

## COMMENT

## The Wernicke-Kleist-Leonhard School of Psychiatry

Gabor S. Ungvari

The lack of clinically homogenous cohorts of functional psychoses remains a major obstacle to further advances in biological psychiatry. In view of this fact, it seems appropriate to call attention to the teachings of the Wernicke-Kleist-Leonhard school largely ignored by Anglo-American psychiatry. This classical school of thought represents a radical departure from the traditions of Kraepelin, Bleuler, and Schneider, which underpin current classifications of schizophrenic and affective psychoses.

Although well-known for his work on aphasia, *Carl Wernicke* (1848-1905) is one of the undeservedly forgotten pioneers of biological psychiatry. Wernicke's efforts to explain psychiatric disorders with his "sejunction" hypothesis, a comprehensive neuropathological framework, were branded as "brain mythology" by Jaspers (Jaspers 1963) while paying tribute to Wernicke's contribution to descriptive psychopathology. Briefly, sejunction means disruption in the interconnections between different neural systems, thus giving rise to loss of function, hyperfunction, and parafunction. For instance, in the area of psychomotility, sejunction may result in akinesia (psychomotor retardation), hyperkinesia (motor excitement), or parakinesia (e.g., mannerisms, choreiform movements). Wernicke's hypothesis of psychic functions and their impairment is in keeping with the tenets of modern neuroscience, implying a dynamic interplay between different neural systems rather than assuming a one-to-one correspondence of psychic functions to morphological substrates. In the light of recent reappraisals of Wernicke's notions on the relationship between psychopathology and brain pathology (e.g., Franzek 1990), Jaspers' deprecating label does not seem to be justified.

Wernicke's major psychiatric work, *Grundriss der Psychiatrie in klinischen Vorlesungen* (Wernicke 1900), not yet available in English, contains original descriptions of disorders of psychomotility (e.g., akinesia, hyperkinesia), speech and thought (e.g., overvalued ideas, transitivismus), and the complex phenomenon of perplexity. His early death prevented him from mounting a challenge to the prevailing Krapelinian nosology by developing a comprehensive system of psychiatric diseases.

Wernicke's neurological orientation in psychiatry was carried further by his pupil, *Karl Kleist* (1879-1960), an eminent neurologist and astute clinical observer. Kleist developed a complicated general psychopathology based on his experience, gained mostly from the study of traumatic brain injuries (for a brief review see Teichmann 1990). His scheme of the disorders of psychomotility, probably the most detailed ever produced in psychiatry, formed the psychopathological basis of his subdivision of catatonia. The conception of the unipolar-bipolar dichotomy of affective disorders, usually attributed to Leonhard, was in fact originally conceived by Kleist and his associates (Teichmann 1990). Kleist also delineated the cycloid psychoses from the group of affective psychoses. Kleist and his associates at the Frankfurt Clinic were the first to conduct systematic, large-scale follow-up studies of the affective psychoses and the group of schizophrenias.

Kleist broke new ground in biological psychiatry by bringing together carefully described clinical syndromes and brain pathology into a coherent classification encompassing the whole range of psychiatric illnesses. Drawing on his vast experience with brain-damaged soldiers during World War I, and also influenced by the correspondence between symptoms and anatomical lesions seen in certain neurodegenerative system diseases, Kleist postulated various subtle systemic brain damage underlying his classification of schizophrenic psychoses ("psychic system diseases" in his terminology, Kleist 1923).

Kleist's views have not gained popularity for a number

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of reasons. First, his most productive years coincided with the rise and heyday of psychoanalysis. Second, at that time his attempts at localizing psychic symptoms in the brain appeared to be a futile exercise even to mainstream psychiatry, which tended to dismiss him as "cerebral localizer" (Mayer-Gross et al 1969, p 13). In hindsight, however, it is clear that his contentions were by no means as naive or exaggerated as they were perceived to be by his contemporaries (Teichmann 1990). Third, when Fish (1957) applied Kleist's classification to a cohort of chronic schizophrenic patients, he found it too complicated and cumbersome to use. Nevertheless, it would be premature to discard completely Kleist's schizophrenia classification solely on the basis of Fish's study, which was but an early attempt to establish clinical validity, and as such, did not employ methods of standardized clinical assessments.

Kleist's contribution to the biological foundations of psychiatry has yet to be properly evaluated. A fraction of his extensive writings that have been translated into English include the outline of his classification of schizophrenias (Kleist 1960), an overview of atypical ("degeneration") psychoses (Kleist 1974) and an essay on the clinical phenomena of paralogia and alogia and their neural substrates (Kleist 1987).

