographic reason, for a long time, various strategies of medical security in China were all only focus on the acute or serious diseases, such as parasitic diseases and infectious diseases. It was reasonable that the diseases or illnesses which were not involved life or death directly, for example the psychoses, were not considered within the scope of basic medical assistance.

On the compulsory medical treatment

The implement of compulsory medical treatment to the mental patients with dangerous tendency is the common strategy to maintain a balance between safeguarding the fundamental rights of citizens and protecting the overall interests of the societies in most countries of the world, and is also a reflection of the humanitarian philosophy embodied in the law. In Germany, from the period of Kraepelin, due to civic responsibility to the nation, compulsory medical treatment for insanity was introduced. Shortly thereafter, some ethical issues and common requisites had been discussed repeatedly, for example, whether the patients have already prosecuted violations or not yet.

[76] China is a large agricultural country, during a long period of time after liberation, farmers accounted for 80% of the total populations in Mainland China.
[77] It means raising money from among several people for a joint gift or a social party.

However, instead of a legal issue, it is an issue much associated with economic development and cultural tradition in modern China. Especially, the reason from economic aspect was more knotty than that from ethical aspect and national aspect. Since the ancient time in China, there were various regulations about commutation for the offenders who were considered to be insanity and could not responsible for their behaviours.

In the article 19 from <中华民国刑法> (*Zhong Hua Min Guo Xing Fa*, Criminal Law of the Republic of China) in 1935, the legitimacy of enforcing monitoring sanctions to insanity who had already implemented illegal behaviours was recorded. But compulsory medical deposit for insanity was not mentioned in this law. Before the 1980s in China, when judiciaries entrusted mental hospitals for forensic identification, doctors were only to be asked in order to make medical diagnosis, but without authorized rights of judging the responsible capacity (Jia, 2001). The provision that, compulsory medical treatment for insanity who had already implemented illegal behaviours was permitted to be enforced by government when necessary, first appeared in the article 18 from <中华人民共和国刑法> (*Zhong Hua Ren Min Gong He Guo Xing Fa*, Criminal Law of the People's Republic of China) in 1997. However, due to the provision was set too general, it was difficult to be carried out in reality. It is no doubt that the imperfection of universal health insurance and the absence of government expenditure acted as the crucial reasons for the compulsory medicine being at a standstill[78].

Fair assessment: degeneration and racial hygiene

The theory of degeneration was introduced into psychiatry by a French psychiatrist named Benedict Morel (1809-1873), who postulated a progressive deterioration from generation to generation because of harmful alterations in

[78] The current situation is that, in the article 30 from <中华人民共和国精神卫生法> (*Zhong Hua Ren Min Gong He Guo Jing Shen Wei Sheng Fa*, Mental Health Law of the People's Republic of China) which was issued in October 2012 and was implemented in May 2013, the voluntary principle for inpatient treatment of people with mental disorders should be complied with was established.

the germ material. In Germany, Kraepelin in particularly emphasized the role played by alcohol and syphilis as a toxic agent to the so-called ‘germ’. He perceived that degeneration was a condition not limited to a small segment of the population, but one which threatened an ever-increasing proportion of the whole nation. Such logic allowed him to diagnose not only individuals but also social groups, or even a whole nation, as suffering from degenerative conditions.

A preventative strategy was advocated in Germany by inaugurating a fight against alcohol and syphilis and the introduction of racial hygiene. In order to assess the current state of affairs, a large-scale investigation of the epidemiology and heredity of degenerative disorders was performed by the German Institute for Psychiatric Research (GIPR). Meanwhile, welfare programs were seen by Kraepelin as highly dubious since they secured the survival and longevity of individuals and populations of ‘low value’ and, therefore, were likely to result in a deterioration of the whole genetic pool.

In that era, many psychiatrists in Germany responded to this call. From this perspective, it was the psychiatrists in Germany who were responsible for the increased prevalence of insanity and for the imminent degeneration of the nation. Ernst Rüdin (1874-1952) urged preventive racial hygiene measures in order to alleviate the burden on the collective populace. The emphasis was on advocating the collective benefit of race or nation over that of the individuals.

Gradually, some effective treatments, such as electroconvulsive therapy, insulin shock therapy, prefrontal lobotomy which was not very common in Germany during the Nazi period, were considered as political and even inhuman control tools by the populace. Under such a historical background, the portrait of German psychiatrists in foreign countries was deeply influenced. The rule of Nazi stifled the academic prosperous state of psychiatry in Germany. Fleeing from the Nazi brought Jaspers and Schneider to the United Kingdom, and the psychoanalysis to the United States. Due to non-academic reasons, many original ideas in that era were plagiarized or ravaged.

For example, some psychiatrists in the United States did not pay attention to the regulation for the references, which cannot be far-fetched to be attributed to the reason of language barrier (mentioned in the chapter 5.6). In 1970, Eli Robins (1921-1994) and Samuel Barry Guze (1923-2000) discussed diagnostic validity in psychiatry, with the focus on schizophrenia. ‘They proposed five steps: a) clinical description, b) laboratory studies, c) delimitation from other disorders, d) follow-up study, and e) family study. This model was used in establishing validity in all psychiatric disorders. Robins and Guze did not quote Kraepelin in their article (Robins and Guze, 1970), but their approach is essentially Kraepelinian, and this is why these authors have been called neo-Kraepelinian’ (Decker, 2007; Klerman, 1978; de Leon, 2014). Further, after the world wide popularity of the ‘menu style’ diagnostic criteria for mental illness represented by the <Diagnostic and Statistical Manual of Mental Disorders 3rd Edition, (DSM-III)> in the United States, the status of psychopathology was reduced to patchwork of symptoms for current diagnostic criteria.

It is no doubt that the Nazi atrocities has been strong opposed and condemned in history of the world. Chinese government and psychiatrists did not follow it. However, there was distinct difference between Nazi members and German psychiatrists, who were scientific researchers essentially, influenced by the complex of nationalism and ethnocentrism, desired of a unified and prosperous nation as a result of a long-term split state of the country. As for the psychiatrists in Germany around 1900, in addition to the shame from political perspective, a fair evaluation should be delivered for their academic contributions to psychiatry as a discipline.

7. Idea: Renaissance from the perspective of cultural diversity

Western medicine and Traditional Chinese Medicine (TCM) are two kinds of medical systems developed in different cultural contexts. When putting aside the socio-economics, productivity, philosophical theories and logic methods, just taking a look at the interaction between the development of different medicines and local customs, the great impact from religion and culture on the formation of their theoretical systems could be perceived.

7.1 Common origin and different routes

Both TCM and western medicine had the originator of simple naturalism and had once become a vassal of mainstream religion and of philosophical thoughts. Despite the disparity between eastern culture and western culture, the two medical systems, with completely different theoretical frameworks, had an innate similarity. They all came from the experience of life.

The ancient traditional form of modern Chinese character *Yi* 医 (medicine) was *Yi* 醫, from which the original meaning could be comprehend. *Yi* 殹, the upper half of *Yi* 醫, referred to the percussion from doctors when diagnosis was made. *You* 酉, the lower half of it, meat the alcohol being used for the propose of treatment. With the wealth of medical knowledge, the title of *Dai Fu* 大夫 (like the title of Dr. in the West) emerged.

The theory of Hippocrates had commonalities with that of Traditional Chinese Medicine. The concepts of blood and of pneuma had the same important positions with that in TCM. Compared with western modern medicine, the way of thinking to believe in mild therapy and the pursuit of healthy balance in the theory of Hippocrates was much consistent with the principle of TCM. In the

primitive society, early medical practices gained experience from human instinctive behaviour, such as seeking food and sustaining life. Medicine during that era was usually called experienced medicine. For example, the methods of cauterization and haemostasis, as well as trauma suturing were adopted in the early activities in both medical systems. By utilizing experience, ancient wise men were able to handle simple infectious trauma.

In Traditional Chinese Medicine, the basic principles of *Wu Xing* 五行 (five phases)[79] and *Yin Yang* 阴阳 (Yin and Yang theory) were established in the classic <黄帝内经> (*Huang Di Nei Jing*, Yellow Emperor) which was compiled from the Warring States period (*Zhan Guo Shi Qi*, 战国时期) (475 BC-221 BC) and was modified for hundreds of years by collective wisdoms. The basic thinking way of *Bian Zheng Shi Zhi* 辨证施治 (diagnosis and treatment based on an overall analysis of the illness and the patient condition) was identified by *Zhong Jing Zhang* 张仲景 (142-210) in the Han dynasty (*Han Chao*, 汉朝) (206 BC-220 AD). Some discoveries and inventions before the seventeenth century in the two medical systems happened to hold the same view.

A kind of herb called *Mu Zei Ma Huang* 木贼麻黄 (ephedra equisetina) was recorded by *Zhong Jing Zhang* 张仲景 for the treatment of asthma, which was earlier than ephedrine first appeared in the western medicine for 1,700 years (Davies and Cule, 2000). In the Ming dynasty (*Ming Chao*, 明朝) (1368-1644), according to contemporary knowledge of anatomy, *Jie Bin Zhang* 张介宾 (1543-1640) inferred that the role played by the organ of heart was like a bellow, which was also in the same era with <De Motu Cordis> by William Harvey (1578-1657) in 1628 (Needham, 1947).

[79] It presumes that all phenomena of the universe and nature can be broken down into five elemental qualities-represented by *Mu* 木 (wood), *Huo* 火 (fire), *Tu* 土 (earth), *Jin* 金 (metal) and *Shui* 水 (water). In this way, lines of correspondence can be drawn.

However, the path of western medicine was turned and guided by the rapid development of natural science around the period of Renaissance[80]. The application of microscopy in medicine helped to move the foundation from the level of Galenic anatomy to cellular physiology and pathology. Together with chemistry, the scientific horizon of bacteriology and cytopathology in medicine was widely opened. Abandoned the classical and philosophical speculations, positivism and experimentalism became the basic scientific methods for medicine. Around 1900, the advantages of natural science-based western medicine were becoming conspicuous increasingly. From the beginning of the twentieth century, modern western medicine embarked on its biological journey.

7.2 Meeting in the East

Since western medicine became popular in China, Traditional Chinese Medicine has long been in the position of being evaluated. Researchers tried to explain it in the framework of biomedical science, in order to clarify its owning scientific characters, which did not help people across the Atlantic to better understand the essence of Traditional Chinese Medicine, but instead weakened the characteristics and advantages of it (Qu, 2005).

Is the 'five phases' the cornerstone for Traditional Chinese Medicine?

With the tendency of cultural convergence and the development of holistic medicine, sinologists and historians were keen to study Traditional Chinese Medicine, research status in late Imperial China were described and evaluated (Ng, 1990; Messner, 2000; Veith, 1955; Lin, 1981; Tseng, 1973; Unschuld, 1985). When Traditional Chinese Medicine was discussed, it was common to begin with the speculated concept of *Wu Xing* 五行 (five phases) in classic <黄帝内经> (*Huang Di Nei Jing*, Yellow Emperor), which actually resulted in discounting or weakening the clinical aspect of TCM.

[80] The Renaissance is a period from the fourteenth to the seventeenth century, considered the bridge between the Middle Ages (or the Medieval period, lasted from the fifth to the fifteenth century) and Modern history. It started as a cultural movement in Italy and later spread to the rest of Europe.

Speculations and clinical practices were entangled in Traditional Chinese Medicine. The theoretical part was based on the concepts[81] characterized by natural philosophy, rather than supernatural philosophy. In clinical practices, great effort was taken to summarize the results from observation and practical experience.

