

# Clinical research

## *Descriptive psychopathology, phenomenology, and the legacy of Karl Jaspers*

Heinz Häfner, MD, PhD



*With his early publications (1910-1913), Karl Jaspers created a comprehensive methodological arsenal for psychiatry, thus laying the foundation for descriptive psychopathology. Following Edmund Husserl, the founder of philosophical phenomenology, Jaspers introduced phenomenology into psychopathology as “static understanding,” ie, the unprejudiced intuitive reproduction (Vergegenwärtigung) and description of conscious phenomena. In a longitudinal perspective, “genetic understanding” based on empathy reveals how mental phenomena arise from mental phenomena. Severance in understanding of, or alienation from, meaningful connections is seen as indicating illness or transition of a natural development into a somatic process. Jaspers opted for philosophy early. After three terms of law, he switched to studying medicine, came to psychopathology after very little training in psychiatry; to psychology without ever studying psychology; and to a chair in philosophy without ever studying philosophy. In the fourth and subsequent editions of his General Psychopathology, imbued by his existential philosophy, Jaspers partly abandoned the descriptive method.*

© 2015, AICH – Servier Research Group

Dialogues Clin Neurosci. 2015;17:19-29.

### Introduction

Recognizing, classifying, and treating illness starts with diagnostics. Behind this leading notion, indispensable in every medical specialty, lie questions that require some consideration before they can be answered. We will try to cast light onto some of the scientific fundamentals underpinning the process of diagnosing.

The first prerequisite for arriving at a diagnosis has to do with the theory of knowledge: how can we gain reliable information on psychopathological phenomena and an understanding of the connections involved, which, when understanding breaks off, might provide a sign of illness?

### Descriptive psychopathology as proposed by Karl Jaspers

Descriptive psychopathology is currently the method of choice for collecting information on and describing the present state and past history of a psychiatric condi-

**Keywords:** *descriptive psychopathology; general psychopathology; hermeneutic interpretation; Karl Jaspers; methodology in psychiatry; phenomenology; understanding psychology*

**Author affiliations:** Schizophrenia Research Group, Central Institute of Mental Health, Mannheim Faculty of Medicine and University of Heidelberg, Germany

**Address for correspondence:** Schizophrenia Research Group, Central Institute of Mental Health, J5, D-68159 Mannheim, Germany (e-mail: heinz.haefner@zi-mannheim.de)

# Clinical research

tion—hence, the precondition for giving it a diagnostic label.

Descriptive psychopathology relies exclusively on the information communicated by the patient, or a relative, and on what is observed by the examiner. It is this asceticism that distinguishes the descriptive approach from other techniques, such as the interpretive method applied in dynamic psychiatry.<sup>1-5</sup> For this reason, compared with other methods, descriptive psychopathology is characterized by a high interrater reliability.<sup>6</sup>

Descriptive psychopathology, as a method, goes back to Karl Jaspers' early writings, summarized in his book *Allgemeine Psychopathologie (General Psychopathology)*.<sup>7</sup> Today, description and descriptive psychopathology, however, are used with quite different meanings in research and practice.<sup>8-11</sup>

The *Oxford Textbook of Psychiatry*<sup>12</sup> gives a fairly precise description. The first method the authors mention for gaining information on psychopathology is phenomenology. It is characterized as an “objective description of abnormal states of the mind in a way that avoids [...] preconceived theories.”<sup>12</sup> Clinical data are to be collected in an objective and precise manner and systematically classified. The authors described Jaspers' *General Psychopathology*, published almost a century earlier (1913),<sup>7</sup> as “a landmark in the development of clinical psychiatry,”<sup>12</sup> stating that the book introduced the methodological arsenal in the field of psychopathology.

In the following, we will try to illuminate the basis, as well as the philosophical and historical background and the methodological approaches proposed by Jaspers. In the “Introduction” of the first edition of *General Psychopathology*, Jaspers outlined the aim of the book as follows: “This book gives an overview of the entire field of general psychopathology, of the facts and various aspects of this science [...] instead of a classificatory system based on a theory it would like to offer an order based on methodological considerations.”<sup>7</sup>

Jaspers<sup>7,13</sup> had adopted phenomenology as a method of gaining knowledge on psychopathological phenomena from the Freiburg-based philosopher Edmund Husserl (1859-1938). The early work of Husserl (1901) shows that he understood phenomenology as the descriptive psychology of phenomena present to consciousness. According to him, all phenomena should be grasped free of any prejudice in their authentic, given selfhood by means of direct perception and intuition.<sup>14</sup>

Jaspers stressed explicitly that only the early Husserlian phenomenology was applicable in psychopathology, but “we are not practising here”<sup>7</sup> the transcendental intuition of essences (*Wesensschau*) of his later work.<sup>15,16</sup>

Against the background of the philosophy of his days, Jaspers also adopted the distinction made by the neo-Kantian philosopher Wilhelm Windelband (1848-1915) between the nomothetic natural sciences and the ideographic human sciences.<sup>17</sup> Continuing in this tradition, Wilhelm Dilthey (1833-1911) strictly distinguished between methods applicable to these two areas of being, in 1894 coining the tenet, “nature we explain, but psychic life we understand.”<sup>18,19</sup>

Jaspers defined phenomenology as the intuitive reproduction (*Vergegenwärtigung*), static understanding of “the individual facts of psychic life present in the consciousness”<sup>7</sup> and discriminated it as a cross-sectional mode of inquiry from genetic understanding as a longitudinal approach.

Genetic understanding means an empathic grasping and vicarious sharing of the patient's psychic life. By this hermeneutic technique, the examiner acquires an understanding of how a mental phenomenon arises from another mental phenomenon in a meaningful way. According to Spiegelberg, “hermeneutics is an attempt to interpret the ‘sense’ of certain phenomena.”<sup>20</sup>

During the examination, however, there is no way of empirically establishing whether the idea the examiner gains from the patient's psychic life really conforms with the patient's actual experience. For this reason, Jaspers introduced the examiner's direct, intuitive experience of evidence (*unmittelbares Evidenzerlebnis*) as a criterion for validity.

