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8

Personality Disorders

Edited by

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In Memory of Paul E. Meehl

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Preface

This eighth volume of the WPA series ''Evidence and Experience in Psychiatry''—the most extensive of the series and the one which took the longest time to complete—reflects the complexity of the ongoing debate on the diagnosis and management of personality disorders.

Many aspects of the current conceptualization and classification of these disorders emerge as problematic from the six reviews, the eighty commentaries and the epilogue composing the book.

The present general definition of a personality disorder is the first of these aspects. On the one hand, it appears debatable whether the ''dysfunction-distress'' criterion is really fulfilled by all the conditions currently classified as personality disorders (see, for instance, the reviews on the obsessive-compulsive, narcissistic and schizoid disorders), which has obvious consequences for help seeking and adherence to treatment. On the other hand, it seems questionable whether all the above conditions really represent ''enduring patterns of experience and behavior'', since more than a half of people with a DSM-IV diagnosis of a personality disorder do not show diagnostic stability even over a one-year period.

The issue of the relationship and the boundary between ''normal'' personality traits and personality disorders is certainly another critical one, recurring in almost all the chapters, and expanding into the debate about the advantages and limitations of a dimensional approach to the classification of these disorders, and on the pros and cons of the dimensional models which have been recently proposed (in particular, Widiger et al.'s five-factor model and Cloninger's tridimensional approach).

Another recurring theme is the mixture of traits, behaviors and symptoms in the current definition of several personality disorders, so that some of them (notably, schizotypal and borderline disorders) appear like ''syndromes'', which would be better accommodated in the DSM-IV Axis I (analogously to what the ICD-10 has done for schizotypal disorder). This is related to the critical question of the boundary between DSM-IV Axis I and II disorders, which emerges as particularly relevant in the case of Cluster A disorders (with respect to schizophrenia) and Cluster C disorders (with respect to major depression and anxiety disorders).

Finally, the issue of the extremely high frequency of probably spurious comorbidity between the various personality disorders (and in particular between some of them, even belonging to different DSM-IV clusters) emerges repeatedly as an indicator of the questionable validity of current classification systems in this area.

Additional concerns which are expressed more sporadically throughout the book, but appear not less significant, are those about the validity of personality assessments carried out by questionnaires in the absence of any external source of information (will people with obsessive-compulsive or narcissistic personality traits admit these traits when requested directly?); the dramatic cross-cultural variability in the expression of personality traits, in the meaning of these traits and in the ''threshold'' for pathology; and the impact of experts' opinions and fashions, in the absence of solid empirical evidence, on the history of several personality disorders.

The last chapter of the book deals with the contemporary renaissance of the ancient temperament approach to personology. This approach emphasizes not only what makes an individual vulnerable to emotional excesses or breakdowns, but also the positive adaptive potential in each temperament type. The conceptual model of temperament is vital for clinical work, because it balances countertransference with what makes therapeutic alliance possible.

The overall impression is that of an area in which a significant change in the approach to classification is now overdue. The hope is that this volume will be of some usefulness in this respect, by providing an overview of the research evidence and the possible solutions to the current problems, and allowing a direct comparison of the state of the art for the various groups of disorders.

The other critical area covered in the volume is that of the management of personality disorders. This is a problem which is emerging as extremely important throughout the world: the more widespread becomes the awareness—not only among psychiatrists and other mental health professionals, but also in the general public—of the broad range and high prevalence of personality disorders, the more the current shortage of empirical evidence concerning the treatment of these conditions becomes a matter of concern. This volume emphasizes the need for well-designed studies in this area, but also reviews what has been done up to now, which appears promising even in areas traditionally dominated by pessimism and disenchantment (like that of antisocial personality disorder). The importance of the context where the treatment is carried out and of the therapeutic alliance which is established, when dealing with people with personality disorders, is a recurring theme in this respect.

It has taken more than two years to put this volume together and to amalgamate the various contributions. We hope that this effort will be

regarded as worthwhile by the readers, and that this book will be useful both to researchers, in their current work aimed to re-shape the classification of personality disorders, and to clinicians, in their daily struggle with these complex and demanding conditions.