Around 200, some brilliant medical books were found being detached with the original philosophical framework. <伤寒论> (*Shang Han Lun*, Treatise on Febrile Diseases) and <金匮要略> (*Jin Kui Yao Lue*, Synopsis of Golden Chamber) focused on the description of symptoms within various stages of typhoid fever and on the definition of herbs applicable rules (Liao, 1996). Around 600, <诸病源候论> (*Zhu Bing Yuan Hou Lun*, Treatise on the Causes and Manifestations of Diseases) recorded more rigorous descriptions of illness pattern and classification for 1,793 diseases, with observed indicators included symptoms and courses of illness as well as speculated etiology and pathogenesis attached.

Regarding the *Zhong Cao Yao* 中草药 (herb medicine), careful observation and empirical knowledge also acted as a key for recognition and classification. In <珍珠囊> (*Zhen Zhu Nang*), distinguishing the odors and floating performance were the basis for the classification for herbs (Liu, 2001). Without wealthy knowledge of anatomy and microscope, various life phenomena which could be observed from intra, together with the etiology and pathogenesis out of speculation, had been recognized in Traditional Chinese Medicine as crucial elements for the collection of patients' information.

When the knowledge from practice was enriched, the relationship with original medical theory turned to become loose. Traditional Chinese Medicine and western medicine had different theoretical basis, but they had similar speculated part in their initial. At present, except historians, almost no one

[81] It included the concepts of *Yin* 阴 and *Yang* 阳, *Wu Xing* 五行 (five phases), and the idea of correspondence between microcosm and macrocosm.

could remember the tradition of ancient western medicine, which had no significant difference with that of TCM or other ethnic medicine, like Ayurveda from India.

Practically, detaching from the natural philosophic basis did not make <本草纲目> (*Ben Cao Gang Mu*, Compendium of Materia Medica)[82] lose its value, just like refuting the meridian theory[83] would not deny the efficacy of acupuncture (Stux and Hammerschlag, 2001). All in all, the speculative and philosophic parts in Traditional Chinese Medicine provided the inspiration on the initial rational level, rather than the essence on the later intellectual level.

Description of mental illness before Republic of China

According to the basic theory of Traditional Chinese Medicine, when *Yin* 阴 and *Yang* 阳 in body lose their balance, discomforts or illnesses will emerge physically or mentally. It was also the pathological basis of ancient Chinese psychiatry, which was with different pathological focuses during different periods. Rational attitude towards mental illness was identified firstly around the Qin and Han dynasties (*Qin Han Shi Qi*, 秦汉时期) (221 BC-220 AD). The role of brain in mental illness had never been denied (see discussion of *Xin Zhu Shen Ming* 心主神明 in the chapter 2.1). Basing on clinical observations from *Zhong Jing Zhang* 张仲景 (142-210), around 200, more concepts related with mental illness, such as febrile delirium and puerperal psychosis were mentioned and various psychiatric symptoms were described in detail (Zhang, 1955). In <诸病源候论> (*Zhu Bing Yuan Hou Lun*, Treatise on the Causes and Manifestations of Diseases) around 600, more than forty kinds of *Zheng Hou* 证候 of mental illnesses were observed and classified (Chao, 1955).

[82] It is a Chinese materia medica work written by *Shi Zhen Li* 李时珍 (1518-1593) in the Ming dynasty (*Ming Chao*, 明朝) (1368-1644). It listed all the plants, animals, minerals, and other items that were believed to have medicinal value.
[83] It is a belief about a pathway in Traditional Chinese Medicine, through which the life-energy known as *Qi* 气 passes.

As for the first classification proposed by *Ken Tang Wang* 王肯堂 (1549-1613), there were three categories in it (mentioned in the chapter 2.2): the first consisted of *Dian* 癫 (similar to the psychosis without excitation) and *Kuang* 狂 (similar to the psychosis with excitation) as well as *Xian* 痫 (similar to epilepsy); the second was *Fan Zao* 烦躁 (similar to restlessness); the third was made of *Jing* 惊 (similar to panic) and *Ji* 悸 (similar to uneasiness) as well as *Kong* 恐 (similar to phobia).

Especially in the Qing dynasty (*Qing Chao*, 清朝) (1616-1912), some descriptions were similar with that of modern western psychiatry. For example, in <景岳全书> (*Jing Yue Quan Shu*, Jing Yue's Complete Works) by *Jie Bin Zhang* 张介宾 (1563-1640), the description of *Chi Dai* 痴呆 was similar with that of dementia praecox proposed in the nineteenth century (Li, 1989; Zhang and Xia, 1994). The clinical profile of *Hua Dian* 花癫 depicted in <石室秘录> (*Shi Shi Mi Lu*) by *Shi Duo Chen* 陈士铎 (c. 1627-1707) worked in concert with the hebephrenic type (Tseng, 1973; Li, 1989; Chen, 1991). In addition to those mentioned above, many other descriptions about schizophrenia and manic-depression disorder could be found in medical classics.

Table 4 Chart of symptoms by *Ken Tang Wang* and categories in modern psychiatry

symptoms by *Wang*	process	corresponding categories
feel the ghosts attached to the body	cognition	hallucination
tell someone something that had never been seen by himself		delusion
sometimes dull, speak incoherent		splitting of thought
crazy, singing, sad or crying from time to time	affection	elation fragility outburst
have no awareness of dirty and clean	will and behavioral	hypobulia abulomania parabulia
rampant and violent, seem like drunk		psychomotor excitation

Note: Data was collected and summarized according to the paper in Chinese <On the contribution of Ken Tang Wang to the diagnosis and treatment of mental illness> (Huang and Zhong, 2006).

Similarities and differences:

Kraepelin's approach vs. Traditional Chinese Medicine

A German physicist, Werner Heisenberg (1901-1976) pointed out (Heisenberg, 1958): we have to remember that what we observed is not nature itself, but nature exposed to our method of questioning. The similar presentation of research results may reflect the echoing operational way. This comparative study was on selected concepts of medical systems from different cultures. The aim is to find similar cognitive style and distinguish essential differences, which could set a mirror for each other.

On the one hand, similarities between the tradition of descriptive psychiatry represented by Kraepelin and Traditional Chinese Medicine laid in the somatic orientation and the medical model, the intra description of livings, the emphasis of the diagnosis and classification, the description of illness course or pattern.

First, the somatic origin of mental illness and the medical model had never been doubted in both descriptive psychiatry and Traditional Chinese Medicine. Wilhelm Griesinger (1817-1868) believed that mental illnesses were diseases of the brain, which brought German psychiatry into the medical field. Correspondingly, in TCM, somatic language was used to describe and link various emotional disturbances with illnesses. Those resulted in the unusual or unconventional behaviors were treated in the same manner as those with somatic manifestation. Although the central position of brain in mental illness was only defined in <医林改错> (*Yi Lin Gai Cuo*) in 1830 (Li and Yan, 1990), medical model for mental illness in Traditional Chinese Medicine has never been shaken.

Second, either modern psychiatry or TCM could not justify themselves by biological indicators under the microscopes or through test tubes, instead by observation and description being performed on livings. The descriptions of external manifestations of life in TCM could not be quantified exactly. No

specific indicators have been designed to identify the *Zheng Hou* 证候 and *Bian Zheng* 辨证 in Traditional Chinese Medicine (Qiu, 2010). Similarly, scientific methods, experimental psychology, had not been successfully applied in descriptive results in German psychiatry around 1900.

Third, the importance of diagnostic process was emphasized both in descriptive psychiatry and Traditional Chinese Medicine. ‘Classification is diagnosis’ was the iconic banner of Kraepelinian which was different from the school of psychoanalysis, in which diagnosis was not believed to be very important (Decker, 2007). As for psychobiological model advocated by Adolf Meyer (1866-1950), any kind of classifications was rejected, and there were no any specific treatment program for a group of patients with similar condition. From this perspective, Traditional Chinese Medicine clapped with the former and had no common language with the other two.

Last but not least, the courses of diseases and the relationship between stages were also emphasized in both Traditional Chinese Medicine and German descriptive psychiatry. It did not mean that ‘phase’ had never gotten attention in other branches of western biological medicine. But it was true that when defined a single disease, the disease phase was less combined with other indicators, such as symptom or syndrome (Qu, 2005). In such background, the ‘dichotomy’ of dementia praecox and manic-depressive illness was obviously a particular case in modern western medicine.

Although China began communication with the West through the old Silk Road (*Si Chou Zhi Lu*, 丝绸之路)[84] around 100 BC, the exchange was mainly in the areas of merchandise and mechanical technologies. Communication of ideas was very rare (Tseng, 1973). Despite the difference in cultural and educational backgrounds, similar points for description and classification for

[84] The Silk Road (*Si Chou Zhi Lu*, 丝绸之路) is a network of trade and cultural transmission routes that were central to cultural interaction through regions of the Asian continent connecting the West and East by linking traders, merchants, pilgrims, monks, soldiers, nomads, and urban dwellers from China and India to the Mediterranean Sea during various periods of time.

psychiatric illnesses appeared before they encountered with each other, though in different languages and theoretical systems respectively.

On the other hand, along with the similarities, there are striking differences which are more essential and significant. First, the ideology for psychiatry developed in the West and East did not share the same trigger. Kraepelin had the traditional biomedical background but realized a different research direction was needed for psychiatry. While in China, autopsy was not only recognized as disrespect behavior toward the ancestors according to the Confucius thoughts, but also was prohibited by law till later Qing dynasty (*Wan Qing*, 晚清) (1840-1911). In TCM, the human anatomy and physiology concepts from western medicine had not been comprehended systematically, until they were introduced to China by Benjamin Hobson (1816-1873), a missionary from London, who published <全体新论> (*Quan Ti Xin Lun*), the earliest western anatomical writing along with a sensational effect in Chinese, in 1851.

As discussed previously, psychiatry related research in TCM just followed the general principle of general medicine. The different point lies in: inexistence of anatomy and incapable of it can't be looked as the same thing. Anatomy is not the 'omnipotent key' for all medical problems, since it was evidenced being powerless for virus, aging etc. In the area that etiology and pathology remains complex, biomedicine, the hero has little space to use his energy. Kraepelin's genius lies in the innovative thinking: a unique roadmap for psychiatric-like specialties of modern medicine, in which many branches had admired anatomy for a long time.

Second, the basic frame of Traditional Chinese Medicine was worlds apart from the model of biomedicine with features of reduction and decomposition. TCM emphasized monism of body and mind together; it grasped the life mechanism from holistic view, which aimed at keeping balance and harmonious state with environment. In spite of somatic descriptive language, mind and body were considered as same important, which was quite different

from reductionist thinking. The appearance of holistic medicine in the early twentieth century was the integrated result from mutual influences between biological medicine and psychiatry, between western medicine and oriental medicine. It is worth noting that the holistic medicine was a natural extension of western medicine and based on body-mind dualism, which can't accommodate with Traditional Chinese Medicine essentially. However, holistic medicine did provide a helpful pathway for understanding TCM. The meaning of the way lies not in the basic ideas of two kinds of medicines which could match each other or not, but in mutual understanding. That is, if western medicine could be divided into 'traditional biomedicine' and psychiatry, then the characteristics of TCM were relatively closer with the latter, although not 'as same as'.

Third, as for the descriptive and diagnosis parts mentioned previously, the recognition of mental illness by Traditional Chinese Medicine stayed only in the stage of general concept; and those terms were not unified. No systematic research or discussion about the importance of grading of the different elements, such as disease pattern and different stages, symptoms and syndromes etc., in *Zheng Hou* 证候, like that happened between Bleuler and Schneider.