Kleist's disciple, *Karl Leonhard* (1904-1988), accepted his teacher's concept of the schizophrenias as "psychic system diseases" but, though he was a skilled neurologist, he did not elaborate on the neuropathology of endogenous psychoses. Instead, he turned to genetics in his quest for an etiological hypothesis. He devoted almost 60 years' of tireless clinical research to modify and further develop Kleist's classification. The Leonhardian classification is not "atheoretical" as it has been conceptualized in modern diagnostic systems. Leonhard's aim was to establish a nosology of endogenous psychoses comprising distinct disease entities in the classical Kahlbaum-Kraepelinian sense by linking cross-sectional psychopathology with course, outcome, family history, and a largely hypothetical etiology. What is important for the reexamination of Leonhard's classification is the fact that the outmoded and rather simple etiological and pathogenetic hypotheses, such as Leonhard's adherence to the Mendelian laws of inheritance, can be separated from his clinical descriptions without calling into question the applicability of the clinical observations themselves. Therefore, despite its direct link with the Wernicke-Kleist school of "cerebral localizers," Leonhard's classification of affective, cycloid, and schizophrenic psychoses remains an empirical and descriptive system based on painstakingly meticulous, longitudinal clinical observations yielding sharply delineated subtypes within the three major groupings of psychoses. In addition to his own monograph (Leonhard 1979), extensive reviews

on the Leonhardian nosology are available in English (e.g., Fish 1958; Ban 1982).

Leonhard's bold claim to have established a natural system of endogenous psychoses has been met in the literature with dismissal, disbelief, or at best irony. It is important to emphasize that his clinical approach differs from those of any current classifications derived from the Kraepelin-Bleuler-Schneiderian traditions, not only in the scope of elementary psychopathological phenomena it embraces, but also in its underlying principles. Because Leonhard first formulated his subtypes in chronic patients and then validated them in patients in the early stages of illness, his diagnoses imply prognostic prediction, that is, they are true life-time diagnoses. This "backward" direction of his classification system enabled Leonhard to identify the most persistent signs and symptoms as characteristics of a particular subtype during its natural history.

The description of subtypes hinges on a prominent symptom being consistently associated, according to Leonhard's long-term follow-up studies, with a halo of less specific symptoms thus forming an unmistakably specific clinical picture. For example, refining Kraepelin and Kleist's description of confabulatory paraphrenia, Leonhard repeatedly observed that confabulatory delusions have a grandiose flavor and nearly always coexist with memory falsifications, slightly elevated mood, and a nonchalant attitude constituting the core of this subtype of paranoid schizophrenia. Furthermore, Leonhard's observations suggested that commenting/imperative choices and/or ideas of reference can occasionally be encountered for a short period without ever gaining prominence or overshadowing the core features, which are present throughout the course of the illness.

At this point in its development the Leonhardian classification is no more than an empirically derived, well-elaborated clinical hypothesis, the validation of which has yet to be completed using currently available sophisticated methods. Not even ardent followers of Leonhard expect his whole system to be validated. The realistic expectation is that the general principles of subdivision of schizophrenia and also some of his subtypes, undoubtedly in a revised and modified form, could survive the scrutiny of modern validation procedures. So far the preliminary results are encouraging. Besides Leonhard's own follow-up and family studies (Leonhard 1979; Trostorf and Leonhard 1990), several other investigators (e.g., Fish 1958; Perris 1974; Cutting et al 1978; Astrup 1979) have established the clinical validity of the Leonhardian subtypes of cycloid and schizophrenic psychoses. More recent reports using contemporary methods of inquiry (e.g., Brockington et al 1972; Maj 1990; Beckmann et al 1990; Franzek and Beckmann 1991; Jonsson et al 1991; Franzek and Beckmann 1992) have given further credence to the descriptive

validity of the cycloid and schizophrenic psychoses, whereas treatment response studies have supported the validity of the systematic-nonsystematic dichotomy of schizophrenias (Fish 1964; Astrup and Fish 1964; Ban 1990; Beckmann et al 1992). Biological investigations attempting to validate Leonhard's classification have just begun (e.g., Warkentin et al 1992). All in all, the evidence accumulated so far is not overwhelming, but it is certainly strong enough to warrant further clinical and biological studies.