In Dilthey's tradition, Jaspers contrasted the phenomenological method of static understanding and the psychological method of genetic understanding—emotional and rational—with the causal explaining practiced in the natural sciences. The functional association between these two levels of inquiry can be objectively experienced through the severance of meaningful connections and the failure of empathic understanding. This event of being faced with the incomprehensible indicates the intrusion of outer-conscious phenomena and somatic processes, marking the transition from health to illness.<sup>7,21,22</sup> In his early work on *Delusions of Jealousy*,<sup>21</sup> Jaspers introduced the notion of “process.” It denotes, Jaspers wrote, a pathological, and thus, incomprehensible, permanent change in a person's psychic life.<sup>23</sup>

The aim of phenomenology, defined by Jaspers as static understanding, is to vividly reproduce the mental phenomena truly experienced by the patient, to review their interrelatedness, delimit them as precisely as possible, differentiate them, and label them with a fixed terminology.<sup>7</sup> To accomplish this objectively, one needs to refrain from all theoretical and personal prejudices and presuppositions. Diagnoses, too, represent a form of prejudice, because they tend to bias the examination. For this reason, a suitable diagnosis should only be given after all the relevant information has been collected.

Jaspers recommended, as a first step in relinquishing all prejudices, “a tranquil immersion into the facts of psychic life without jumping to conclusions.”<sup>24</sup>

The phenomenological method and genetic understanding as tools for gaining insight into abnormal mental phenomena require a high degree of self-discipline, sufficient specialist knowledge, and practical experience.<sup>7</sup>

Jaspers regarded the then-influential psychiatric theories relying on impermissible generalizations as obstacles to gaining pure insight. One such theory was Wernicke and Meynert's assumption that all mental disorders are caused by brain processes. Jaspers called it “brain mythology.”<sup>25</sup> “Psychomythology” is what he called the assumption, which he attributed to Sigmund Freud, that all disorders could be explained psychologically.

### The historical background of phenomenology

In his two-volume textbook, *The Phenomenological Movement*, Herbert Spiegelberg stated that Husserl's phenomenology had revolutionized continental philosophy, predominated by world-view philosophies and modern “isms.”<sup>20</sup>

In fact, the term “phenomenology” was not really new, either in philosophy or psychiatry. In the modern history of German philosophy, phenomenology, as far as discernible, first cropped up in 1764 in Johann Heinrich Lambert's theory of appearance (illusion).<sup>26</sup> Lambert understood the purpose of phenomenology as a means of ascertaining truth by exposing the influence of appearance.<sup>26</sup>

To Immanuel Kant, phenomenology dealt with the world of appearances. The term implies that there must be something corresponding to this world of appear-

ances that is not mere appearance, an imperceptible “thing in itself” (*Ding an sich*).<sup>27</sup>

Hegel, in his *Phänomenologie des Geistes* (*The Phenomenology of Mind*),<sup>28</sup> defined phenomenology as the science of appearances, which he understood as representations of the absolute mind evolving in stages from naive consciousness to absolute knowledge, a state in which essence and appearance finally coincide.

In Hegel's succession, Husserl's teacher Franz Brentano turned to empiricism.<sup>29,30</sup> Phenomenology, he taught, acquaints us “with the structures of our own selves and with things...as they exist in reality.”<sup>31</sup> Hence, Brentano sketched out phenomenology as a method of gaining knowledge the way Husserl understood it in his early works and Jaspers adopted it in psychopathology.

Husserl introduced phenomenology as a method in lieu of descriptive psychology in his *Logische Untersuchungen* (*Logical Investigations*).<sup>32</sup> In his later works, he espoused the method of phenomenological reduction. It begins with the bracketing of the world (*Einklammerung der Welt*), in other words, with the suspension of all natural judgment, leading, via eidetic reduction, to essences (*Wesensallgemeinheit*).<sup>16,33</sup>

### Karl Jaspers on his way from psychopathology to existential philosophy

With his three publications dealing with methodological issues<sup>13,21,34</sup> and the first edition of *General Psychopathology*,<sup>7</sup> Jaspers set the methodological foundations of psychopathology and defined the topics relevant in that field in psychiatric research and practice. After a short stint as a clinician, without acquiring much additional clinical experience, he published seven further editions of this seminal work of psychiatry; the ninth edition appeared posthumously in 1973.<sup>35</sup> Starting with *Psychologie der Weltanschauungen* (*Psychology of World Views*)<sup>36</sup> and a three-volume opus on *Philosophy*,<sup>37</sup> he created an existential—and cultural—philosophical body of work, exceptional in scope.<sup>38</sup>

Jaspers confirmed, in retrospect, that the focus of his intellectual work had shifted on philosophy. In the second volume of the third edition of his *Philosophy*, he wrote: “The Philosophy is the favourite of my books .... The intention of my book was to provide comprehensive knowledge under the guidance of the ancient notions of philosophy, world, soul, God.”<sup>39</sup>

# Clinical research

In his career, he dealt not only with the fundamental questions of humanity, but also with almost all the leading issues of his time, addressing topics such as *Die Geistige Situation der Zeit (Man in the Modern Age)*,<sup>40</sup> *Die Idee der Universität (The Idea of the University)*,<sup>41</sup> *Die Atombombe und die Zukunft des Menschen (The Atom Bomb and the Future of Man)*,<sup>42</sup> *Zur Kritik der Psychoanalyse (A Critique of Psychoanalysis)*,<sup>43</sup> and *Der Arzt im Technischen Zeitalter (The Physician in the Technical Age)*.<sup>44</sup> After he was appointed associate professor in psychology at the philosophical faculty in Heidelberg in 1916, psychopathology was no longer the focal point of his intellectual creativity.

In the final years of his forced retirement (1937), ban on publishing (1938), and exclusion from the academic and civic life during the National-Socialist era, Jaspers wrote the fourth edition of the *General Psychopathology*. The book was not published until 1946.<sup>45</sup> With its 748 pages, it had grown immensely in scope from the 338 pages of the first edition. Kurt Schneider, who had continued exchanging letters with Jaspers, even through those difficult years, and whom Jaspers had sent excerpts from the yet unpublished manuscript, wrote him on June 24, 1942 that the work was “overladen with philosophy.”<sup>46</sup> Schneider, although he personally found “the proliferation of the philosophical [...] particularly interesting,” had his doubts: “[w]hether it will benefit the book intended as a description of psychopathology, is another question” (Schneider’s letter to Jaspers of June 14, 1942<sup>47</sup>).

In an even earlier letter to Jaspers (February 24, 1929), referring to the contents of the book before the appearance of the philosophically overlaid fourth edition, Schneider had already expressed concern about its limited practical value: “Critical and methodological subtleties alone are not enough, it must also be shown that they are of some use.”<sup>47</sup>

In the subsequent period of his career, Jaspers abandoned phenomenology and pure description as unscientific, replacing them with his method of elucidation of existence (*Existenzerhellung*), while continuing to accept phenomenology as a psychopathological tool.<sup>20</sup>

## Jaspers’ biography and academic career

Some information on his personal life and academic career will provide some background to *General Psychopathology* and the changes in Jaspers’ thinking and output.