Last but not least, the patient information acquired by *Si Zhen* 四诊 (see the chapter 2.2) could only be converted into effective diagnosis result through the process of *Bian Zheng* 辨证. In the process of *Bian Zheng* 辨证, the observed elements of *Zheng Hou* 证候 may change, some of them even could become useless finally according to specific environment. So subjective experience was important, and the flexibility was retained during the diagnosis process. The non-standardized operating was much different from Kraepelin's wish to develop systematic diagnostic and prognostic techniques which were 'as good as those in the other medical specialties' and to 'separate the essential from the incidental features of the syndromes through such research agenda'. Experiment and statistical methods in analysis of clinical data

emphasized by Kraepelin were conflicted with the dynamic and flexible features of Traditional Chinese Medicine.

China encountered western psychiatry in 1898 along with other classic branches of biological medicine which were accepted formerly. China scholars had not fully recognized the distinctive position of psychiatry in western medicine. They were even more convinced that anatomy and physiology would help to point out a sunny way for mental illness than their western peers. However, an untraditional attempt shared similarities with classic traditional medicine in China had been performed in full swing in central Europe.

Du Xiu Chen 陈独秀 (1879-1942), a Chinese revolutionary socialist, advocated in 1915: the essence of European culture and that of Chinese traditional culture were fundamentally opposed, 'they are two incompatible things, when one exists another one must be killed' (Li and Yan, 1990). The slogan of *Fei Jiu Li Xin* 废旧立新, which referred to abandon old ideas and learn new techniques, shrouded the entire intelligentsia in China. Since then, almost no one developed and modified the heritage of Traditional Chinese Medicine and some antiquated concepts were still used by conservative doctors until the 1980s (Liu, 1981). In such historical context, it is not surprising that the similarities and differences have never been discussed in China.

7.3 Re-evaluation of the psychiatric concepts in Germany

Psychiatry is distinct from the other branches of biomedicine that matured in the early twentieth century. Therefore, unlike other medical branches, for example, nephrology and cardiology, it turned out that no satisfactory solution could be easily attended through relying on the achievements of anatomy and physiology. The aetiology and pathogenesis behind most endogenous psychoses still remain unclear; current popular menu-style diagnosis is mainly based on symptoms or syndromes. Neatly cutting the cake along 'the natural

boundaries existed between natural diseases entities' proposed by Kraepelin has not yet achieved so far.

Biological medicine has benefited a lot from the exact science[85] that originated from France and then once prospered in Germany. The rigorous clinical and experimental research has received enough attention; however, the biological-orientated psychiatry has not solved most of all the questions related to various psychoses. Since the exact science is unequal to the correct and credible knowledge, excessive reliance on the approaches for natural science will bring narrow horizon to contemporary psychiatry.

Finding the suitable approach to the unknown basic mechanism of the mentally ill requires great humility, providing room for knowledge and intelligence coming from different cultures to aid in this endeavour (Shorter, 2008).

In this study, before Chinese elites encountered German psychiatric thoughts, the United States, as a mediator, had screened the German achievements according to its own wish. However, a beginner in this field, the U.S. mediation during that era had not enough ability to identify the value of these concepts that came from Europe. Before the 1890s, the United States could be considered as a creative follower of France and Germany (see analysis in the chapter 3.3). From this perspective, China was unaware of the whole brilliant situation of German psychiatry around 1900 and, while the achievement in Germany has not been tested or evaluated fully by China, the ancient country in the East experienced a longer history and owned a richer culture than most of the other countries in the world.

[85] An exact science is any field of science capable of accurate quantitative expression or precise predictions and rigorous methods of testing hypotheses, especially reproducible experiments involving quantifiable predictions and measurements. Physics and chemistry can be considered as exact sciences in this sense. Systems biology, especially theoretical and mathematical systems biology can also be considered an exact science, as it makes heavy use of mathematical graph theory, logic, statistics and ordinary differential equations.

When a dying civilization was back to life through a revival movement, the existing civilization would be in touch with it. The term ‘Renaissance’ should not be limited to the renaissance of Greek culture which began from Italy. Renaissance is a quite common phenomenon in many societies. In addition to the manifestations in the Late Middle Ages[86] and the early modern Italy, renaissance could occur in other areas. Through such comparative study, German psychiatric speculations and concepts around 1900, the achievement with great value but had not been considered seriously for sophisticated reasons, should be re-evaluated before contemporary psychiatry was pushed forward hastily on the avenue named biomedicine without any fork.

It is imperative to convene the sincere dialogue between East and West. In the Far East, the independently generated experience and wisdom of many nations through several centuries are of great value. Being away from the ‘radar’ of American academic psychiatry, fortunately they have never disappeared or been strangled (Shorter, 2008). ‘East Asian psychiatry residents, who are not particularly attached to the antiquated language[87] currently used, may be particularly equipped for the task of recreating psychiatric language together with knowledge in the twentieth century (de Leon, 2013).

[86] The Late Middle Ages or Late Medieval Period was the period of European history generally comprising the fourteenth and fifteenth centuries (c. 1301-1500). The Late Middle Ages followed the High Middle Ages and preceded the onset of the early modern era (and, in much of Europe, the Renaissance).
[87] The challenge lies in ‘antiquated language’, which was already stressed by Jaspers and Chaslin one hundred years ago, but was neglected later till now, because it makes psychiatry’s scientific methodology very weak.

8. Discussion

8.1 Limitation of this research

This comparative study is about transnational adaption of German psychiatric concepts around 1900 during the academic evolution of modern psychiatry in China. It focuses on the modification of academic concepts through the lens of international knowledge transfer. The subject is German psychiatric concepts and the development of modern psychiatry in China as an academic discipline, instead of the patients group in hospital or in society. However, in the course of medical history, patients own the same important place with professionals and medical advances (Porter, 1985). Therefore, with the absence of detailed information of patients, this work could not to be said enveloping everything; and further, it could not be said an all-inclusive research about psychiatric history in China.

One of the most crucial reasons why the specific situation of patients had not been included in this study is that, based on the subjective judgment of individual scholars and the difference and disunities in reference standard of quality of life, the viewpoints about the situation of patients in China are quite divergent. For example, one thing have to be clarified is that the western picture of the hardship situation like ‘iron cage’ of Chinese mentally ill was distorted to some extent. As a mean of propaganda, these negative reports or proposals plotted by missionaries and other westerners, such as Charles C. Selden, an American doctor who had been in *Guang Zhou* 广州 since 1900, were suspected in order to achieve their goals of striving for the operating expenses from or proving their working performance in China to Christian church and their employers (Grau, 2014). Meanwhile, till now, only few detailed reports in Chinese about the accommodation and rehabilitation of

mentally ill could be accessed, partly because mental illness was largely marginalized, comparing with fatal diseases or infectious diseases in China. Therefore, the situation of mentally ill in China is not the point in this research.

Further, any study is a process of understanding of the objective things by the observers, which is a process with inevitable subjectivity. The absolute consistency between subjectivity and objectivity in one study is impossible to realize. The objectivity of historical study lies in the harmony of the relationship between historical facts and their interpretations, and also in the continuity among the past, the present and the future. Historical research is a process, in which the past events were organized into a well-ordered system in order to get better understanding (Toynbee, 1947).

In this study, many crucial historical figures, major academic concepts and important events are compared and discussed. However, according to the property and adequacy of the available data, the utilization of quantitative methods from medical intelligence science were restricted while the approaches for qualitative analysis were widely employed, for which the accuracy of the findings in this research might be reduced to some extent. Moreover, due to the limitation of defined time interval in this study and the restriction of familiarity with several foreign languages which originate from different language systems respectively, especially the Russian, overarching literature investigation had not been attended, and there are many points which could be enriched later on. It is no doubt that many interesting topics are worthy of further exploration.

Last but not least, according to the viewpoint from hermeneutics, the value and the orientation reflected by a specific culture can only be understood and explained in a system or in an environment which was created by the same culture and its related ethical rules as well as the aesthetic tendency. It is difficult to achieve a comprehensive and thoroughly translation of other languages from different cultures (He, 2004). The Chinese language is easy because of its relative simple grammar, especially being compared with

German language. However, it is also difficult because of its profound and extended implication.

Owing to the different cultural backgrounds, a phenomenon is quite common that a foreigner who is able to translate Chinese language literally cannot understand it essentially. Therefore, some findings in the study might be conflict with the contemporary findings achieved by western sinologists, which will be an open and attractive issue for future Chinese studies.

8.2 A broader cultural perspective for history of psychiatry

A British historian, Arnold Joseph Toynbee (1889-1975), pointed out that the contact during the same era between different civilizations is not the only way for touching (Toynbee, 1947). Civilizations generated in the same era could encounter with each other in different spaces, like German psychiatric concepts were transferred to the United States; also, civilizations in different eras have the chance to chat with each other at an unknown future time point or time interval, German psychiatric concepts around 1900, for instance, were comprehended in Chinese circumstance from 1898 to 1978.

A study with a beginning of a specific case or subject, with emphasis of social and cultural influences, along with the complex process of interaction and construction of medical knowledge between East and West, might be one of the vibrant areas of medical history. In the process of trans-cultural reconstruction of civilization, exceptions, transformations and creations in human actives are unique performances. Therefore, one of the most important duties for historian is to use their intelligence to capture such phenomena instead of just trying best to accumulate numerous historical facts (Toynbee, 1947).

There is an impressive paragraph recorded in Chinese medical history that can well illustrate the indirect communication may lead to distortion of information. During the middle Qing dynasty (*Qing Chao*, 清朝) (1616-1912), *Qing Ren Wang* 王清任 (1768-1831) wrote in his famous book <医林改错> (*Yi*

Lin Gai Cuo), in 1830 (see the chapter 4.2), that the function of thinking and memory was dominated by the specific physical organ named brain, rather than the traditional comprehensive concept of *Xin* 心 (see the chapter of 2.1).This new interpretation was later known as *Nao Sui Shuo* 脑髓说 in China. The year of 1830 was just in the trough period between the two climax points of learning from the West in China; therefore, *Nao Sui Shuo* 脑髓说 was identified by some indigenous scholars and recorded in some books as the original work of *Wang* (王) who achieved it through individual anatomical practice.

In fact, *Nao Sui Shuo* 脑髓说 came from the western medicine, rather than the new discovery by *Wang* (王). In <医林改错> (*Yi Lin Gai Cuo*), *Wang* (王) claimed that '*Nao Sui Shuo* 脑髓说' was inherited from *Ren An Wang* 汪讱庵 (1615-c. 1700). In the book <本草备要> (*Ben Cao Bei Yao*) of *Wang* (汪), he recorded that '*Nao Wei Yuan Shen Zhi Fu*, 脑为元神之府', which meant that the brain was the house of higher nervous activities. It was actually drawn from another person named *Zheng Xi Jin* 金正希 (1598-1644). In the updated edition of <本草备要> (*Ben Cao Bei Yao*) which was born in the Kangxi period (*Kang Xi Nian Jian*, 康熙年间) (1662-1722), *Wang* (汪) narrated that he got the information of '*Ren Zhi Ji Xing, Jie Zai Yu Nao*, 人之记性, 皆在于脑' (the same meaning with *Nao Sui Shuo* 脑髓说) from the dictation of *Jin*.

Jin was recorded a polymath, but he was not familiar with medicine. He began to contact with missionaries in 1624, such as Nicholas Longobardi (*Hua Min Long*, 龙华民) (1559-1654) and Emmanuel Diaz (*Ma Nuo Yang*, 阳玛诺) (1574-1644). Then, *Jin* was baptized and became a devout Catholic under the guide of Francesco Sambiasi (*Fang Ji Bi*, 毕方济) (1582-1649). *Jin* had ever claimed that he admired *Shi Xue* 实学 (real learning), and he was interested in translating and disseminating the knowledge from the West in China.