The significance of Leonhard's classification lies in its heuristic value, that is, its potential to provide clinically homogenous subgroups of nonorganic psychoses for biological research. Methodological shortcomings of Leonhard's own studies, such as their reliance on Mendelian genetics, lack of operationalized diagnostic criteria, reliability studies and blind family studies, and so on, bear the stamp of the era when the system was developed. However, there has been some progress in this respect. In the past 10 years a detailed diagnostic guide (Ban 1982), operationalized diagnostic criteria for research with accompanying glossary (Petho and Ban 1988) and a diagnostic schedule (Fritze and Lanczik 1990) have been published. Commencement of clinical and biological validation studies awaits examination of the reliability of these instruments and construction of a standardized interview schedule.

To reach a diagnosis according to the Leonhardian nosology in most cases requires repeated personal interviews and careful observation. Hence the reluctance of investigations to embark on a systematic revision of Leonhard's

classification. However, the reward could be substantial, as the diagnostic process promises stable and very specific subtype diagnoses with prognostic implications. The differentiation of the 38 basic subtypes of endogenous psychoses is a time-consuming and difficult, albeit not impossible, exercise requiring extended apprenticeship training with an experienced clinician. For this reason, when setting out to investigate Leonhard's classification, the researcher would face a daunting task in terms of the number of patients required, the time-frame, costs, and logistics of such a study.

Because of its relative complexity and remote similarity with the Kraepelin-Bleulerian subdivision of functional psychoses familiar to English-speaking psychiatrists and allied mental health professionals, the widespread application of Leonhard's classification to clinical practice in the near future is highly unlikely. Without considerable simplification the system is definitely not user-friendly and could not serve the educational and public health interests in the manner expected of a modern classification.

When Leonhard's *Aufteilung der endogenen Psychosen* appeared in an English translation in 1979, Robins predicted that it would "make a significant difference in the way in which both American psychiatrists and psychiatrists from other countries look at psychotic disorders" (Robins 1979 p vi). Unfortunately this prediction has not come true so far, although the Wernicke-Kleist-Leonhard school in general, and Leonhard's classification of endogenous psychoses in particular, undoubtedly deserve a thorough appraisal.

## References

- Astrup C (1979): *The Chronic Schizophrenias*. New York: Columbia University Press.
- Astrup C, Fish F (1964): The response of the different Leonhard subgroups of schizophrenia to psychotropic drugs. *Folia Psychiatr Neurol Japonica* 18:133-140.
- Ban TA (1982): Chronic schizophrenias: A guide to Leonhard's classification. *Compr Psychiatry* 23:255-265.
- Ban TA (1990): Clinical pharmacology and Leonhard's classification of endogenous psychoses. *Psychopathology* 23:331-338.
- Beckmann H, Fritze J, Lanczik M (1990): Prognostic validity of the cycloid psychoses. *Psychopathology* 23:205-212.
- Beckmann H, Fritze J, Franzek E (1992): The influence of neuroleptics on specific syndromes and symptoms in schizophrenics with unfavourable long-term course. *Neuropsychobiology* 26:50-58.
- Brockington IF, Perris C, Meltzer HV (1982): Cycloid psychosis. Diagnostic and heuristic value. *J Nerv Ment Dis* 170:651-656.
- Cutting JC, Clare AW, Mann AH (1978): Cycloid psychosis: An investigation of the diagnostic concept. *Psychol Med* 8:637-648.
- Fish FJ (1957): The classification of schizophrenia. *J Ment Sci* 103:443-463.
- Fish FJ (1958): Leonhard's classification of schizophrenia. *J Ment Sci* 104:943-971.
- Fish FJ (1964): The influence of tranquilizers on the Leonhard schizophrenic syndromes. *Encephale* 53:245-249.
- Franzek E (1990): Influence of Carl Wernicke on Karl Leonhard's nosology. *Psychopathology* 23:277-281.
- Franzek E, Beckmann H (1991): Syndrom- und Symptomenentwicklung schizophrener Langzeitverlaufe. *Nervenarzt* 62:549-556.
- Franzek E, Beckmann H (1992): Schizophrenia: Not a disease entity? A study of 57 long-term hospitalized chronic schizophrenics. *Eur J Psychiatry* 6:97-108.
- Fritze J, Lanczik M (1990): Schedule for operationalized diagnosis according to the Leonhard classification of endogenous psychoses. *Psychopathology* 23:303-315.
- Jaspers K (1963): *General Psychopathology* (transl. Hoenig J, Hamilton MW) Manchester: Manchester University Press.
- Jonsson SAT, Jonsson H, Nyman AK, Nyman GE (1991): The concept of cycloid psychosis: sensitivity and specificity of