Jaspers was born on February 23, 1883 into a wealthy Oldenburg-based lawyer’s family. His upbringing followed a conservative ideal of continuity and a moral way of life: “The spirit that surrounded us as children was characterized by a demand for truthfulness and open-mindedness, for diligence and reliability, for faithfulness and respect for traditions.”<sup>48</sup> His conservative worldview, consistent adherence to high ethical principles, and his loyal and faithful nature probably originated in his upbringing.

It was already during his school years that philosophy seemed to Jaspers to be “the most sublime, well, the sole matter for man to preoccupy himself with,”<sup>24</sup> “but a certain shyness deterred me from making [philosophy] my profession...”<sup>49</sup>

Following in the footsteps of his father, he started studying law with the intention of becoming a lawyer,<sup>49</sup> but he soon switched to medicine out of the practical consideration of becoming a physician, while secretly hoping for a scientific career at a philosophical faculty.<sup>48,50</sup>

## Short clinical experience in psychiatry

After finishing his studies of medicine at the University of Heidelberg and changing the topic of his doctoral thesis from *Blood Pressure Changes in Mental Disorders* to *Nostalgia and Crime*,<sup>51</sup> he acquired a doctorate in medicine. The chair of the department, neuropathologist Franz Nissl, hired “the exceptionally talented young doctor so enthusiastic about science”<sup>47</sup> as a voluntary assistant doctor without pay on July 1, 1909. However, 6 weeks later, Jaspers asked to be spared from clinical work because of his illness—at 18 years he had been diagnosed with bronchiectasis and secondary heart insufficiency by Dr Fraenkel, a spa physician in Badenweiler, Germany—and Nissl consented.

Nissl’s successor as chairman of the department, Karl Wilmanns, stated of Jaspers (on September 19, 1915), “[b]ecause of his illness he was never able to assume any practical task on the ward, he rather preoccupied himself with theoretical issues.”<sup>52</sup>

After his doctor had told him that he would be suffering from the condition all his life and after reading the following statement from Rudolf Virchow’s pen, “in their thirties at the latest, these patients will perish from general suppuration,”<sup>48</sup> Jaspers adjusted his life accordingly. He lived in constant awareness of the serious-



ness of his illness, anxiously cared for by his wife, and shunned practical work and other risks to his health.

The short stint as a psychiatric clinician, participation in tutorials, and a few psychiatric expert assessments were the only practical experience he could muster when writing the different editions of the *General Psychopathology*. He expanded his psychopathological knowledge from the literature and from conversations with his colleagues Karl Wilmanns, Hans Walter Gruhle, and Wilhelm Mayer-Gross at the Heidelberg Department of Psychiatry. Acknowledging the role they had played, Jaspers stated, "without this clinic and these men my psychopathology would never have come into being."<sup>47</sup>

During his academic career Jaspers underwent, as he himself put it, "a metamorphosis from a psychiatrist to a philosopher."<sup>53</sup> Indeed, the holder of the chair in philosophy at the University of Heidelberg (starting in 1922) had never studied philosophy; the psychology professor, appointed in 1916 after qualifying as a lecturer with his *General Psychopathology*, had never studied psychology; and the author of *General Psychopathology*, the fundamental textbook of psychiatry, had received only a few weeks of clinical training in psychiatry.<sup>50</sup> Considering how limited his practical experience was, one cannot help but be awestruck by the body of work he created, so exceptional in scope, yet also systematic and thorough in content.

### Criticism of Jaspers' psychopathological methodology

Over the course of time, Jaspers' methodology has, in part, come in for criticism. Understanding, as a method of gaining information, was already criticized by Emil Kraepelin.<sup>54</sup> He regarded empathic grasping as highly unreliable, though indispensable in human relationships and poetic reproduction, but as a research method, he believed, it could lead to the most serious kind of self-deception. The intuition of evidence as a criterion for validity, in particular, was questionable in Kraepelin's view, "because [there is] no yardstick by which to measure the reliability of this sense of certainty"<sup>55</sup> (see also refs 54,56). Later, several authors have criticized genetic understanding on similar grounds.<sup>19,23,57-59</sup>

The static understanding of isolated phenomena, described as pathologically altered "forms" of experience, probably poses less of a problem, eg, differentiat-

ing between verbal hallucinations as "inner" speech and heard "external" speech. This is one of the reasons for the continued popularity of discriminating between a qualitatively changed form as an indicator of illness and mostly understandable, not illness-related pathoplastic content.<sup>60</sup>

The severance of meaningful connections as a sign of illness, which von Baeyer called "the Jaspers theorem,"<sup>58</sup> and the transition of a natural development into a pathological process<sup>21</sup> has been criticized. Jaspers described a process of how meaningful connections may break down and turn into incomprehensible, "incurable changes in the psychic life incompatible with the personality as known hitherto."<sup>21</sup>

The apodictic distinction between a comprehensible, healthy development and an incomprehensible, causally explainable pathological process stood in the way of an interpretive explanation of pathological experiences, such as delusions and hallucinations. Jaspers completely rejected both Eugen Bleuler's<sup>61</sup> psychoanalytically oriented empathic penetration (*verstehendes Eindringen*) into the symptoms of schizophrenia and Robert Gaupp's and Ernst Kretschmer's hypothesis that underlying paranoid delusions<sup>62</sup> or sensitive delusions of reference<sup>63</sup> were developments understandable from a person's personality, biography, and traumatic experiences.

Last, but not least, there is an epistemological problem that is not given much attention, which Jaspers had created by adopting phenomenology from Husserl. While Husserl intended phenomenology as a method of reflecting upon phenomena present in one's own consciousness, Jaspers used it for gaining insight into another person's consciousness. This raises the question of intersubjective perception. Jaspers preferred an indirect method: empathic understanding and vicarious sharing of another person's mental phenomena from one's own experience.

In contrast, Max Scheler, who as a philosopher further developed Husserl's phenomenological method on the psychological level, believed that insight into another person's psychic life is gained intuitively.<sup>64,65</sup> Human beings are capable of sympathizing with each other because of their shared human nature, hence, there is no need for conscious reflection.<sup>66</sup> For this reason, a psychiatric interviewer is frequently capable of understanding experiences and behaviors he himself has not experienced, and equally, those of a mentally ill person.

# Clinical research

## The fourth edition of *General Psychopathology* and shift of focus to philosophy

As the fourth and subsequent editions of the *General Psychopathology* became intensively permeated by his philosophical thinking, Jaspers also modified his methodological approach to psychopathology. From the fourth edition<sup>45</sup> on, genetic understanding and a hermeneutic analysis of meaningful connections no longer qualified as science. They were at best “a humanely beneficial exercise” that Jaspers regarded as belonging to the empirically irrelevant realm “of fiction and philosophy,” and thus, not a matter of immediate concern for a clinician.<sup>67</sup> (also, Bormuth M. Kapitel 3: *Der freie Wille zwischen Wissenschaft und Spekulation*. Unpublished manuscript; 2014:43). Behind this position lies Jaspers’ early distinction between science and philosophy.