Just during this period, the first manuscript on anatomy, <泰西人身说概> (*Tai Xi Ren Shen Shuo Gai*, the sketch of western theories on the human body)[88], was born and then published in 1643, after being polished its Chinese language by *Gong Chen Bi* 毕拱辰 (?-1644) in China. <泰西人身说概> (*Tai Xi Ren Shen Shuo Gai*) was first compiled by Johann Schreck (*Yu Han Deng*, 邓玉函) (1576-1630), a German Jesuit and missionary in China. Although, Schreck was considered the first scientist to introduce western books on physiology and anatomy in China, the academic views covered by <泰西人身说概> (*Tai Xi Ren Shen Shuo Gai*) did not cause widespread attention at that time, until another book with the similar contents, <全体新论> (*Quan Ti Xin Lun*) by Benjamin Hobson (1816-1873), published in 1851 (see the chapter 4.2). The missing transmission chain of *Nao Sui Shuo* 脑髓说 could be connected and sorted as the following consequence: from German missionary, Johann Schreck, to *Jin* to *Wang* (汪) to *Wang* (王) (Xiong, 2011).

Further, the historical research projects of psychiatry today had been found majorly being carried out inside single countries respectively. Although international relationship and the knowledge transfer increasingly become the topic of concern, related explorations were mostly proposed among the western world, or just between several countries in Europe, among which close contact in international relations and direct association of modern civilizations have been honoured by the time.

Moreover, as one of medical issues, psychiatry has been depicted too much by sociologists, rather than medical historians. Michel Foucault (1926-1984) has had a very important impact on the understanding of how modern societies and their powerful politics concerned the population, including the mentally ill. The relationship between knowledge and power did exist; however, over interpretation of medical phenomenon from the perspective of

[88] The handwritten edition in two volumes was recorded being based on the teaching of Gaspard Bauhin (1560-1624), professor at the University of Basel and expert in many fields including anatomy, internal medicine and Greek classic.

sociology is inappropriate. The inherent medical components should be supplemented and restored.

After all, in addition to the reality of entangling with culture and politics, as a branch of medicine, psychiatry did also exist. It needs to be evaluated by persons who had the background of medical education, and meanwhile came from different cultures. Medical history, of course, should be connected with the social history; however, the most important is to always keep a clear mind to distinguish which one will play the leading role in each specific historical project.

Through this comparative study, the role of some figures and countries, such as Adolf Meyer (1866-1950) and the United States before the 1940s, has been examined more carefully, with China as the point of reference. A strong circumstantial evidence will help to better understand how German psychiatry was evolved in the process of trans-cultural knowledge construction. Further, through this comparative study, it could be deduced that abandoning of empirical medicine is too hasty only in term of modern science; for instance, some valuable thoughts have been found coincide between Kraepelin and Traditional Chinese Medicine.

Moreover, detailed analysis of specific contents in advance, for example, the investigation of different German psychiatric schools in this study, was usually neglected in most of historical studies which were proposed in China, although of which the purpose to interpret modern western psychiatry was clear. Actually, ‘the West’ refers to different countries with their own distinct features in each era. For example, the thought of Enlightenment during the seventeenth to eighteenth centuries, the liberalism during the mid-nineteenth century and the nationalism emerging in the late nineteenth century casted different impacts on the thinking way of psychiatrists in different European countries. The differences in ideology and culture which were on behalf of the United Kingdom, Germany and France could not be ignored or even confused; and the term ‘the West’ should not become the only synonym for all the

different countries which are located in the western hemisphere geographically.

Therefore, when talking about the impact of western psychiatry on China, the first step is preferable to investigate the particularity of societies and cultures in different countries, and then depict the changing course of various academic views and philosophical thoughts. The second step is better to consider the importation process of western psychiatric thoughts. In order to break with the inherent mode of thinking, the issue of ‘modern psychiatry in China’ should be best reviewed from the perspective of world history.

9. Summary

This study was designed with an original intention on the comparison between German psychiatry and the achievements of mental illness in Traditional Chinese Medicine around 1900, specifically, like table 1 showed in chapter 2, an itemized comparison from several aspects, like research paradigm, diseases classification, as well as portrait of patients etc. However, the research attention was drawn on by a compelling historical event that modern psychiatry was first introduced to mainland China around 1900 by western missionaries.

Actually, through the analysis of the role played by the key individuals and related events prior to 1949, the field in China had developed gradually as a result of contact with western psychiatry and especially its American practitioners. Along with gradual in-depth investigation, a hypothesis that modern psychiatry was introduced to China through a process of cultural adaptation, like ‘German wine in an American bottle’ (Li and Schmiedebach, 2015), in which some other countries, served as bridge for German thoughts was coming into being. This hypothesis suggested that the investigation of Germany-China contact can go well beyond the comparison model of ‘difference and similarity’.

Given the one-sided understanding or misunderstanding of German psychiatric thoughts around 1900, it was imperative to make a refined summary in order to present the panoramic view at a glance in advance, like that has been narrated in the chapter 3. Similarly, what happened during the ‘shifting of pivotal center of modern psychiatry’ from Germany to the United State became the most worth tasting appetizer that should be chewed carefully before the following main course.

It is said as an idiom in Chinese: *Nan Ju Bei Zhi* 南橘北枳, which meant when the citrus reticulate, a kind of southern fruits, was transplanted to the North China, it would grow like something else. The historical background and the oriental civilization in China around 1900 was just like the sunlight, the air and the water in a different place for the cultivation of western original thoughts. Along with the introduction of the belief of Christianity from the West, the emergency of the concept of 'science' (*Ke Xue*, 科学) and the admission of western medical paradigm help to set the keynote before different psychiatric thoughts was ready to be interviewed in front of Chinese scholars who were eager to strengthen their countries through learning the advanced technologies.

Also, in term of the closed political environment and the restricted scientific exchange before 1978, as the recipient of western thoughts, 'jet lag' was assumed to be existed during the process of knowledge transfer from Germany to China. Therefore, in the chapter 4, keeping in mind of the international intelligence exchange in the field of psychiatry among various western countries, especially between America and Germany, it compared and analyzed the major strains of academic thoughts around 1900 that had been spread in China before 1978. In doing so, this study suggested how Chinese psychiatry developed to an academic level through a process of cultural adaptation in the first half of the twentieth century. At the same time, in addition to the United States, three other missing links between modern psychiatry in Germany and China were revealed. The intellectual achievements of German psychiatry were filtered and molded in the Soviet Union, the Great Britain and Japan, before they arrived in China with new makeup.

Since German psychiatric thoughts around 1900 were transmitted into China through indirect ways, changes were inevitable. Therefore, in the chapter 5, this study examined references related to the emergence of psychiatry in China and the major translations and publications in the field that appeared in

China before 1978. In order to reveal the historical facts, the connotation of related academic advocates and terms were compared and evaluated in-depth through the lens of international transfer of psychiatric knowledge. And then, the reasons why the somatic-biological orientation was adhered and why the related philosophical inspirations and explanations were omitted or excluded were expounded. Further, together with the consideration of cultures, politics and the other factors, the diverse roles played by the four main hubs: America, Great Britain, the Soviet Union and Japan, in the process of indirect transmission of German psychiatric concepts around 1900 to China were discussed respectively.

In the chapter 6, the comparison of timelines of the professionalized process of modern psychiatry in Germany and China confirmed the objective existence of ‘jet lag’ (time difference) mentioned in the chapter 4.4. In addition, the huge gap resulted from different social regulations and cultural traditions, like medical educational and professional admittance, medical security and health insurance etc., contributed the incomparable of developing level of modern psychiatry in the two countries. As for the sensitive topic of degeneration and its relationship with racial hygiene, an attitude of impartiality is required, at least when the pure psychiatric thoughts are to be evaluated.

In the chapter 7, the similarities and differences between German descriptive psychiatry represented by Emil Kraepelin (1856-1926) and related concepts came from Traditional Chinese Medicine (TCM) were discussed. Regarding the influence of modern psychiatry on holistic medicine and the inheritance of empirical medicine, among various branches of western medicine, the imported modern psychiatry was the closest one to Traditional Chinese Medicine. Such comparability may facilitate ethnic medical systems, such as Traditional Chinese Medicine, to be better understood in alien cultures. The similar discoveries from the renascent empirical observation in modern western psychiatry with that in Traditional Chinese Medicine may have positive effects for appealing of profound retrospection of the solo biological-oriented medicine. From the perspective of disciplinary construction, exploration of new biotechnologies may not be more urgent than to revive the

systematic consideration proposed by Karl Jaspers (1883-1969) or to develop a new path based on the tentative idea of Carl Wernicke (1848-1905).

The indirect transmission is much like the process of surrogacy, in which some substances, such as alcohol and rubella virus, are able to pass through the fetal blood barrier, and then might lead to fetal malformation, although the genes of a fertilized egg cannot be changed fundamentally. As for German original psychiatric concepts around 1900, it has little chance to be presented as a meticulous prototype in front of China. Intact preservation was not the responsibilities of American or any other intermediaries. And also, the indirect transmission had not monitored and supervised by any authorized academic committee on the professional level. The selection and exclusion was uncontrollable to a large extend.

Further, German science and technology was not introduced in China, along with its great philosophy synchronously. In Germany, psychiatric practices were infiltrated and cultivated by different factions of philosophical thoughts. However, in China, German psychiatric practices were prior to be passed on and arrived in earlier than their original wombs, their philosophical frameworks. After all, without a unified psychiatric language that was designed being suitable for different cultures, there was no individual who had the ability to clarify the philosophical mysteries behind different academic concepts. Therefore, backtracking and restoring the exchange process is one of the playgrounds, where the historians with medical knowledge can show their talents.

Comparison is a good way to tell one thing from another. Inspired by the results of this study, a broader perspective of combining with the world history is imperative, when the history of psychiatry being described. Even if only the history of German psychiatry is to be narrated, reference points, like China as the circumstantial evidence in the East and America in the West, are also indispensable, because anything cannot isolated exist and it is needed to be examined through the eyes of others. With another countries or different cultures as references, how the current research pattern and the routine of

modern psychiatry were formed and defined worldwide are much clearer. As for controversial figures in the history of psychiatry, like Adolf Meyer, more accurate and fair assessments could be given through investigating his exchange activates.

The description and discussion of the history of psychiatry from a global perspective are far from sufficient and in-depth, especially regarding the relationship between the West and the East. This investigation has demonstrated that the cross-cultural hybridity in academia is a more worthy and meaningful topic to be pursed. Such under-explored areas of medical history and Chinese studies are exactly what medical historians should undertake nowadays.

References

Alexander F and Selesnick ST. (1965) Freud-Bleuler correspondence. *Archives of General Psychiatry* 12(1): 1-9.

Ayd FJ. (1967) Comprehensive textbook of psychiatry. *JAMA* 202(4): 369.

Böker H. (2006) *Psychoanalyse und Psychiatrie: Geschichte. Krankheitsmodelle und Therapiepraxis. Heidelberg,* Heidelberg: Springer.

Bao C. (1995) The achievements and limitations of the transmission of Western science and technology during the early Qing Dynasty (in Chinese). *Journal of Historical Science* (3): 42-46.

Barton WE. (1987) *The History and Influence of the American Psychiatric Association* Washington: American Psychiatric Publishing.

Beard G. (1869) Neurasthenia, or nervous exhaustion. *The Boston Medical and Surgical Journal* 80(13): 217-221.

Bernal JD. (1954) *Science in History,* London: Watts & Co Ltd.

Berrios G. (2008) Descriptive Psychiatry and Psychiatric Nosology during the Nineteenth Century. In: Wallace ER and Gach J (eds) *History of Psychiatry and Medical Psychology: With an Epilogue on Psychiatry and the Mind-Body Relation.* New York: Springer, 353-379.