- syndromes derived by multivariate clustering techniques. *Acta Psychiatr Scand* 83:353-362.
- Kleist K (1923): Die Auffassung der Schizophrenien als psychische Systemerkrankungen (Heredodegenerationen). *Klin Wschr* 2:962-963.
- Kleist K (1960): Schizophrenic symptoms and cerebral pathology. *J Ment Sci* 106:246-255.
- Kleist K (1974): Cycloid, paranoid and epileptoid psychoses and the problem of degenerative psychoses. In Hirsch SR, Shepherd M (eds), *Themes and Variations in European Psychiatry*. Bristol: Wright, pp 297-332.
- Kleist K (1987): Alogical thought disorder: An organic manifestation of the schizophrenic psychological deficit. In Cutting J, Shepherd M (eds), *The Clinical Roots of the Schizophrenia Concept*. Cambridge: Cambridge University Press, pp 75-78.
- Leonhard K (1979): *The Classification of Endogenous Psychoses*. 5th ed. (transl. Berman, R) New York: Irvington.
- Maj M (1990): Cycloid psychotic disorder: Validation of the concept by means of a follow-up and a family study. *Psychopathology* 23:196-204.
- Mayer-Gross W, Slater E, Roth M (1969): *Clinical Psychiatry* 3rd ed. London: Bailliere Tindall.
- Perris C (1974): A study of cycloid psychosis. *Acta Psychiatr Scand* (suppl) 253, pp 1-75.
- Petho B, Ban TA (1988): DCR Budapest-Nashville in the diagnosis and classification of functional psychoses. *Psychopathology* 21:153-240.
- Robins E (1979): Foreword. In Leonhard K, *The Classification of Endogenous Psychoses*. New York: Irvington, pp v-vi.
- Teichmann G (1990): The influence of Karl Kleist on the nosology of Karl Leonhard. *Psychopathology* 23:267-276.
- Trostorff S, Leonhard K (1990): Catamnesis of endogenous psychoses according to the differential diagnostic method of Karl Leonhard. *Psychopathology* 23:259-262.
- Warkentin S, Nilsson A, Karlson S, Risberg J, Franze'n G, Gustafson L (1992): Cycloid psychosis: Regional cerebral flow correlates of a psychotic episode. *Acta Psychiatr Scand* 85:23-29.
- Wernicke C (1990): *Grundriss der Psychiatrie in klinischen Vorlesungen*. Leipzig: Thieme.

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## Leonhard's classification of schizophrenia: A plea for attention

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The classification of schizophrenia proposed by Karl Leonhard (1979) is probably the most meticulously elaborated attempt to subdivide these psychoses to date. Drawing on nearly 60 years of personally conducted long-term follow-up and family studies, Leonhard delineated sharply circumscribed subtypes entailing prognostic predictions. His system is a purely empirical clinical classification based on easily observable and/or elicitable signs and symptoms encompassing a considerable larger domain of descriptive psychopathology than does current clinical or research practice.

Leonhard is customarily regarded as a follower of the Wernicke-Kleist school of thought. In Kleist and Leonhard's interpretation, schizophrenic psychoses are subtle brain disorders (Leonhard, 1979), a view based on Kleist's extensive neurological and neuropathological experience gained during World War I (Kleist, 1934). Kleist and Leonhard built their respective nosologies of schizophrenias on their assumed similarity with systemic neurological diseases (Kleist, 1923; Leonhard, 1979). Instead of elaborating on the neuropathology of schizophrenia, Leonhard focused on refining Kleist's clinical descriptions and turned to genetics in his quest for etiological hypotheses.

To modern researchers, the shortcomings of Leonhard's nosology concerning methodology and

etiopathogenetic assumptions are obvious. Clearly, there is a discrepancy between the unsophisticated research methods and the subtle clinical descriptions in his writings. Leonhard's concept of the unipolar-bipolar dichotomy of affective disorders and his cycloid psychosis category have gained some recognition in Anglo-American psychiatry. Although his subdivision of schizophrenia has received less attention, ample evidence has been accumulated in the last four decades attesting to its descriptive validity. The results of Fish and Astrup's early clinical, psychopharmacological and psychophysiological investigations (Fish, 1964; Astrup, 1962) have been supported by recent clinical, treatment response and genetic studies (e.g. Ban, 1990; Beckmann et al., 1992). Over the past decade three different sets of operationalized diagnostic criteria for Leonhard's schizophrenia classification have been published (Ban, 1982; Petho and Ban, 1988; Fritze and Lanczik, 1990). However, the development of a structured interview schedule and comprehensive reliability studies are still lacking. In view of the complexity of the Leonhardian classification - there are 16 basic subtypes of schizophrenia - to conduct such studies would be a time-consuming, albeit technically not impossible, task.