Jaspers took the view that philosophy’s purpose was to deal with personhood (*Menschsein*) in its entirety, though, admittedly, it did so in an imperfect way, whereas psychopathology, as a guiding principle for organizing knowledge, addressed only selected aspects and never the whole. Psychopathology qualified as a scientific discipline only, if it left the topics that could not be causally explained—personhood, individual fate, existence, and the reference to transcendence—to philosophy to deal with. Psychopathology and philosophy, Jaspers thought, must be kept apart.<sup>68</sup>

Jaspers now believed that findings that were scientifically valuable, including reliable diagnoses, provided they were accepted, could not be derived from meaningful connections and comprehensible developments, but only from the somatic.

Concluding that illness was always somatic in nature, and thus, causally explainable by somatic factors, Jaspers, in the fourth and subsequent editions of the *General Psychopathology*, contradicted the positions he had held in his earlier writings. As he started to develop his methodology in 1910, Jaspers stressed the interdisciplinary nature of psychiatry and criticized brain mythology as producing merely biased generalizations. In his view, “biased generalizations constitute a paralyzing obstacle to gaining deep insight into the complexities of human behavior and experience.”<sup>35</sup>

Despite the booming of biological approaches, psychiatry has refused to discard the method of genetic understanding of meaningful connections. Considering

relevant criticism and following the example of Jaspers’ former colleagues—Schneider<sup>60</sup> and Gruhle<sup>69</sup>—it is better to stick to the methodology formulated in the first edition.

## The notion of science in psychopathology, from Karl Jaspers to the present

Jaspers’ later refusal to acknowledge the scientific nature of genetic understanding is also understandable from the traditional way he viewed science. The criteria which science had to fulfill according to Jaspers were compelling insight, general validity, causality of the connections, and provability guaranteed by the replicability of the methods used. His refusal to acknowledge the scientific nature of meaningful psychological connections stemmed, among other things, from the fact that establishing causality would entail losing existential freedom.

Today, it is not only the full, 100% causal explanation of associations that counts; rather it has become a matter of adopting approaches that render psychopathological phenomena, and the connections involved, objective and measurable as preconditions for a scientific testing of hypotheses.<sup>70</sup> Associations are analyzed using biomathematical procedures designed for calculating probabilities and effect sizes.

The serious misgivings Jaspers repeatedly voiced concerning the ability to attribute certain mental phenomena to brain findings as a basis for diagnoses have also been largely rebutted. The modern techniques of morphological and functional imaging—magnetoencephalography and other approaches—have provided differential insight into the morphology and functioning of the brain as associated with a variety of normal and pathological behaviors. These developments have tremendously advanced psychopathological knowledge on the biological level, but failed to fully unseat, on either level, the applicability of the methodological approaches described in Jaspers’ *General Psychopathology*.

## From disease construct to diagnosis

Jaspers held an agnostic view of how to define diagnoses:

Ideal disease entities, ie, disease diagnoses in a stricter sense, do not actually exist in the science of psychiatry,

neither varieties of a unitary psychosis as proposed by Griesinger nor sharply delineable disease entities as suggested by Kraepelin.<sup>24</sup>

However, aware as he was of the fact that disease categories are needed in clinical practice, he proposed the following rough classification system, largely in line with Kraepelin's tripartite classification:

1. Dysfunctions of the brain (organic psychoses)
2. Mental disorders attributable to somatic causes, but lacking the corresponding pathophysiological findings (functional psychosis)
3. Neurotic disorders, abnormal psychogenic reactions, and psychopathies. Jaspers regarded this final group as "variations of personhood," without somatic origin.

This "triadic" classification system was supplemented by a hierarchic rule Jaspers had adopted from Hughlings Jackson.<sup>71</sup> Given the experience that mild symptoms also usually occur in more severe disorders, Jaspers suggested that only one diagnosis should be applied, namely for the most severe type of psychopathology involved. The triadic principle has survived Jaspers, but the diagnostic constructs and related classification systems have advanced far beyond Jaspers' diagnostic asceticism.

### The reception of General Psychopathology in psychiatry

*General Psychopathology*, published in 1913, was received with keen interest in German psychiatry, in particular, by the Heidelberg-based psychopathological school of Wilmanns, Gruhle, and Schneider. Their successors (von Baeyer, Huber, Häfner, Kisker, Janzarik, Schmitt, Blankenburg, and Mundt) have, to a certain degree, carried on that tradition to the present day.

On the scientific level, however, debates ensued with the proponents of related strands of psychiatry, eg, Ludwig Binswanger's *Daseinsanalyse*,<sup>72,73</sup> Jürg Zutt's,<sup>74</sup> Caspar Kulenkampff's,<sup>75</sup> and Viktor von Gebattel's<sup>76</sup> anthropological psychiatry, as well as with Kretschmer's multidimensional psychopathology.<sup>77</sup>

Binswanger's *Daseinsanalyse*<sup>73,78</sup> proceeded from the premise that a person's "being-in-the-world" in Martin Heidegger's sense is a fundamental aspect of psychopathology. The patient's illness and being ill can only be understood by analyzing the different facets of

being-in-the-world against the backdrop of the individual's biography and existence/presence.

Anthropological psychiatry interprets illness in a similar way based on individual, altered structures of human existence as embedded in a person's biography. *Daseinsanalyse*, and in part, anthropological psychiatry were highly influential, especially in German-speaking countries before and shortly after World War II (Binswanger, Zutt, von Gebattel, von Baeyer, Heilmann, Häfner, and Blankenburg).

In his later works, Jaspers consistently positioned himself against the daseinsanalytical and anthropological psychiatry. He criticized the way Binswanger interpreted mental disorder as based on a theoretical construction that emphasized the totality of personhood. Given this totality, Jaspers stressed that mental disorder was not accessible to scientific insight, but could only be addressed by means of philosophy. Jaspers strictly discriminated between his understanding of science and philosophy and Heidegger's<sup>79</sup> existential philosophy.<sup>20,80,81</sup>

Jaspers accused his opponents of being engaged in unscientific, arbitrary philosophizing. Binswanger,<sup>82</sup> actually a great admirer of Jaspers', regarded Jaspers' later, purely descriptive-phenomenological psychopathology as unfruitful.