Berrios G and Dening T. (1991) Alfred Hoche and DSM-III-R. *Biological psychiatry* 29(2): 93-95.

Berrios GE and Hauser R. (1988) The early development of Kraepelin's ideas on classification: a conceptual history. *Psychological Medicine* 18(04): 813-821.

Beumont P. (1992) Phenomenology and the history of psychiatry. *Australian and New Zealand journal of psychiatry* 26(4): 532-545.

Bleuler E. (1911) *Dementia praecox oder Gruppe der Schizophrenien,* Leipzig: Deuticke.

Bleuler E. (1916) *Lehrbuch der Psychiatrie,* Heidelberg: Springer.

Bleuler E. (1924) *Textbook of Psychiatry,* New York: Macmillan; translation by Abraham Arden Brill of Lehrbuch der Psychiatrie, 4th edn (1923).

Bleuler M. (1991) The concept of schizophrenia in Europe during the past one hundred years. *What Is Schizophrenia?* New York: Springer, 1-15.

Bloch M. (1953) Toward a comparative history of European societies. *Enterprise and Secular Change*: 494-521.

Blowers G. (2004) Bingham Dai, Adolf Storfer, and the Tentative Beginnings of Psychoanalytic Culture in China: 1935-1941. *Psychoanalysis and history* 6(1): 93-105.

Bonhoeffer K. (1908) Zur frage der klassifikation der symptomatischen psychosen. *Berliner Klinische Wochenschrift* 45: 2257-2260.

Bonner TN. (1963) *American Doctors and German Universities: A Chapter in International Intellectual Relations, 1870-1914,* Lincoln: University of Nebraska Press.

Boor Wd. (1956) *Pharmakopsychologie und Psychopathologie*, Heidelberg: Springer.
Bowman KM. (1948) Psychiatry in China. *The American Jounal of Psychiatry* 105(1): 70-71.
Brink L and Jelliffe SE. (1933) Emil Kraepelin, psychiatrist and poet. *Journal of Nervous and Mental Diseases* 77(3): 134-152.
Burke P and Hsia RP-c. (2007) *Cultural Translation in Early Modern Europe*, Cambridge: Cambridge University Press.
Bynum WF. (1994) *Science and the Practice of Medicine in the Nineteenth Century*, Cambridge: Cambridge University Press.
Cao Z. (1999) *Missionaries and Chinese Science (in Chinese)*, Beijing: China Religious Culture Publisher.
Chang DF, Tong H, Shi Q, et al. (2005) Letting a hundred flowers bloom: counseling and psychotherapy in the People's Republic of China. *Journal of Mental Health Counseling* 27(2): 104-116.
Chao Y. (1955) *Treatise on Causes and Symptoms of Disease (in Chinese)*, Beijing: People's Health Publishing House.
Chen S. (1991) *Shi Shi Mi Lu (in Chinese)*, Beijing: China Press of Traditional Chinese Medicine.
Chen Y. (2010) Early traces of modern psychiatry in Beijing: a glorious history - Woods, Lyman, Yulin Wei, Yingkui Xu (in Chinese). *Journal of Clinical Psychiatry* 20(2): 142-143.
Chen Y. (2014) From the Yang Ji Yuan, Pu Ji Tang to paychaitric hispital: history of psychiatry in China for millennium (in Chinese). *Journal of Psychiatry* 27(3): 225-227.
Chen Y, Yu S and Mei L. (1992) World Famous Encyclopedia Dictionary: Natural and Technical Sciences (in Chinese). Jinan: Shandong Education Press.
Cheng Y. (1948a) Discussion of the psychological therapy (in Chinese). *Xi Feng* (108): 491-494.
Cheng Y. (1948b) The proposal of training practitioners for China modern psychiatry (in Chinese). *Yi Chao Yue Kan* 2: 3-4.
Chiang H. (2014) *Psychiatry and Chinese History (Studies for the Society for the Social History of Medicine)*, London: Pickering & Chatto.
Cho JM, Kurlander E and McGetchin DT. (2013) *Transcultural Encounters Between Germany and India: Kindred Spirits in the 19th and 20th Centuries*, London: Routledge.
Chu L and Liu M. (1960) Mental Diseases in Peking between 1933 and 1943. *The British Journal of Psychiatry* 106(442): 274-280.
Cousland PB. (1913) Publication committee: editional secretary's report. *Chinese Medical Journal* 24(1): 15-19.
Dalzell TG. (2007) Eugen Bleuler 150: Bleuler's reception of Freud. *History of Psychiatry* 18(4): 471-482.
Davies G and Cule J. (2000) *Timetables of Medicine*: Black Dog & Leventhal.
De Boor W. (1954) *Psychiatrische Systematik: Ihre Entwicklung in Deutschland seit Kahlbaum*, Berlin: Springer.
de Leon J. (2013) Is psychiatry scientific? A letter to a 21st century psychiatry resident. *Psychiatry investigation* 10(3): 205-217.
de Leon J. (2014) One hundred years of limited impact of Jaspers' General Psychopathology on US psychiatry. *The Journal of nervous and mental disease* 202(2): 79-87.

Decker HS. (2007) How Kraepelinian was Kraepelin? How Kraepelinian are the neo-Kraepelinians? - from Emil Kraepelin to DSM-III. *History of Psychiatry* 18(3): 337-360.
Diamant N. (1993) China's great confinement? Missionaries, municipal elites, and police in the establishment of chinese mental hospitals. *Republican China* 19(1): 3-50.
Double DB. (1990) What would Adolf Meyer have thought of the neo-Kraepelinian approach? *Psychiatric Bulletin* 14(8): 472-474.
Duan Z. (2001) *The Rise of Modern Science and Culture in Modern China: 1919-1936,* Shanghai: Shanghai People's Publishing House.
Eigen JP. (2004) Delusion's odyssey: charting the course of Victorian forensic psychiatry. *International journal of law and psychiatry* 27(5): 395-412.
Ellenberger HF. (1970) *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry,* New York: Basic Books.
Engstrom EJ. (2003) *Clinical Psychiatry in Imperial Germany: A History of Psychiatric Practice,* New York: Cornell University Press.
Engstrom EJ and Weber MM. (2005) The directions of psychiatric research by Emil Kraepelin. *History of Psychiatry* 16(3): 345-349.
Engstrom EJ and Weber MM. (2007) Making Kraepelin history: a great instauration? *History of Psychiatry* 18(3): 267-273.
Faber E. (2002) *From the West to the East (in Chinese),* Shanghai: Shanghai Bookstore Publishing House.
Fan T. (2013) From asylum to scientific treatment: Wei and the creation of Peking psychiatric sanatorium (in Chinese). *Chinese Journal of Medical History* 43(6): 345-350.
Feng Y and Zhao F. (1985) *A Short History of Chinese Philosophy (in Chinese),* Beijing: Peking University Press.
Foucault M. (1988) *Madness and Civilization: A History of Insanity in the Age of Reason,* New York: Random House.
Franzek E. (1990) Influence of Carl Wernicke on Karl Leonhard's nosology. *Psychopathology* 23(4-6): 277-281.
Freedman AM, Kaplan HI and Kaplan HS. (1967) *Comprehensive Textbook of Psychiatry,* Baltimore: Willams & Wilkins.
Fuchs T. (2006) The European China - Receptions from Leibniz to Kant: translation by Martin Schönfeld. *Journal of Chinese philosophy* 33(1): 35-49.
Gallagher LJ and Ricci M. (1942) *China in the Sixteenth Century; The Journals of Matthew Ricci: 1583-1610,* New York: Random House.
Gaupp R. (1903) Über die Grenzen psychiatrischer Erkenntnis. *Centralblatt für Nervenheilkunde und Psychiatrie* 26: 1-14.
Gaupp RE. (1910) *Psychologie des kindes,* Leipzig: Teubner.
Gelder M. (2003) Introduction: Adolf Meyer and his influence on British psychiatry. *History of Psychiatry* 14(4): 475-508.
Giliarovskii VA. (1957) *Psychiatry (in Chinese),* Beijing: People's Health Publishing House; translation by Hunan Medical Psychiatry Research Group of Psychiatry (in Russian), (1954).
Gilman SL. (2008) Electrotherapy and mental illness: then and now. *History of Psychiatry* 19(3): 339-357.
Grau C. (2014) *Die Frühphase der Psychiatrie Chinas: vergleichende Betrachtung der ersten psychiatrischen Anstalten im China der späten Kaiser-und Republikzeit (1898-1945),* Berlin: LIT Verlag Münster.

Graves RE. (1997) The legacy of the Wernicke‐Lichtheim Model. *Journal of the History of the Neurosciences* 6(1): 3-20.
Griesinger W. (1861) *Die Pathologie und Therapie der psychischen Krankheiten: für Aerzte und Studirende,* Stuttgart: Krabbe.
Gui Z. (1932) *Modern Psychiatry (in Chinese),* Shanghai: New Moon bookstore.
Guo X, Sun C and Han L. (2006) Advances in the basic concepts of TCM diagnosis (in Chinese). *Modern Chinese Traditional Chinese Medicine* (6): 57-59.
Hamanaka T and Berrios GE. (2003) *Two Millennia of Psychiatry in West and East,* Tokyo: Gakuju Shoin.
Hashimoto A. (2013) A 'German World' shared among doctors: a history of the relationship between Japanese and German psychiatry before World War II. *History of Psychiatry* 24(2): 180-195.
Havens LL. (1967) Karl Jaspers and American psychiatry. *American Journal of Psychiatry* 124(1): 66-70.
He P. (2004) Theory and practice of comparative history (in Chinese). *Historiography Quarterly* 4: 137-143.
He X. (2002) Western medicine transfered to the East: the humanistic significance of medical system reforms in the late Qing dynasty (in Chinese). *Historical Review* (4): 66-75.
He X. (2006) *Western Medicine and Cultural Adaptation (in Chinese),* Shanghai: Shanghai Ancient Books Publishing House.
Hecker E. (1871a) Die hebephrenie. *Virchows Archiv* 52(3): 394-429.
Hecker E. (1871b) Zur Begründung des klinischen Standpunktes in der Psychiatrie. *Virchows Archiv* 52(1): 203-218.
Heisenberg W. (1958) *Physics and Philosophy: The Revolution in Modern Science,* New York: Harper.
Hell D and Baur N. (2006) Wie das psychodynamische Denken ins Burghölzli Einzug hielt. *Psychoanalyse und Psychiatrie.* Heidelberg: Springer Medezin Verlag, 33-40.
Henderson DK and Gillespie RD. (1947) *A Text-book of Psychiatry for Students and Practitioners,* London: Oxford University Press.
Hillier SM. (1983) Psychiatry and the treatment of mental illness in China. In: Hillier SM and Jewell JA (eds) *Health Care and Traditional Medicine in China, 1800-1982.* London: Routledge and Kegan Paul.
Hippius H and Müller N. (2008) The work of Emil Kraepelin and his research group in München. *European Archives of Psychiatry and Clinical Neuroscience* 258(2): 3-11.
Hirschmüller A and Whitrow M. (1999) The development of psychiatry and neurology in the nineteenth century. *History of Psychiatry* 10(40): 395-423.
Hoche AE. (1991) Die Bedeutung der Symptomenkomplexe in der Psychiatrie. *History of Psychiatry* 2(7): 334-343.
Hoenig J. (1983) The concept of Schizophrenia. Kraepelin-Bleuler-Schneider. *The British Journal of Psychiatry* 142(6): 547-556.
Hoff P. (1998) Emil Kraepelin and forensic psychiatry. *International journal of law and psychiatry* 21(4): 343-353.
Hofmann JA. (1912) A report of the patients discharged from the John G. Kerr Hospital for the insane during 1912. *Chinese Medical Journal* 27: 369-379.
Huang D and Zhong Y. (2006) On the contribution of Ken Tang Wang to the diagnosis and treatment of mental illness (in Chinese). *Chinese Archives of Traditional Chinese Medicine* 24(6): 1103-1104.