Despite the innovative clinical descriptions, the acceptance of Leonhard's classification has been hampered by his speculative etiological hypotheses. However, the outmoded etiological and pathogenetical constructs, such as his adherence to the

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Mendelian laws of inheritance, have remained unrelated to the phenomenology. Therefore they do not call into question the applicability of the clinical concept itself.

Leonhard's classification, firmly rooted in the rich psychopathological tradition of Wernicke and Kleist, represents a radical departure from Kraepelin's and Schneider's views. Unlike Kraepelin, Leonhard distinguished three major groups of endogenous psychoses, viz. affective disorders, cycloid psychoses and the schizophrenias. In subdividing schizophrenia he incorporated, albeit modifying their content, some of Kraepelin's lesser known schizophrenia and paraphrenia subtypes (e.g. schizophasia, paraphrenia phantastica). For Leonhard, symptoms, and not the clinical course, are the pivotal factors in classifying endogenous psychoses although diagnoses carry prognostic implications. Recent classifications are either based on the Kraepelinian tradition (e.g. Feighner criteria, RDC, DSM-III-R) or the negative-positive dichotomy (e.g. Crow's Types I and II). They show little, if any, similarity to Leonhard's nosology. Liddle's three-syndrome concept bears some resemblance to Leonhard's three-tiered subdivision of systematic schizophrenias. Whether there is a real overlap remains to be investigated.

We submit that, deprived of its etiological assumptions, Leonhard's scrupulously elaborated clinical system built on the solid empirical foundation of direct clinical observation meets the premises and expectations of the modern 'atheoretical' descriptive nosology, in as much as Kraepelin's division of functional psychoses has done. The idea to operationalize Kraepelin's concept of endogenous psychoses in modern American psychiatry was an expedient decision to maintain continuity with diagnostic traditions, while missing out on a broader range of psychopathological phenomena embraced by the Leonhardian system. It is our view, therefore, that the ignorance of Leonhard's classification in Anglo-American psychiatry is not derived from an incongruity between Leonhard's subdivision of schizophrenia and the fundamental principles underlying classifications.

The ballast of speculative etiological hypotheses accompanying the clinical descriptions and the

lack of adequate access to the original sources, most of which were published in German many years ago, are some of the reasons why Anglo-American psychiatry has failed to recognize the heuristic value of the Leonhardian nosology. The need for a prolonged clinical training is another obstacle to the acceptance of Leonhard's diagnostic system. To acquire the proficiency necessary in diagnosing 16 subtypes of schizophrenia requires extensive training and supervision by an experienced clinician. Although Leonhard's system exceeds existing classifications in the coverage of symptoms, the difficulty of achieving an acceptable level of reliability could be another hindrance in its application in research settings.

Despite the considerable, albeit not insurmountable, practical difficulties, the rediscovery of Leonhard's classification has begun in continental European psychiatry (e.g. Beckmann and Lanczik, 1990). It seems logical that the pursuit of alternative classifications should eventually lead to a reappraisal of Leonhard's concept of schizophrenia in Anglo-American psychiatry.

#### References

- Astrup, Ch. (1962) *Conditional Reflex Studies*. Thomas, Springfield, IL.
- Ban, T.A. (1982) Chronic schizophrenia: a guide to Leonhard's classification. *Compr. Psychiatry* 23, 155-169
- Ban, T.A. (1990) Clinical pharmacology and Leonhard's classification of endogenous psychoses. *Psychopathology* 23, 331-338.
- Beckmann, H. and Lanczik, M. (Eds.) (1990) *Leonhard Classification of Endogenous Psychoses*. Karger, Basel, 1990.
- Beckmann, H., Fritze, J. and Franzek, B. (1992) The influence of neuroleptics on specific syndromes and symptoms in schizophrenics with unfavourable long-term course. *Neuropsychobiology* 26, 50-58.
- Fish, F.J. (1964) The influence of tranquilizers on the Leonhard schizophrenic syndromes. *Encephale* 53, 245-249.
- Fritze, J. and Lanczik, M. (1990) Schedule for operational diagnosis according to the Leonhard classification of endogenous psychoses. *Psychopathology* 23, 303-315.
- Kleist, K. (1923) *Die Auffassung der Schizophrenien als psychische Systemerkrankungen (Heredodegenerationen)*. *Klin. Wochenschr.* 2, 962-963.
- Kleist, K. (1934) *Gehirnpathologie*. Barth, Leipzig.
- Leonhard, K. (1979) *The Classification of Endogenous Psychoses*. (Translated by R. Berman) Irvington, New York, NY.
- Petho, B. and Ban, T.A. (1988) DCR Budapest-Nashville in the diagnosis and classification of functional psychoses. *Psychopathology*, 21, 155-240.