A decisive role in making the *General Psychopathology* internationally known was played by Jaspers' pre-eminent psychiatric student, Kurt Schneider. Schneider had written his doctoral thesis on *Pathopsychologische Beiträge zur Phänomenologie von Liebe und Mitgefühl (Pathopsychological contributions to the phenomenology of love and compassion)*<sup>83,84</sup> under the supervision of the German philosopher Max Scheler. Schneider's *Clinical Psychopathology*, a lucid distillate of Jaspers' *General Psychopathology*,<sup>50,85-87</sup> was published in 1950, after shorter versions had appeared in 1945 and 1948.

The *Clinical Psychopathology* was to become the formative textbook of German psychiatry for several decades. It was received with great enthusiasm, because it made the Jaspersian methodology easier to understand. For example, Schneider simplified the distinction between form and content, between meaningful connections and break-offs in the law of meaningfulness (*Sinngesetzlichkeit*). The book has finally been superseded by the growing number of empirical findings accumulated on the biological and psychopathological level in the last few years.

# Clinical research

Beyond the German-speaking countries, *General Psychopathology* attracted keen interest in the second half of the 20th century when translations into other languages appeared (eg, into French in 1928, Spanish in 1950-1951, Japan in 1953-1956, Italian in 1963, Portuguese in 1973, and Serbo-Croatian in 1978 as well as of the 2nd edition in Russian in 1997).

In the Anglo-American countries, Jaspers' *General Psychopathology* was acknowledged late, and only by a few authors.<sup>88-98</sup> Before the first English translation appeared in 1963,<sup>99</sup> half a century after the first German edition, phenomenology in the USA was still in its infancy.<sup>20</sup> Unfortunately, the translation was based on the seventh, philosophically permeated, edition. Its very size, comprising 929 pages vs the 338 pages of the first edition, was not helpful in that respect. In the USA, a strand of psychopathology aiming at an objective, correct description with clear-cut diagnostic definitions did not replace the predominant psychodynamic psychiatry until the historical article by Robins and Guze (1970)<sup>100</sup> and the radically descriptive classification system of *DSM-III* (1980)<sup>101</sup> appeared.

Recently, on the occasion of the centenary of *General Psychopathology*, there have been several publications by international authors reflecting upon Jaspers' works and the continued validity of his contribution to the methodological foundations of psychopathology.<sup>94,98,102-107</sup>

Not only has the variety of phenomenology that Jaspers introduced to psychopathology, but also his later philosophical works attracted new interest on the international scene. A recent volume, *The Maudsley Reader in Phenomenological Psychiatry*, edited by Broome, Harland, Owen, and Stringaris,<sup>108</sup> is of historical importance. It contains standard writings of several philosophical forerunners and representatives of the phenomenological movement: Brentano, Dilthey, Weber, Bergson, Husserl, Scheler, Minkowsky, and Heidegger, along with their daseinsanalytical or existential and philosophical successors. It also includes some representatives of phenomenological psychopathology (Schneider, Biswanger, Conrad, Blankenburg, Strauss, von Gebattel, Merleau-Ponty, Scheler). The book illuminates the philosophical background and the different varieties of phenomenological thinking in and outside the psychopathological field.

## Karl Jaspers' legacy: the method of descriptive psychopathology

We have mentioned the different strands of descriptive psychopathology employed in research and practice, and we have described the methodological foundations of that method as set out by Jaspers in his early writings on the topic<sup>13,21,109,110</sup> and in the first edition of *General Psychopathology*.<sup>7</sup>

The phenomenology that Jaspers adopted from philosophy, molding it to a psychopathological method, and genetic understanding as a form of understanding psychology (*verstehende Psychologie*), constitute the methodological underpinning of descriptive psychopathology. Genetic understanding had been highly criticized and Jaspers no longer regarded it as a scientific approach in the fourth and subsequent editions of *General Psychopathology*.

However, psychiatric research and practice depend on the method of understanding psychology. A breakdown or in distortion of understanding and the discontinuity of the meaningfulness of psychological connections are powerful indicators of disorder, even though the predictive validity of such events is limited. Understanding psychology provides access to understanding the sick person, as well as the biographical and personal context of illness.

The error-proneness of understanding psychology by no means rules out the possibility of using it for the purpose of scientific analyses. At any rate, care must be taken to keep errors to a minimum by applying the greatest possible degree of objectivity and in the maintenance of a rigorous scientific analysis by employing quantification techniques and psychometric tools. An objective observation and description of conscious experiences, and their existing or missing connections, remains an instrument of descriptive psychopathology. Descriptive psychopathology based on this foundation, "currently the most frequently practiced form of psychopathology [...] is an indispensable basic tool for the currently prevailing operational diagnostics."<sup>6</sup>

In spite of all the methodical stringency needed, the examiner should adopt an open-minded, unprejudiced attitude towards the patient as a person, his or her biography, and illness from the beginning of the diagnostic process to its very end. □



### La psicopatología descriptiva, la fenomenología y el legado de Karl Jaspers

A partir de sus primeras publicaciones (1910-1913) Karl Jaspers creó un arsenal metodológico comprensible para la psiquiatría, sentando así las bases para la psicopatología descriptiva. Siguiendo a Edmund Husserl -fundador de la fenomenología filosófica- Jaspers introdujo la fenomenología en la psicopatología como una "comprensión estática", es decir, la reproducción intuitiva no prejuiciosa (Vergegenwärtigung) y la descripción de los fenómenos conscientes. En una perspectiva longitudinal, la "comprensión genética" basada en la empatía revela cómo aparecen los fenómenos mentales a partir de los fenómenos mentales. El cese de la comprensión o la alienación de las conexiones significativas son vistas como indicios de enfermedad o de la transición desde un desarrollo natural hacia un proceso somático. Jaspers optó precozmente por la filosofía. Después de tres trimestres de cursar derecho se cambió a estudiar medicina. Posteriormente se dedicó a la psicopatología después de un breve entrenamiento en psiquiatría, a la psicología sin haber estudiado psicología y tuvo una cátedra de filosofía sin haber estudiado filosofía. En la cuarta y siguientes ediciones de su *Psicopatología General*, Jaspers -imbuido por su filosofía existencial- abandonó parcialmente el método descriptivo.