Huber G. (1984) Die Bedeutung von Karl Jaspers für die Psychiatrie der Gegenwart. *Nervenarzt* 55(1): 1-9.
Ion RM and Beer M. (2002a) The British reaction to dementia praecox 1893-1913. Part 1. *History of Psychiatry* 13(51): 285-304.
Ion RM and Beer M. (2002b) The British reaction to dementia praecox 1893-1913. Part 2. *History of Psychiatry* 13(52): 419-431.
Jablensky A. (2007) Living in a Kraepelinian world: Kraepelin's impact on modern psychiatry. *History of Psychiatry* 18(3): 381-388.
Janzarik W, Viviani R and Berrios G. (1998) Jaspers, Kurt Schneider and the Heidelberg school of psychiatry. *History of Psychiatry* 9(34): 241-252.
Jaspers K. (1946) *Allgemeine Psychopathologie,* Berlin: Springer.
Jia Y. (2001) Refuting the discourse of 'political abuse of forensic psychaitry in China' from foreign countries (in Chinese). *Shanghai Archives of Psychiatry* 13(2): 106-110.
Jilek WG. (1995) Emil Kraepelin and comparative sociocultural psychiatry. *European Archives of Psychiatry and Clinical Neuroscience* 245(4-5): 231-238.
Jin B. (1985) The western medicine schools in the Republic of China and the evolution of health care (in Chinese). *Chinese Cultural and Historical Data Library 16.* Beijing: Chinese Literature and History Press.
Kahlbaum K. (1874) *Klinische Abhandlungen über psychische Krankheiten: Die Katatonie oder das Spannungsirresein,* Berlin: Hirschwald.
Kant I. (1959) *Foundations of the Metaphysics of Morals and What is Enlightenment?,* Indianapolis: Bobbs-Merrill Educational Publishing.
Kaplan HI, Freedman AM and Sadock BJ. (1980) *Comprehensive Textbook of Psychiatry, III,* Baltimore: Williams & Wilkins.
Klerman GL. (1978) The evolution of a scientific nosology. In: Shershow JC (ed) *Schizophrenia: Science and Practice.* Cambridge: Harvard University Press, 99-121.
Korolenko CP and Kensin DV. (2002) Reflections on the past and present state of Russian psychiatry. *Anthropology & Medicine* 9(1): 51-64.
Kozo S and Sugita N. (1923) *The Latest Psychiatry (in Japanese)*: Katsu Makoto-do bookstore.
Kozo S and Sugita N. (1940) *Modern Psychaitry (in Chinese),* Shanghai: The Shanghai Medical Press; translation and edition by Fu Bao Ding of The Latest Psychiatry (in Japanese), (1923).
Kraepelin E. (1880) *Die Abschaffung des Strafmasses: ein Vorschlag zur Reform der heutigen Strafrechtspflege,* Stuttgart: Enke.
Kraepelin E. (1896) *Lehrbuch der Psychiatrie,* Leipzig: Barth.
Kraepelin E. (1902) *Clinical Psychiatry,* New York and London: Macmillan; translation by Allan Ross Diefendorf of Lehrbuch der Psychiatrie, 6th edn (1899).
Kraepelin E. (1907) Das Verbrechen als soziale Krankheit. *Monatsschrift für Kriminalpsychologie und Strafrechtsreform* (3): 257-259.
Kraepelin E. (1913) *Psychiatrie: ein Lehrbuch für Studierende und Ärzte,* Leipzig: Barth.
Kraepelin E. (1925) Über 'exogene Reaktionstypen'. *Zentralblatt für die gesamte Neurologie und Psychiatrie* 40: 379-382.
Krafft-Ebing Rv. (1879) *Lehrbuch der Psychiatrie auf klinischer Grundlage für praktische Ärzte und Studirende,* Stuttgart: Enke.

Krahl A and Schifferdecker M. (1998) Carl Wernicke and the concept of 'elementary symptom'. *History of Psychiatry* 9(36): 503-508.
Kretschmer E. (1918) *Der sensitive Beziehungswahn: ein Beitrag zur Paranoiafrage und zur psychiatrischen Charakterlehre,* Berlin: Springer.
Kretschmer E. (1919) Über psychogene Wahnbildung bei traumatischer Hirnschwäche. *Zeitschrift für die gesamte Neurologie und Psychiatrie* 45(1): 272-300.
Kretschmer E. (1921) *Körperbau und Charakter,* Berlin: Springer.
Lanczik M. (1988) *Der Breslauer Psychiater Carl Wernicke: Werkanalyse und Wirkungsgeschichte als Beitrag zur Medizingeschichte Schlesiens,* Sigmaringen: Thorbecke.
Lanczik M. (1992) Karl Ludwig Kahlbaum (1828-1899) and the emergence of psychopathological and nosological research in German psychiatry. *History of Psychiatry* 3(9): 53-58.
Lee T. (1958) Chinese medicine during the Ming dynasty (1368-1644 AD). *Chinese Medical Journal* 76(2): 178-198.
Lefevere A. (1992) *Translation, Rewriting, and the Manipulation of Literary Fame,* London: Routledge.
Leonhard K. (1979) *The Classification of Endogenous Psychoses,* New York: Irvington Publisher.
Leonhardt M. (2004) Mehrdimensionale Psychiatrie: Robert Gaupp, Ernst Kretschmer und die Tübinger psychiatrische Schule. *Universitätskolloquien zur Schizophrenie.* Darmstadt: Springer, 367-381.
Lerner PF. (2003) *Hysterical Men: War, Psychiatry, and the Politics of Trauma in Germany, 1890-1930,* Ithaca: Cornell University Press.
Li C. (2010) On the influence of psychoanalysis upon China's contemporary literature (in Chinese). *Journal of Zunyi Normal College* 12(5): 20-25.
Li J. (1998) *The Communication History between China and Foreign countries (in Chinese),* Wuhan: Hunan Education Publishing House.
Li J and Cheng W. (2009) The treatment of psychological disease in western medicine in the 19th century (in Chinese). *Guide of China medicine* 7(9): 172-176.
Li J and Yan L. (1990) *Western Learning and Chinese View of Modern Medicine (in Chinese),* Wuhan: Hubei Science and Technology Press.
Li Q. (1989) *Psychiatry in Traditional Chinese Medicine (in Chinese),* Tianjin: Tianjin Science and Technology Press.
Li S. (1995) From the 'polytechnic' to 'science': China concept evolution of modern technology (in Chinese). *Guizhou Social Sciences* 10(5): 102-107.
Li W. (2011) Recalling the first session of the conference of prevention and treatment of mental illness (in Chinese). *Journal of Clinical Psychiatry* 21(2): 142.
Li W and Schmiedebach H-P. (2015) German wine in an American bottle: the spread of modern psychiatry in China, 1898-1949. *History of Psychiatry* 26(3): 348-358.
Li Y. (2005) Germany psychaitry in nineteenth century (in Chinese). *Chinese Journal of Medical History* 35(2): 114-117.
Li Y. (2008) Kraepelin and the time image of psychopath (in Chinese). *Medicine and philosophy* 29(4): 64-66.
Liao Y. (1996) *Ancient Chinese History of Science and Technology: Medical Volume (in Chinese),* Shenyang: Liaoning Education Press.
Lidz T. (1966) Adolf Meyer and the development of American psychiatry *The American Journal of Psychiatry* 123(3): 320-332.

Liebreich O. (1869) *Das Chloralhydrat: Ein Neues Hypnoticum und Anaestheticum und dessen Anwendung in der Medicin; eine Arzneimittel-Untersuchung* Berlin: Müller.
Lin K-M. (1981) Traditional Chinese medical beliefs and their relevance for mental illness and psychiatry. In: Kleinman A (ed) *Normal and abnormal behavior in Chinese culture.* Dordrecht: Reidel, 95-111.
Lin P-y and Tsai W. (2014) *Print, Profit, and Perception: Ideas, Information and Knowledge in Chinese Societies, 1895-1949,* Leiden: Brill.
Lin T-Y and Lin M-C. (1981) Love, denial and rejection: responses of Chinese families to mental illness. In: Kleinman A (ed) *Normal and abnormal behavior in Chinese culture.* Dordrecht: Reidel, 387-401.
Liu C. (1961) *Psychiatry (in Chinese),* Beijing: People's Medical Publishing House.
Liu LH. (1995) *Translingual Practice: Literature, National Culture, and Translated Modernity China; 1900-1937,* Stanford: Stanford University Press.
Liu X. (1964) Psychiatry (in Chinese). Chengdu: Sichuan People's Publishing House.
Liu X. (1981) Psychiatry in Traditional Chinese Medicine. *The British Journal of Psychiatry* 138: 429-433.
Liu X. (2001) *School of Thought in Traditional Chinese Medicine (in Chinese),* Beijing: Science Press.
Liu X. (2012) The institutionalizaiton of modern psychiatry in China (1891-1979) (in Chinese). Harbin: Heilongjiang University of Chinese Medicine, 27-39.
Liu Y. (1994) The exploration of the features of 'Western studies east-bound' in Modern China (in Chinese). *Fujian Tribune (The Humanities &Social Sciences Bimonthly)* 3: 44-49.
Lou H. (1982) *China Medical Encyclopedia: Psychiatry Volume (in Chinese),* Shanghai: Shanghai Science and Technology Press.
Luo L and Niu J. (2003) The Chinese translation of psychiatric literature during the Qing dynasty (in Chinese). *China Journal of Medical History* 33(2): 112-115.
Lyman R. (1937) Psychiatry in China. *Archives of Neurology and Psychiatry* 37(4): 765-771.
Matusiewicz J and Smyczek S. (2014) Knowledge creation in international scientific networks on example of NetAware intensive programme. *Equilibrium* 8(4): 107-122.
Mayer-Gross W, Slater E and Roth M. (1960) *Clinical Psychiatry,* London: Cassell and Company LTD.
Mayer-Gross W, Slater E and Roth M. (1963) *Clinical Psychiatry (in Chinese),* Shanghai: Shanghai Science and Technology Press; translation by Ming Ji etc. of Clinical Psychiatry, 2th edn (1960).
Mei S. (1956) Important contribution of Traditional Chinese Medicine in psychiatry (in Chinese). *Jiang Xi Zhong Yi Yao* (2): 13-18.
Messner AC. (2000) *Medizinische Diskurse zu Irresein in China (1600-1930),* Stuttgart: Steiner.
Meyer A and Winters EE. (1951) The Collected Papers of Adolf Meyer: Psychiatry. Baltimore: Johns Hopkins University Press, 523.
Miao G and Yang D. (1997) Changes in the diagnostic concept of schizophrenia and evolution of scientific thought (in Chinese). *Journal of Clinical Psychiatry* 7(3): 168-171.
Mitsutomo Y. (1974) The shifting center of scientific activity in the West. *Science and Society in Modern Japan: Selected Historical Sources* (5): 81.