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# **Endogenous Psychoses**

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Editor: M. Linz: The classification of Basic Symptoms. New York (1987)

Editor: M. Linz: The classification of Basic Symptoms. New York (1987)

19. Schneider, K.: Klinische Psychopathologie. 14th unchanged ed. with commentary by G. Huber and G. Gross. Thieme - Stuttgart - New York (1992)

## 2.2 The Price of Pragmatism - Comments on the Lack of Recognition of Leonhard's Nosological System in Contemporary Anglo-Saxon Psychiatry

Gabor S. Ungvari, John D. Little, Paul M. Hantz and Paul E. Mullen

The nosology of functional psychoses devised by Karl Leonhard is arguably the most detailed and comprehensive system produced in clinical psychiatry. Firmly rooted in the clinical tradition of Wernicke and Kleist, the Leonhardian nosology is based on painstakingly meticulous and dispassionate observation and subsequent description of the patient's behaviour and experiences. Drawing on personally conducted, long-term clinical observations, follow-up investigations and family studies on chronic patients as the main methods of inquiry, Leonhard delineated sharply circumscribed clinical disease entities, each with specific prognostic implications. Leonhard's is a purely *empirical* clinical classification based on easily observable and/or elicitable signs and symptoms, the scope of which stretches beyond current clinical and research practice.

Certain shortcomings of Leonhard's classification regarding methodological issues and etiological assumptions stem from the particular era during which the system was developed. It is not surprising, therefore, that there is a gap in terms of the degree of sophistication between the refined clinical descriptions and the research methodology used by Leonhard.

However, methodological pitfalls of Leonhard's system, such as the lack of explicit, operationalized diagnostic criteria and lack of

reliability studies are not insurmountable and can be rectified (Ban, 1982; Fritze; Pethö, 1988). Obviously, most of the etiological assumptions need to be revisited and modified, especially Leonhard's adherence to the simple laws of Mendelian inheritance. The international acceptance of the Leonhardian classification, just like those of Wernicke's and Kleist's in the past, has been hampered by speculative etiological hypotheses. The outdated theoretical hypotheses, nevertheless, remained unrelated to the phenomenology in Leonhard's system and, therefore, do not cast doubt on the validity of the *clinical descriptions themselves*.

All these aspects of the Leonhardian nosology make it ideally suited for clinical and biological research. In spite of the great advantage it offers, the Leonhardian classification has remained largely unknown in Anglo-Saxon psychiatry. In spite of publications in English (e.g. Perris) and the great efforts to operationalize Leonhard's narrative classification (Ban, 1982; Fritze; Pethö, 1988), the fact remains that Leonhard is rarely cited, probably even less frequently read and hardly ever applied in clinical practice and/or research.

There is an intricate web of philosophical, socio-cultural and professional reasons, inherent in the nature of psychiatric practice and research, as to why the Leonhardian nosology has never been subjected to comprehensive clinical and/or biological studies in Anglo-Saxon psychiatry. Space limitations, however, allow us to outline only few of these reasons in this paper.

The philosophical underpinnings of the most influential American classificatory system, DSM-III-R, hark back to an early English empiricist, Bacon, who "strove toward minimizing or eliminating presupposition, unnecessary theorizing and higher level abstraction in order to make science factual and object" (Faust, 1986). The introduction of operationalized definitions, the major methodological innovation in DSM-III, was suggested by Carl Hempel, a prominent logical empiricist. The philosophical background of this shift from psychodynamic theories, based on empathy, intuition and inference (hermeneutic approach), to purportedly purely objective



descriptions (empirical/positivist approach) espoused by DSM-III, is amply detailed and criticized in the current literature (e.g. Schwartz, 1986).