### Psychopathologie descriptive, phénoménologie et héritage de Karl Jaspers

Karl Jaspers a créé, avec ses premières publications (1910-1913), un arsenal méthodologique détaillé pour la psychiatrie, posant donc les fondations de la psychopathologie descriptive. Après Edmund Husserl, le fondateur de la phénoménologie philosophique, Jaspers a introduit la phénoménologie dans la psychopathologie comme une « compréhension statique », c'est-à-dire la reproduction intuitive impartiale (Vergegenwärtigung) et la description des phénomènes conscients. Dans une perspective longitudinale, la « compréhension génétique » basée sur l'empathie révèle comment les phénomènes mentaux émanent de phénomènes mentaux. La perte de la compréhension ou la distanciation des connexions cohérentes sont vues comme un indicateur de la maladie ou une transition d'une évolution naturelle en processus somatique. Jaspers a opté très tôt pour la philosophie. Après 3 trimestres de droit, il a fait des études de médecine, puis en vint à la psychopathologie après une très brève formation en psychiatrie ; à la psychologie sans jamais l'avoir étudiée ; et à une chaire de philosophie sans jamais avoir étudié la philosophie. Dans la quatrième édition et les suivantes de sa *Psychopathologie Générale*, Jaspers, imprégné de sa philosophie existentielle, abandonne en partie la méthode descriptive.

## REFERENCES

1. Stevenson I. The psychiatric interview. In: Arieti S, ed. *American Handbook of Psychiatry*. Vol 1, 2nd ed. New York, NY: Basic Books; 1974:215-234.
2. Klerman GL. An American perspective on the conceptual approaches to psychopathology. In: Kerr A, McClelland H, eds. *Concepts of Mental Disorders*. London, England: Gaskell; 1991:74-83.
3. Gelder M, Gath D, Mayou R, Cowen P. Interviewing, clinical examination, and record keeping. In: Gelder M, Gath D, Mayou R, Cowen P, eds. *Oxford Textbook of Psychiatry*. 3rd ed. Oxford, UK: Oxford University Press; 1996:25-55.
4. Fähndrich E, Stieglitz RD. *Leitfaden zur Erfassung des Psychopathologischen Befundes*. 2nd ed. Göttingen, Germany: Hogrefe; 1998.
5. Haug H-J, Kind H. *Psychiatrische Untersuchung*. 7th ed. Heidelberg, Germany: Springer-Verlag; 2008.
6. Haug H-J. Untersuchungsgang. In: Gaebel W, Müller-Spahn F, eds. *Diagnostik und Therapie Psychischer Störungen*. Stuttgart, Germany: Kohlhammer; 2002:729-764.
7. Jaspers K. *Allgemeine Psychopathologie. Ein Leitfaden für Studierende, Ärzte und Psychologen*. Berlin, Germany: Julius Springer; 1913:45,47.
8. Mundt Ch. Psychopathologie heute. In: Kisker HP, Lauter H, Meyer J-E, Müller C, Strömgen E, eds. *Psychiatrie der Gegenwart*. Vol 9. Brennpunkte der Psychiatrie. 3rd ed. Berlin, Heidelberg, Germany: Springer-Verlag; 1989:147-184.
9. Hirsch SR, Weinberger DR, eds. *Schizophrenia*. Oxford, UK: Blackwell Science; 1995.
10. Hirsch SR, Weinberger DR, eds. *Schizophrenia*. 2nd ed. Oxford, UK: Blackwell Publishing; 2003.
11. Weinberger DR, Harrison PJ, eds. *Schizophrenia*. 3rd ed. Chichester, UK: Wiley-Blackwell; 2011.
12. Gelder M, Gath D, Mayou R, Cowen P, eds. *Oxford Textbook of Psychiatry*. 3rd ed. Oxford, UK: Oxford University Press; 1996:2.
13. Jaspers K. Die phänomenologische Methode in der Psychopathologie. *Zeitschr ges Neurol Psychiat*. 1912;9:391-408.
14. Gadamer HG. Die phänomenologische Bewegung. *Philosophische Rundschau*. 1963;11:1-45.
15. Husserl E. Philosophie als strenge Wissenschaft. *Logos*. 1911;1.
16. Husserl E. *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Buch 1: Allgemeine Einführung in die reine Phänomenologie*. 1913 (Husserliana 3). The Hague, the Netherlands: Martinus Nijhoff; 1950.
17. Windelband W. Geschichte und Naturwissenschaft. Straßburger Rektoratsrede. In: *Präludien*. Vol 2. Tübingen, Germany; 1894:136-160.
18. Dilthey W. *Ideen über eine beschreibende und zergliedernde Psychologie*. Gesammelte Schriften, Bd V, 6. Aufl. Stuttgart, Germany: Teubner; 1974:139-240.
19. Blankenburg W. Unausgeschöpftes in der Psychopathologie von Karl Jaspers. In: Hersch J, Lochman JM, Wiehl R, eds. *Karl Jaspers: Philosoph, Arzt, politischer Denker*. Munich, Germany; Zürich, Switzerland: Piper; 1986:143.
20. Spiegelberg H. *The Phenomenological Movement. A Historical Introduction*. Vol 2. The Hague: Martinus Nijhoff; 1960:695.
21. Jaspers K. Eifersuchtswahn. Ein Beitrag zur Frage, Entwicklung einer Persönlichkeit oder Prozess? *Zeitschr ges Neurol Psychiat*. 1910;1:567-637.