Nanjing NDHi. (1960) Psychiatry (in Chinese). Nanjing: Jiangsu People's Publishing House.
Needham J. (1947) *Science and Society in Ancient China,* London: Watts.
Neumann H. (1859) *Lehrbuch der Psychiatrie*: Enke.
Neumarker K-J. (2001) Karl Bonhoeffer and the concept of symptomatic psychoses. *History of Psychiatry* 12(46): 213-226.
Ng CH. (1997) The stigma of mental illness in Asian cultures. *Australian and New Zealand journal of psychiatry* 31(3): 382-390.
Ng VW. (1990) *Madness in Late Imperial China: From Illness to Deviance,* Norman: University of Oklahoma Press.
Noll R. (2011) *American Madness: The Rise and Fall of Dementia Praecox,* Cambridge: Harvard University Press.
Pearson V. (1991) The development of modern psychiatric services in China 1891-1949. *History of Psychiatry* 2(6): 133-147.
Pearson V. (1995) *Mental Health Care in China: State Policies, Professional Services and Family Responsibilities,* London: Gaskell London.
Peters UH. (1988) Die deutsche Schizophrenielehre und die psychiatrische Emigration. *Fortschritte der Neurologie, Psychiatrie* 56(11): 347-360.
Peters UH. (1990) Adolf Meyer und die Beziehungen zwischen deutscher und amerikanischer Psychiatrie. *Fortschritte der Neurologie, Psychiatrie* 58(09): 332-338.
Pichot P. (1983) *Ein Jahrhundert Psychiatrie,* Paris: Roger Dacosta.
Porter R. (1985) The patient's view: doing medical history from below *Theory and society* 14(2): 175-198.
Qiu H. (2010) Phenomenological analysis of Zheng's essence in Traditional Chinese Medicine (in Chinese). *Tradition Chinese Medicine Research* 23(7): 1-3.
Qu J. (2005) *When Chinese Medicine Met Western Medicine: History and Ideas (in Chinese),* Beijing: SDX Joint Publishing Company.
Quan R. (2005) Biography of Chinese Scientific and Technical Experts, Medical Volume (in Chinese). Beijing: People's Medical Publishing House.
Rössler W. (1992) Wilhelm Griesinger und die gemeindenahe Versorgung. *Nervenarzt* 63(5): 257-261.
Rössler W, Riecher-Rossler A and Meise U. (1994) Wilhelm Griesinger and the Concept of Community Care. *Hospital and Community Psychiatry* 45(8): 818-822.
Reaume G. (2002) Lunatic to patient to person: Nomenclature in psychiatric history and the influence of patients' activism in North America. *International journal of law and psychiatry* 25(4): 405-426.
Reil JC. (1818) *Rhapsodieen über die Anwendung der psychischen Kurmethode auf Geisteszerrüttungen,* Halle: Curtsche Buchhandlung.
Robins E and Guze SB. (1970) Establishment of diagnostic validity in psychiatric illness: its application to schizophrenia. *American Journal of Psychiatry* 126(7): 983-987.
Roelcke V. (1997) Biologizing social facts: an early 20th century debate on Kraepelin's concepts of culture, neurasthenia, and degeneration. *Culture, medicine and psychiatry* 21(4): 383-403.
Roelcke V, Weindling P and Westwood L. (2010) *International Relations in Psychiatry: Britain, Germany, and the United States to World War II,* Rochester: University Rochester Press.

Sarason SB. (1988) *The Making of an American Psychologist: An Autobiography*, San Francisco: Jossey-Bass.
Schaltenbrand G. (1931) Psychiatrie in Peking. *Zeitschrift für die gesamte Neurologie und Psychiatrie* 137: 169-232.
Scharfetter C. (2006) *Eugen Bleuler, 1857-1939: Polyphrenie und Schizophrenie,* Zürich: vdf Hochschulverlag AG.
Schmiedebach H-P. (2011) The reputation of psychiatry in the first half of the twentieth century. *European Archives of Psychiatry and Clinical Neuroscience* 261(2): 192-196.
Schmiedebach H-P and Priebe S. (2004) Social psychiatry in Germany in the twentieth century: ideas and models. *Medical history* 48(4): 449-472.
Schneider K. (1947) Der Aufbau der körperlich begründbaren Psychosen. *Deutsche Medizinische Wochenschrift* 72(15/16): 177-179.
Schneider K. (2007) *Klinische psychopathologie,* Stuttgart: Thieme.
Sewell WH. (1967) Marc Bloch and the logic of comparative history. *History and Theory*: 208-218.
Shi X. (2008) Freud's psychoanalysis in China (in Chinese). *Extensive Reading* (5): 19-23.
Shorter E. (1975) *The making of the modern family,* New York: Basic Books.
Shorter E. (1997) *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac,* New York: Wiley.
Shorter E. (2008) *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac (in Chinese),* Shanghai: Shanghai Science and Education Press: translation by Jian Ping Han etc. of A History of Psychiatry (1997).
Skocpol T and Somers M. (1980) The uses of comparative history in macrosocial inquiry. *Comparative studies in society and history* 22(2): 174-197.
Specht G. (1913) Zur Frage der exogenen Schädigungstypen. *Zeitschrift für die gesamte Neurologie und Psychiatrie* 19(1): 104-116.
St. André J and Peng H-y. (2012) Introduction: setting the terms. *China and Its Others: Knowledge Transfer through Translation, 1829-2010.* Amsterdam: Rodopi, 11-25.
Steinberg H. (2004) Die Errichtung des ersten psychiatrischen Lehrstuhls: Johann Christian August Heinroth in Leipzig. *Der Nervenarzt* 75(3): 303-307.
Steinberg H and Angermeyer MC. (2001) Emil Kraepelin's years at Dorpat as professor of psychiatry in nineteenth-century Russia. *History of Psychiatry* 12(47): 297-327.
Stephens JH, Ota KY, More WW, et al. (1986) Inpatient diagnoses during Adolf Meyer's tenure as director of the Henry Phipps Psychiatric Clinic, 1913-1940. *The Journal of nervous and mental disease* 174(12): 747-751.
Stevens R. (1998) *American Medicine and the Public Interest,* Berkeley: University of California Press.
Stone MH. (1997) *Healing the Mind: A History of Psychiatry from Antiquity to the Present,* New York: Norton.
Storch A. (1926) Über den psychobiologischen Aufbau der Schizophrenie. *Zeitschrift für die gesamte Neurologie und Psychiatrie* 101(1): 748-769.
Ströhle A, Wrase J, Malach H, et al. (2008) Karl Bonhoeffer (1868–1948). *American Journal of Psychiatry* 165(5): 575-576.
Strömgren E. (1980) Contemporary school of Psychiatry (in Chinese). *Foreign Medical Sciences (Section of Psychiatry)* (4): 192-193.

Stux G and Hammerschlag R. (2001) *Clinical Acupuncture: Scientific Basis*, Berlin: Springer.
Su Z. (1946) On emotion and mood: special manuscript for Xi Fen (in Chinese) *Xi Feng* (83): 496-500.
Su Z. (1951) *An Introduction to Psychiatry (in Chinese),* Beijing: Commercial Press.
Sutton SB. (1986) *Crossroads in Psychiatry: A History of the McLean Hospital,* Washington: American Psychiatric Press.
Szto PP. (2002) The accommodation of insanity in Canton, China: 1857-1935. Pennsylvania: University of Pennsylvania, 357.
Tao F. (2010) How traditional medical concepts were changed by missionaries (in Chinese). *Historical Research* (5): 60-78.
Tao G. (1996) In which year was the first classification for mental disorders proposed in China? (in Chinese). *Journal of Clinical Psychiatry* 6(5): 316.
Teichmann G. (1990) The influence of Karl Kleist on the nosology of Karl Leonhard. *Psychopathology* 23(4-6): 267-276.
Thom A. (1968) Philosophische Probleme der Bildung allgemeiner Theorien in der Psychiatrie. *Beiträge zu einer allgemeinen Theorie der Psychiatrie.* Jena: Fischer, 9-46.
Toynbee AJ. (1947) *A Study of History,* New York: Oxford University Press.
Tseng W-S. (1973) The development of psychiatric concepts in Traditional Chinese Medicine. *Archives of General Psychiatry* 29(4): 569-575.
Ungvari GS. (1993) The Wernicke-Kleist-Leonhard school of psychiatry. *Biological psychiatry* 34(11): 749-752.
Unschuld PU. (1985) *Medicine in China: A History of Ideas,* California: University of California Press.
Utena H and Niwa S-I. (1992) The history of schizophrenia research in Japan. *Schizophrenia bulletin* 18(1): 67-73.
Varvin S and Gerlach A. (2011) The development of psychodynamic psychotherapy and psychoanalysis in China. *International Journal of Applied Psychoanalytic Studies* 8(3): 261-267.
Veith I. (1955) Psychiatric thought in Chinese medicine. *Journal of the history of medicine and allied sciences* 10(3): 261-268.
Wang J. (1996) On the evolution of the scientific concept of modern Chinese society (in Chinese). *Journal of Peking University (Philosophy and Social Sciences)* 1: 28-33.
Wang J and Chang L. (2009) *Collection of Thesis of the 1st International Symposium on Evidence Law and Forensic Science (in Chinese),* Beijing: China University of Political Science and Law Press.
Wang K. (1962) *Zheng Zhi Zhun Sheng (in Chinese),* Shanghai: Science and Technology Press.
Wang L. (1997) *American Missionaries and Modernization in Late Qing China (in Chinese),* Tianjin: Tianjin People's Publishing House.
Wang L. (2012) *Modern History Relief in Shandong Province (in Chinese),* Jinan: Qilu Press.
Wang Q. (1995) *The Pathogenesis of Symptoms and Signs of Traditional Chinese Medicine (in Chinese),* Shanghai: Shanghai Popular Science Press.
Wang W. (2010) Soviet Union and Chinese psychiatry (in Chinese). *Journal of Clinical Psychiatry* 20(4): 286.
Wang Z. (2001) The early forerunner of modern psychiatry in China: Fubao Ding (in Chinese). *Shanghai Archives of Psychiatry* 3: 2.

Wang Z. (2005) *Centenary Set for Zonghua Su (in Chinese)*, Shanghai: Science and Technology Press.
Wang Z. (2006) Brought in a fresh wind: commemorating the translation and publication of the psychiatric monograph "Clinical Psychiatry" in 1963 (in Chinese). *Shanghai Archives of Psychiatry* 18(1): 61-62.
Wang Z. (2011) Commemorate the first female psychiatrist in China: professor Zhiliang Gui (in Chinese). *Shanghai Archives of Psychiatry* 23(3): 191-192.
Wang Z and Cao T. (1958) *Neuropsychiatry (in Chinese)*, Beijing: People's Medical Publishing House.
Weaver K and Olson JK. (2006) Understanding paradigms used for nursing research. *Journal of Advanced Nursing* 53(4): 459-469.
Weber MM and Engstrom EJ. (1997) Kraepelin's 'diagnostic cards': the confluence of clinical research and preconceived categories. *History of Psychiatry* 8(31): 375-385.
Wen C. (2006) Chinese modern scientific term review activities: 1928-1945 (in Chinese). *Journal of Dialectics of Nature* 28(2): 71-78.
Wernicke C. (1874) *Der aphasische symptomenkomplex: eine psychologische Studie auf anatomischer Basis*, Breslau: Cohn & Weigert.
Wernicke C. (1900) *Grundriss der Psychiatrie in klinischen Vorlesungen*, Leipzig: Thieme.
Westbrook CH. (1953) Psychiatry and mental hygiene in Shanghai: a historical sketch. *The American Journal of Psychiatry* 110(4): 301-306.
Windholz G. (1999) Soviet psychiatrists under Stalinist duress: the design for a 'new Soviet psychiatry' and its demise. *History of Psychiatry* 10(39): 329-347.
Wolpert EM. (2006) *Images in Psychiatry: German Speaking Countries; Austria, Germany, Switzerland*, Heidelberg: Universitätsverlag Winter.
Wong K. (1950) A short history of psychiatry and mental hygiene in China. *Chinese Medical Journal* 68(1-2): 44.
Woo D. (1991) China's importation of western psychiatry: cultural relativily and mental disorders. *Theoretical Medicine* 12(1): 25-43.
Wortis J. (1992) Freud the novelist. *Biological psychiatry* 32(12): 1063-1064.
Wu G. (2002) On the Internal construction of discipline system (in Chinese). *Social Sciences in China* (3): 81-82.
Wu H, Hu Q and Hu X. (1998) The Morita therapy and Chinese traditional culture (in Chinese). *China Journal of Health Psychology* 6(4): 451-453.
Wu Z. (1953) The great contributions of Pavlovian theory in psychiatry (in Chinese). *Chinese Science Bulletin* 11: 14-16.
Xi Z. (2001) History of Chinese Science and Technology: Scientific Thinking Volume (in Chinese). Beijing: Science Press.
Xia Z and Zhang M. (1981) History and present status of modern psychiatry in China. *Chinese Medical Journal* 94(5): 277-282.
Xiong Y. (2011) *Western Learning and the Late Qing Dynasty (in Chinese)*, Beijing: China Renmin University Press.
Xu T. (1989) Forty years of Chinese psychiatry (in Chinese). *Shanghai Archives of Psychiatry* 1(1): 7-9.
Xu T. (1995) History of modern psychiatry in China (in Chinese). *Chinese Journal of Psychiatry* 28(3): 168-176.
Xu T. (1996) China's psychiatric teaching (in Chinese). *Shanghai Archives of Psychiatry* 8(2): 98-100.