It is important to emphasize that we are not arguing against objectivity as approximated by operationally defined diagnostic criteria or the measurement of reliability. We submit that Leohnard's scrupulously described subtypes of non-organic psychoses provide "ideal types" in Jasper's sense and that these have enough heuristic value to be tested, modified and, eventually, developed further. The ideal types postulated by Leohnard meet the premises and expectations of the empirical-positivist descriptions of psychiatry not less than Kraepelin's division of functional psychoses does. It is our view that the ignorance of Leohnard's classification in Anglo-Saxon psychiatry is not derived from incongruity of fundamental principles. It rather originates from the vastly different social and political climate of practice and research present in psychiatry in the past few decades. Because of its practical implication, the Leohnardian classification would be difficult to accommodate in the current Anglo-Saxon diagnostic practice. A subtype diagnosis according to Leohnard usually requires repeated, personally conducted interviews and intensive observation lasting several hours.

Contemporary psychiatry persistently overrates the experiential aspects of examination at the expense of the observational ones. This reduction in the scope of inquiry found its scientific support in Kendell's well known diagnostic experiments (Kendell, 1985). In the method of best estimate lifetime diagnosis (Leckman, 1982), the most advanced diagnostic procedure to date, used by leading American research centres (e.g. Gershon, 1988), different parts of the history and the mental state are collected by different research workers while the final diagnosis is established by the principal investigator on the basis of transcripts. In the last three decades profound changes have taken place in the social context of psychiatric practice and research. Their impact affects, among other things, the role of the psychiatrist in the mental health system as well as in diagnostic practice. Pertinent to our topic is

the split that has developed between the roles of the practising clinician and the researcher. Leohnard, as were all his predecessors and contemporaries, was primarily a *clinical* scientist who developed, revised and modified his views according to his experience gained by the examination of thousands of patients and relatives over nearly six decades. In modern psychiatric research clinical input is provided by rating scales and diagnostic schedules mostly employed by trained paramedical staff. Likewise, in every-day practice, the role of the psychiatrist, as a member of the multidisciplinary team, has undergone fundamental changes. Restructuring a regional psychiatric service in the United Kingdom resulted in psychiatrists having access to "less than 20% of the total case-load" (Freeman, 1992). Furthermore, market forces in the form of managed care and utilization review boards in the United States and the privatization of mental health services elsewhere tend to dilute professional values. Evidently in this climate the expectations from a classificatory system have changed considerably. In addition to their clinical and scientific objectives and goals, modern diagnostic systems have to satisfy educational and public health interests, as well. Unequivocal and simple formulations, therefore, are essential characteristics. Moreover, current classifications are the product of consensus reached by collating, and compromising, the views of several hundred psychiatrists belonging to different cultures and schools of thought.

Although not poised for an immediate international breakthrough there are signs indicating that Anglo-American psychiatry might rediscover Leohnard's long neglected nosology. It seems plausible that the call for exploring alternative classifications (e.g. Fenton, 1991) will eventually lead to the reappraisal of Leohnard's classification.

References

1. Ban, T.A.: Chronic schizophrenias: a guide to Leohnard's classification. Compr Psychiatry - Philadelphia PA 23 (1982) 155-165  
2. Faust, D., R.A. Minder: The empiricist and his new clothes: DSM-III in perspective. Am J Psychiatry - Washington DC 143 (1986) 962-967

3. Fenton, W.S., T.H. Mcschizophrenia subtypes. Arch 48 (1991) 969-977  
4. Freeman, H.: Evaluation of schizophrenia - London 161 (15  
5. Fritze, J., Lanczyl, M.: diagnosis according to the endogenous psychoses. Ps (1990) 303-315  
6. Gershon, E.S., L.E. Delrolled family study of chronicity - Chicago III. 45 (197 Kendell, R.E.: The role Oxford, Blackwell (1985)  
8. Leckman, J.F., D. Sholal. Best estimate of lifetime Gen Psychiatry - Chicago III 9. Ferris, C.: A study of cy at Scand Suppl - Copenhagen 10. Petib, B., T.A. Ban: Dx diagnosis and classification. chopathology - Basel 21 (19 11. Schwartz, M.A., O.P. and psychiatric classification delpia III. 27 (1986) 101-11

2.3 Structure of Psych Powers in Biology by Karl Leohnard

Hans-Walter Leohnard

Karl Leohnard regarded *teiling* (1) as his second and *teiling* (2) as his second in partly attributable to it which a brief account vter.

K. Leohnard's psych research

Three perspectives of "scientific" psychology in Erlangen (3), the following distinctive context:

between the roles of the clinician and the researcher. Predecessors and contemporaries of a clinical scientist modified his views on the practice gained by the treatment of patients and relationships. In modern psychiatry, diagnosis is provided by raters, schedules mostly used by medical staff.