# Clinical research

22. Ebmeier KP. Explaining and understanding in psychopathology. *Br J Psychiatry*. 1987;151:800-804.
23. Häfner H. Prozess und Entwicklung als Grundbegriffe der Psychopathologie. *Fortschr Neurol Psychiat*. 1963;31:393-438.
24. Jaspers K. Wahrheit und Leben. *Ausgewählte Schriften*. Zurich, Switzerland: Buchklub ex libris; 1965;9,15,331.
25. Jaspers K. *Allgemeine Psychopathologie*. 2nd ed. Berlin, Germany: Springer; 1920:22.
26. Lambert, JH. *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung vom Irrthum und Schein*. Leipzig, Germany: Wendler; 1764.
27. Kant I. *Kritik der reinen Vernunft*. (1781). Berliner Ausgabe. Berlin: Holzinger; 2013.
28. Hegel GWF. *Phänomenologie des Geistes* (1807) (auf der Grundlage der Werke von 1832-1845, neu ed. Ausg. Reihe Suhrkamp Taschenbuch Wissenschaft, 2nd ed). Frankfurt, Germany: Suhrkamp; 1989.
29. Brentano F. *Psychologie vom empirischen Standpunkte*. Leipzig, Germany: Duncker & Humblot; 1874.
30. Brentano F. The concept of descriptive psychology. In: Broome MR, Harland R, Owen GS, Stringaris A, eds. *The Maudsley Reader in Phenomenological Psychiatry*. Cambridge, UK: Cambridge University Press; 2012:3-4.
31. Brentano F. *Deskriptive Psychologie*. Hamburg, Germany: Meiner; 1982:76.
32. Husserl E. *Logische Untersuchungen*. Bd 1 (Prolegomena zur reinen Logik) Bonn, Germany: Halle ADS Niemeyer; 1900, Bd 2/1 (Untersuchungen zur Phänomenologie und Theorie der Erkenntnis), Bonn, Germany: Halle ADS Niemeyer, 1901.
33. Husserl E. *Phänomenologie und Psychologie* (1917). In: Husserl E. *Aufsätze und Vorträge* (1911-1921). (Husserliana, vol 25). The Hague, The Netherlands: Springer; 1987:82-124.
34. Jaspers K. Kausale und 'verständliche Zusammenhänge' zwischen Schicksal und Psychose bei der Dementia praecox (Schizophrenie). *Zeitschr ges Neurol Psychiat*. 1913b;14:158-263.
35. Jaspers K. *Allgemeine Psychopathologie*. 9th ed. Heidelberg und Berlin, Germany: Springer; 1973:37.
36. Jaspers K. *Psychologie der Weltanschauungen*. Berlin, Germany: Springer; 1919.
37. Jaspers K. *Philosophie*. Vol 3. (I. Philosophische Weltorientierung; II. Existenzherhellung; III. Metaphysik). Berlin, Germany: Springer; 1932.
38. Heimann H. Der Einfluss von Karl Jaspers auf die Psychopathologie. *Monatsschrift Psychiatrie Neurologie*. 1950;120:1-19.
39. Jaspers K. *Philosophie*. Vol 3. (I. Philosophische Weltorientierung; II. Existenzherhellung; III. Metaphysik), 3rd ed. Berlin, Germany: Springer; 1956.
40. Jaspers K. *Die geistige Situation der Zeit*. Berlin, Germany: de Gruyter; 1931.
41. Jaspers K. *Die Idee der Universität*. Berlin, Germany: Springer; 1946.
42. Jaspers K. *Die Atombombe und die Zukunft des Menschen*. Munich, Germany: Piper; 1957.
43. Jaspers K. Zur Kritik der Psychoanalyse. *Nervenarzt*. 1951;21:465-468.
44. Jaspers K. Der Arzt im technischen Zeitalter. *Klinische Wochenschrift*. 1957;36:1037-1043.
45. Jaspers K. *Allgemeine Psychopathologie*. 4th ed. Berlin, Heidelberg, Germany: Springer; 1946.
46. Bormuth M. *Lebensführung in der Moderne. Karl Jaspers und die Psychoanalyse*. Stuttgart, Bad-Canstatt, Germany: Frommann-Holzboog; 2002:166.
47. Janzarik W. Jaspers, Kurt Schneider und die Heidelberger Psychiatrie. In: Hersch J, Lochman JM, Wiehl R, eds. *Karl Jaspers. Philosoph, Arzt, politischer Denker*. Munich, Germany: Piper; 1986:112-126.
48. Engel W. Kindheit, Jugend, Studium. In: Leonhard J-F, ed. *Karl Jaspers in seiner Heidelberger Zeit (Heidelberger Bibliotheksschriften 8)*. Heidelberg, Germany: Heidelberg Verlagsanstalt und Druckerei; 1983:13-21.
49. Jaspers K. Mein Weg zur Philosophie. In: Jaspers K. *Reichenschaft und Ausblick. Reden und Aufsätze*. München, Germany: Piper; 1951:9,323-332.
50. Häfner H. Karl Jaspers, 100 Jahre "Allgemeine Psychopathologie." *Nervenarzt*. 2013,84:1281-1290.
51. Jaspers K. Heimweh und Verbrechen [dissertation]. Heidelberg: University of Heidelberg. *Archiv für Kriminalanthropologie und Kriminalistik*. 1909;35.
52. Leonhard J-F, ed. *Karl Jaspers in seiner Heidelberger Zeit (Heidelberger Bibliotheksschriften 8)*. Heidelberg, Germany: Heidelberg Verlagsanstalt und Druckerei; 1983:42.
53. Jaspers K. Tagebuch 1939-1942. In: Saner H, ed. *Schicksal und Wille. Autobiographische Schriften*. Munich, Germany: Piper; 1967:26,143-163.
54. Kraepelin E. Ziele und Wege der psychiatrischen Forschung. *Z Neurol*. 1918;42:169-205.
55. Avenarius R. Emil Kraepelin, seine Persönlichkeit und seine Konzeption. In: Janzarik W, ed. *Psychopathologie als Grundlagenwissenschaft*. Stuttgart, Germany: Enke; 1979:62-73.
56. Kraepelin E. Die Erforschung psychischer Krankheitsphänomene. *Z Neurol*. 1919;51:224-246.
57. Kisker KP. Zur Frage der Sinngesetzlichkeit. *Schweizer Archiv für Neurologie und Psychiatrie*. 1955;76:5-22.
58. von Baeyer W. *Wähnen und Wahn*. Stuttgart, Germany: Enke; 1979.
59. Glatzel J. *Allgemeine Psychopathologie*. Stuttgart, Germany: Enke; 1978.
60. Schneider K. *Klinische Psychopathologie*. Stuttgart, Germany: Thieme; 1950.
61. Bleuler E. Dementia praecox oder Gruppe der Schizophrenien. In: Aschaffenburg G, ed. *Handbuch der Psychiatrie*. Leipzig, Germany: Deuticke; 1911:1-420.
62. Gaupp R. Die Lehre von der Paranoia. *Nervenarzt*. 1947;18:167-169.
63. Kretschmer E. *Der sensitive Beziehungswahn*. Berlin, Germany: Julius Springer; 1918.
64. Scheler M. *Wesen und Formen der Sympathie* (2. vermehrte u. durchges. Aufl. von Zur Phänomenologie und Theorie der Sympathiegefühle von Liebe und Haß). 3rd ed. Bonn, Germany: Halle ASM Niemeyer; 1926.
65. Hensen J. *Max Scheler. Eine kritische Einführung in seine Philosophie*. Essen, Germany: Verlag Dr. Hans v. Chamier; 1948.
66. Lorscheid B. *Max Schelers Phänomenologie des Psychischen. Abhandlungen zur Philosophie, Psychologie und Pädagogik*. Bd 11. Bonn, Germany: H. Bouvier u. Co. Verlag; 1957.
67. Jaspers K. Arzt und Patient (1953). In: Jaspers K. *Der Arzt im technischen Zeitalter*. Munich, Germany: Piper; 1986:19-38.
68. Schmitt W. Karl Jaspers als Psychiater und sein Einfluss auf die Psychiatrie. In: Leonhard J-F, ed. *Karl Jaspers in seiner Heidelberger Zeit (Heidelberger Bibliotheksschriften 8)*. Heidelberg, Germany: Heidelberg Verlagsanstalt und Druckerei; 1983:23-38.
69. Gruhle HW. *Verstehende Psychologie (Erlebnislehre). Ein Lehrbuch*. Stuttgart, Germany: Thieme; 1948.
70. Feger H, Breidenkamp J, eds. Messen und Testen. In: *Forschungsmethoden der Psychologie*. Vol 3. Göttingen, Germany: Hogrefe; 1983:604-692.
71. Jackson H. Remarks on evolution and dissolution of the nervous system. *J Mental Sci*. 1887;33:25-48.
72. Binswanger L. Bemerkungen zu der Arbeit Jaspers' "Kausale und verständliche Zusammenhänge zwischen Schicksal und Psychose bei der Dementia praecox". *Zeitschrift für Ärztliche Psychoanalyse*. 1913;1:383-390.
73. Binswanger L. *Ausgewählte Aufsätze und Vorträge*. Vol 1. *Zur Phänomenologischen Anthropologie*. 2nd ed. Bern, Switzerland: Francke; 1961.
74. Zutt JG. *Auf dem Wege zu einer anthropologischen Psychiatrie*. Berlin, Göttingen, Heidelberg, Germany: Springer; 1963.
75. Kulenkampff C. Zum Problem der abnormen Krise in der Psychiatrie. *Nervenarzt*. 1959;30:62.
76. Von Gebattel V. Gedanken zu einer anthropologischen Psychotherapie. In: Frankl VE, von Gebattel V, Schultz JH, eds. *Handbuch der Neurosenlehre und Psychotherapie*. Vol 3. Munich, Berlin, Germany: Urban und Schwarzenberg; 1959.
77. Kretschmer E. Die mehrdimensionale Struktur der Schizophrenien in Bezug auf ihre Therapie. *Z Psychother Med Psychol*. 1957;183-191.
78. Binswanger L. *Drei Formen missglückten Daseins. Verstiegtheit, Verschrobenheit, Manieriertheit*. Berlin, Germany: De Gruyter; 1956.
79. Heidegger M. *Sein und Zeit*. 10th ed. Tübingen, Germany: Niemeyer; 1963.
80. Jaspers K. *Philosophische Autobiographie. Um ein Kapitel zu Heidegger erweiterte Neuausgabe*. München, Germany: Piper; 1977.
81. Jaspers K, Bultmann R. *Myth & Christianity: an Inquiry into the Possibility of Religion Without Myth*. New York, NY: Doody Press; 1958:8-11.