Xu T and Xia Z. (1989) Chinese classification of mental disorders, past and present (in Chinese). *Chinese journal of Nervous and Mental Diseases* 22(5): 257-260.
Young D and Chang M. (1983) Psychiatry in the People's Republic of China. *Comprehensive Psychiatry* 24(5): 431-438.
Yung W. (2007) *My Life in China and America,* Hong Kong: China Economic Review Publisher.
Zhang D. (1996) Chinese modern scientific term review activities: 1915-1927 (in Chinese). *Journal of Dialectics of Nature* 18(5): 47-52.
Zhang J and Xia Z. (1994) *Jing Yue Quan Shu (in Chinese),* Beijing: China Press of Traditional Chinese Medicine.
Zhang Z. (1955) *Shang Han Lun: With Notes (in Chinese),* Shanghai: Commercial Press.
Zhao D and Xing R. (2003) The science activities and the impact of Chinese students who studied in Japan from the later Qing dynasty to the begin of the Republic of China (in Chinese). *Science, Technology and Dialectics* 20(5): 67-71.
Zhao H. (1929) *Psychiatry (in Chinese),* Shanghai: The Commercial Press.
Zhao S. (1937) *Psychopathological Terminology (in Chinese),* Nanjing: National Institute for Compilation and Translation.
Zhen Z. (1991) *History of Chinese Medicine (in Chinese),* Beijing: People's Health Publishing House.
Zhou Y. (2004) Trace of the Sino-German cultural exchange (in Chinese). *Journal of Zhejiang University of Science and Technology* 16(2): 120-124.
Zhuang Z. (1992) *Diagnostics of Traditional Chinese Medicine (in Chinese),* Beijing: Science Press.
Zuo H. (2010) Analysis of the transfer of the world medical scientific center until modern times (in Chinese). *Chinese Journal of Medical History* 40(2): 67-71.

Note: All references in Chinese are with translated titles.

Appendix

I Chinese psychiatrists with experience of studying aboard, 1898-1978

Name	Birth/death year	Study abroad	Research direction
魏毓麟 (*Yu Lin Wei*)	1899-1967	1930-1931, Philadelphia General Hospital, University of Pennsylvania	neuropsychiatry
桂质良(*Zhi Liang Gui*)	1900-1956	1925-1929, Johns Hopkins School of Medicine	child psychiatry, psychotherapy
粟宗华 (*Zong Hua Su*)	1904-1970	1935-1937, Johns Hopkins School of Medicine 1937-1938, Harvard Medical School	neuropsychiatry, neurology
程玉麐 (*Yu Lin Cheng*)	1905-1993	1931-1932, German Institute for Psychiatry Research in Munich 1932-1933, Harvard Medical School	neuropathology, psychology
许英魁 (*Ying Kui Xu*)	1905-1966	1938, German Institute for Psychiatry Research in Munich 1939, Bryn School, University of Chicago	neuropathology
黄友岐 (*You Qi Huang*)	1907-1993	1946-1947, School of Medicine, Tennessee State University	neuropsychiatry, neurology
伍正谊 (*Zheng Yi Wu*)	1912-1996	1947, University of California	neuropsychiatry
夏镇夷 (*Zhen Yi Xia*)	1915-2004	1947-1948, Payne Whitney Psychiatric Clinic, University of Cornell	neuropsychiatry
陶国泰 (*Guo Tai Tao*)	1916-	1948-1949, University of California	child psychiatry
刘贻德 (*Yi De Liu*)	1917-2010	1946-1947, School of Medicine, University of Paris	neuropsychiatry

Note: Data collected from <China Medical Encyclopedia> (Lou, 1982) and <Biography of Chinese Scientific and Technical Experts, Medical Volume> (Quan, 2005).

II Professional journals of psychiatry in People's Republic of China

Original name	English name	ISSN	Founded year	Core journal(Y/N)	Publication cycle
中华精神科杂志	Chinese Journal of Psychiatry	1006-7884	1955	Y	Quarterly
上海精神医学	Shanghai Archives of Psychiatry	1002-0829	1959	Y	Bimonthly
国际精神病学杂志	Journal of International Psychiatry	1673-2952	1974	Y	Quarterly
中国神经精神疾病杂志	Chinese Journal of Nervous and Mental Diseases	1002-0152	1975	Y	Monthly
精神医学杂志	Journal of Psychiatry	1009-7201	1988	Y	Bimonthly
四川精神卫生	Sichuan Mental Health	1007-3256	1988	N	Quarterly
临床精神医学杂志	Journal of Clinical Psychiatry	1005-3220	1991	Y	Bimonthly
中华行为医学与脑科学杂志	Chinese Journal of Behavioral Medical and Brain Science	1674-6554	1992	Y	Monthly
临床心身疾病杂志	Journal of Clinical Psychosomatic Diseases	1672-187X	1994	Y	Bimonthly
国际中华心身医学杂志	International Chinese Psychosomatic Medicine Journal	1523-9659	1999	N	Quarterly
国际中华心身医学杂志	International Chinese Neuropsychiatry Medicine Journal	1528-2996	2000	N	Quarterly
神经疾病与精神卫生	Nervous Diseases and Mental Health	1009-6574	2001	N	Bimonthly
神经病学与神经康复学杂志	Journal of Neurology and Neuro-rehabilitation	1672-7061	2004	Y	Quarterly

Note: Data collection are based on the professional journals lists from online platform of China National Knowledge Infrastructure (CNKI) (website: http://www.cnki.net) and Wan Fang Data (website: http://www.wanfangdata.com).

Acknowledgement

As if it was always yesterday that I received the admission letter from the University Medical Center Hamburg-Eppendorf (UKE). For the great opportunity of studying in Hamburg, a beautiful city which impresses me a lot with its superior academic atmosphere and its graceful life style, my deepest gratitude goes first and foremost to Prof. Dr. med. Heinz-Peter Schmiedebach, my dear supervisor, for his constant encouragement and intellectual guidance. He has walked with me through all the writing stages of this thesis along with my Ph.D. study in Germany. Therefore, I owe all the merits in this thesis to his instruction. For me, the most touching German word is ‘der Doktorvater’, which means that Prof. Schmiedebach will be the most respectable person who has an enlightened influence on my future academic career.

High tribute shall be paid to Prof. Tao Dai, Prof. Pei Yang Xu and Prof. Xiao Li Tang in the Institute of Medical Information & Library, Chinese Academy of Medical Sciences (CAMS) and Peking Union Medical College (PUMC). They are my first teachers to initiate me into the field of medical intelligence science, and they always support my academic career. My heart was often touched, whenever I think of their earnest instructions.

I would like to express my sincere thanks to China Scholarship Council (CSC) in my motherland, for providing me scholarship for these years in Germany.

My cordial thanks go to Ms. Brigitte Seidl who was always helpful, and to all the other colleagues in the Department of History and Ethics of Medicine (IGEM). The profit that I gained from their intellectual ingenuity and meticulous attitude will be the everlasting positive energy to my research.

I would like to say thanks to Prof. Dr. med. Dieter Naber and Prof. Dr. Michael Goerig in UKE, who are the members of my thesis committee.

I am also greatly indebted to all my teachers who have helped me directly and indirectly in my study. Any progress that I have made was sprouted from the seeds of wisdom they sowed, which reflects the result of their profound concern and selfless devotion.

Finally, thanks go to my beloved family, especially to my dear husband Dr. Peng Wang who has shared my worries, frustrations, and hopefulness, as well as happiness during my Ph.D. program. Thanks my cute son, Zhi Zhi, who is always the magic to reduce my stress and making me smile. Thanks for the understanding and support from my parents in law, Zi Xi Wang and Shi Fen Feng. As for my dear parents, Fu En Li and Gui Ying Song, any words of gratitude are not enough to express my love to them.

Curriculum vitae

Wenjing Li, female, has born on April 8th, 1978, in He Bei, China.

Experience of Education and Profession:

- 07.1996: High school diploma in Han Dan, China
- 09.1996-07.2001: Bachelor degree and college study of medical information science in China Medical University (CMU), Shen Yang, China
- 08.2001-06.2007: Assistant librarian, Institute of Medical Information & Library, Chinese Academy of Medical Sciences (CAMS) and Peking Union Medical College (PUMC), Beijing, China
- Since 07.2007: Librarian, assistant professor, teacher of biomedical literature retrieval & analysis for undergraduate and graduate students, Institute of Medical Information & Library, CAMS and PUMC, Beijing, China
- 09.2008-07.2011: Master degree and university study of medical intelligence science in Peking Union Medical College (PUMC), Beijing, China
- 10.2012-09.2016: Ph. D. study of medical intelligence science in the Department of History and Ethics of Medicine, Medical Center Hamburg-Eppendorf (UKE), University of Hamburg, Germany

Publications and Certifications:

- 11 papers in medical intelligence science were published in Chinese and 4 book chapters were compiled. 1 paper in English was published in journal monitored by the Social Science Citation Index (SSCI).
- National Higher Education Teacher in Medical Information, 2004, China
- National Professional Librarian qualification, 2007, China
- Information Analyst and Lecturer issued by China Education of Automation Certificate (CEAC), 2009, China

Publication list during Ph. D. study

Li, W. and H.-P. Schmiedebach (2015). “German wine in an American bottle: the spread of modern psychiatry in China, 1898-1949.” History of Psychiatry (3): 348-358.

Li, W. and H.-P. Schmiedebach. “The indirect transmission of German psychiatric concepts: Analysis of milestone writings appeared in China from 1898-1978.” (In processing).

Affidavit (Eidesstattliche Versicherung)

Ich versichere ausdrücklich, dass ich die Arbeit selbständig und ohne fremde Hilfe verfasst, andere als die von mir angegebenen Quellen und Hilfsmittel nicht benutzt und die aus den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen einzeln nach Ausgabe (Auflage und Jahr des Erscheinens), Band und Seite des benutzten Werkes kenntlich gemacht habe.
Ferner versichere ich, dass ich die Dissertation bisher nicht einem Fachvertreter an einer anderen Hochschule zur Überprüfung vorgelegt oder mich anderweitig um Zulassung zur Promotion beworben habe.
Ich erkläre mich einverstanden, dass meine Dissertation vom Dekanat der Medizinischen Fakultät mit einer gängigen Software zur Erkennung von Plagiaten überprüft werden kann.

Unterschrift: .....Wenjing Li.....