In practice, the role of the clinician of the multidisciplinary approach of the fundamental regional psychiatric nosology resulted in psychoses less than 20% of the total (1992). Furthermore, the management of care and the role of the United States mental health services reflect professional values.

The expectations have changed concerning clinical and scientific modern diagnostic nosology and public opinion are equivocal and similar. The essential characteristic classifications reached by collating the views of several nosologists differing to different degrees.

In the immediate interwar period, signs indicating that psychiatry might rediscover nosology. It is for exploring alternative nosology (Fenton, 1991) will be a reanalysis of Leonhard's

nosology: a guide to Leonhard's psychiatry - Philadelphia PA

empiricist and his new nosology in J Psychiatry - Wash-

3. Fenton, W.S., T.H. McGlashan: Natural history of schizophrenia subtypes. Arch Gen Psychiatry - Chicago Ill. 48 (1991) 969-977
4. Freeman, H.: Evaluation in mental health care. Br J Psychiatry - London 161 (1992) 1-2
5. Fritze, J., Lanczik, M.: Schedule for operationalized diagnosis according to the Leonhard classification of endogenous psychoses. Psychopathology - Basel 23 (1990) 303-315
6. Gershon, E.S., L.E. DeLisi, J. Hamovit et al.: A controlled family study of chronic psychoses. Arch Gen Psychiatry - Chicago Ill. 45 (1988) 328-336
7. Kendell, R.E.: The role of diagnosis in psychiatry. Oxford, Blackwell (1985)
8. Leckmann, J.F., D. Sholomskas, W.D. Thompson et al.: Best estimate of lifetime psychiatric diagnosis. Arch Gen Psychiatry - Chicago Ill. 39 (1982) 879-883
9. Perris, C.: A study of cycloid psychoses. Acta Psychiatr Scand Suppl - Copenhagen 243 (1974) 1-75
10. Pethö, B., T.A. Ban: DCR Budapest-Nashville in the diagnosis and classification of functional psychoses. Psychopathology - Basel 21 (1988) 153-239
11. Schwartz, M.A., O.P. Wiggins: Logical empiricism and psychiatric classification. Compr Psychiatry - Philadelphia Ill. 27 (1986) 101-113

### 2.3

#### Structure of Psychic Features and Powers in *Biologische Psychologie* by Karl Leonhard

Hans-Walter Leonhard

Karl Leonhard regarded *Biologische Psychologie* (1) as his second major work, next to *Aufteilung* (2). It is, however, hardly known. This is partly attributable to its method of research of which a brief account will be given in this chapter.

#### K. Leonhard's psychological method of research

Three perspectives of equal standing to achieve "scientific psychological statements" were recently described by Werbik, professor of psychology in Erlangen (3, p. 3). He suggested that the following distinctions could be made in that context:

- The perspective of the experiencing subject. Statements from this perspective are rooted in inner perception, that is introspection.
- The perspective of an interlocutor. Statements from this perspective are rooted in "attempts at confidential communication" (3, p. 4).
- The perspective of an observer. Statements from this perspective are primarily based on experiments in which probands are subjected to defined conditions, and alterations in their manifest behaviour are recorded.

Werbik criticizes that in psychology the third procedure is largely thought to be the only scientific method, while the other methods are rejected. One may probably guess from familiarity with K. Leonhard's psychiatric work that his efforts in psychology were based neither on empiricism nor on experimentation. He rather relied primarily on introspection. Since introspection is a particularly controversial notion or is simply not accepted at all, attention may have to be given in greater detail to the reasons for his choice of this method which may be quoted as follows:

"Any psychology which is primarily based on experiment tends to remain ivory-towered, as it may not in the least imitate reality. ... As opposed to the variety of psychic events, an experiment is merely an unsatisfying instrument of research. ... This method of introspection has always been rejected by some psychologists, as they missed an indication of objectivity in the line of argumentation. This, however, means neglecting that more exact psychological statements cannot be achieved unless these means are used. ...

Essentially, psychology as a whole, even experimental psychology, is based on this method. Most objective experiments could not be carried out in an appropriate form unless their implications and potential outcome had been realized beforehand by means of introspection. Moreover, many an experiment is likely to do nothing but confirm what introspection had shown before, maybe, more clearly and definitely. This implies that introspection is of utmost importance" (4, p. 7).

With this view, considering the dominance of experimentally orientated psychology, Leonhard was very much of an outsider.