82. Binswanger L. *Melancholie und Manie. Phänomenologische Studien*. Pfullingen, Germany: Neske; 1960.
83. Schneider K. Pathopsychologische Beiträge zur psychologischen Phänomenologie von Liebe und Mitfühlen. *Zschr ges Neurol Psychiat*. 1921;65:109-140.
84. Schneider K. *Die phänomenologische richtung in der psychiatrie. Philosophischer Anzeiger*. 1926;1:382-404.
85. Kisker KP. Die Heidelberger psychopathologie in der kritik. In: Janzarik W, ed. *Psychopathologie als Grundlagenwissenschaft*. Stuttgart, Germany: Enke; 1979:122-136.
86. Mundt C. Karl Jaspers. *Am J Psychiatry*. 1993;150:1244-1245.
87. Janzarik W. Jaspers, Kurt Schneider and the Heidelberg School of Psychiatry. *Hist Psychiatry*. 1998;9:241-252.
88. Mayer-Gross W, Slater E, Roth M. *Clinical Psychiatry*. 3rd ed. London, England: Baillière, Tindall & Cassell; 1969.
89. Trethowan WK. Book reviews. General Psychopathology by Karl Jaspers. *Br J Psychiatry*. 1963;109:698-699.
90. Havens LL. Karl Jaspers and American psychiatry. *Am J Psychiatry*. 1967;124:66-70.
91. Shepherd M. Books reconsidered. Karl Jaspers: General Psychopathology. *Br J Psychiatry*. 1982;141:310-312.
92. Slavney PR, McHugh PR. Explanation and understanding. In: Slavney PR, McHugh PR, eds. *Psychiatric Polarities*. Baltimore, MD: The Johns Hopkins University Press; 1987:29-44.
93. Harrison PJ. General psychopathology: Karl Jaspers. A trainee's view. *Br J Psychiatry*. 1991;159:300-302.
94. Berrios GE. Phenomenology and psychopathology. Was there ever a relationship? *Compr Psychiatry*. 1993;34:213-220.
95. Berrios GE. Jaspers and the first edition of Allgemeine Psychopathologie—reflection. *Br J Psychiatry*. 2013;202:433.
96. Andreasen NC. DSM and the death of phenomenology in America: an example of unintended consequences. *Schizophr Bull*. 2007;33:108-112.
97. Mishara AL, Fusar-Poli P. The phenomenology and neurobiology of delusion formation during psychosis onset: Jaspers, Truman symptoms, and aberrant salience. *Schizophr Bull*. 2013;39:278-286.
98. de Leon J. One hundred years of limited impact of Jaspers' General Psychopathology on US psychiatry. *J Nerv Ment Dis*. 2014;202:79-87.
99. Hoenig J, Hamilton MW. *Karl Jaspers General Psychopathology* (translation from German). Manchester, England: Manchester University Press; 1963.
100. Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: its application to schizophrenia. *Am J Psychiatry*. 1970;126:983-987.
101. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 3rd ed. Washington, DC: American Psychiatric Association; 1980.
102. Maj M. Mental disorders as "brain disorders" and Jaspers's legacy. *World Psychiatry*. 2013;12:1-3.
103. Broome MR. On Jaspers' general psychopathology—reflection. *Br J Psychiatry*. 2013;203:102.
104. Goldberg D. Karl Jaspers, general psychopathology—reflection. *Br J Psychiatry*. 2013;202:83.
105. Musalek M. Karl Jaspers and human-based psychiatry—reflection. *Br J Psychiatry*. 2013;202:306.
106. Sims A. Karl Jaspers—reflection. *Br J Psychiatry*. 2013;202:4.
107. Stanghellini G, Fuchs T, eds. *One Century of Karl Jaspers' General Psychopathology*. Oxford, UK: Oxford University Press; 2013.
108. Broome MR, Harland R, Owen GS, Stringaris A, eds. *The Maudsley Reader in Phenomenological Psychiatry*. New York, NY: Cambridge University Press; 2012.
109. Jaspers K. Zur Analyse der Trugwahrnehmungen (Leibhaftigkeit und Realitätsurteil). *Zeitschr ges Neurol Psychiat*. 1911;6:460-535.
110. Jaspers K. Die Trugwahrnehmungen. kritisches Referat. *Zeitschr ges Neurol Psychiat*. 1912:289-354.