Mario Maj
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CHAPTER

1

Cluster A Personality Disorders: A Review

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INTRODUCTION

Schizoid (SdPD), paranoid (PPD), and schizotypal (SPD) personality disorders together form the so-called Cluster A personality disorders of the DSM-IV classification [1], a cluster that is believed to bear a symptomatic and genetic relationship to schizophrenia. SPD is characterized by an ''odd'' pattern of affectivity and cognition, interpersonal isolation, and transient psychotic experiences. Introversion and lack of enjoyment from social relations, but an absence of the affective-cognitive peculiarities and sub-psychotic symptoms found in SPD, dominate the schizoid pattern. The criteria of PPD emphasize a distrustful, guarded attitude and suspiciousness-related interpersonal problems, and a lack of SPD-type peculiarities (for details see the section on clinical aspects). Individuals can be diagnosed with more than one of these disorders (because of the overlapping criteria) and, in clinical samples, SPD and PPD exhibit moderate to high levels of Axis I co-morbidity (especially with depression, anxiety, and substance abuse) [2,3].

The DSM's general definition of personality disorders emphasizes an ''enduring pattern of inner experience and behavior that (...) leads to distress or impairment'' [1]. As such, a schizoid person defined according to the DSM SdPD criteria (as well as a proportion of individuals with symptom patterns of SPD and PPD) would typically not fulfill such a dysfunction-distress criterion (e.g. one would not seek help from a doctor

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for disliking a talkative environment or because of harbouring a magical conviction).

It is important to realize that, in the ICD-10 [4], schizotypy is *not* a personality disorder, but is rather a *syndrome*, listed just after schizophrenia. This difference between the DSM and the ICD has important implications for clinical diagnosis, which are addressed at the end of this chapter. In an examination of cross-system concordance, diagnostic agreement between the DSM-IV and ICD-10 categories showed good agreement for PPD and schizotypy (PPD: Cohen's $\kappa = 0.74$; schizotypy: $\kappa = 0.66$) and poor agreement for SdPD ($\kappa = 0.37$). The dimensional correlations (Pearson's r) between pairs of the diagnostic criteria sets were much higher (PPD: $r = 0.88$; SdPD: $r = 0.88$; schizotypy: $r = 0.89$) [5].

Although the current literature demonstrates massive research on the construct of schizotypy (including, but not limited to, SPD), SdPD and PPD have not stimulated a corresponding interest, perhaps because of their rarity, and, in the case of SdPD, because of its apparent lack of genetic affinity to schizophrenia. In the following, we shall therefore concentrate on SPD, occasionally (when appropriate) referring to PPD and SdPD, as well as including a summary at the end of this chapter of some of the information pertinent to PPD and SdPD.

Another important issue to note is that modern SPD literature, especially the one dealing with the neurobiological and cognitive correlates of the construct, concerns at least three variants of SPD subjects: patients identified in clinical settings, persons diagnosed in genetic family studies, and ''psychometric'' samples (usually college students or people recruited through newspapers) recruited on the basis of high scores on self-report questionnaires targeting presumed schizotypal dimensions.

EPIDEMIOLOGY

Descriptive Epidemiology in Non-Psychiatric Populations

In a recent study of a community sample comprising 2053 subjects aged 18 to 65 years in Oslo, Torgersen *et al*. [6] found an overall prevalence of 13.4% for any personality disorder (assessed using the Semistructured Interview for DSM-III-R Personality Disorders, SIDP-R). The figure for the Cluster A personality disorders was 4.1% (PPD: 2.4%; SdPD: 1.7%; SPD: 0.6%; some subjects met criteria for more than one Cluster A personality disorder). SdPD was found to be twice as frequent in men than it was in women (not statistically significantly different). Several personality disorders, particularly those of Cluster A, were diagnosed most frequently in subjects aged 50 and above (a highly problematic finding, considering the general definition

of a personality disorder), and were more frequent among less educated subjects, those living without a partner, and those living in the centre of the city.

In a review of previous community studies, Torgersen *et al.* [6] noted considerable variation in the estimated prevalence of Cluster A personality disorders, ranging from 0% to 4.5% for PPD, 0% to 4.1% for SdPD, and 0% to 5.1% for SPD. These figures can be compared with those provided in genetic-epidemiological studies (see Table 1.3), which evaluated the frequency of Cluster A personality disorders in control probands or their first-degree relatives (FDR). However, these control samples are relatively small, and further they are biased, because they often contain multiple members from families. Frangos *et al.* [7] found a rate of 1.68% for Cluster A personality disorders; rates for PPD have ranged from 0.4% [8] to 2.7% [9]; for SdPD, from 0% [9] to 0.5% [10]; and for SPD, from 0.3% [10] to 6.5% [9]. Battaglia *et al.* [11], studying the factorial structure of SPD, using direct diagnostic interviews, found a rate of 0.8% for SPD among non-patients. And finally, Koenigsberg *et al.* [12] examined 2462 patients with general medical conditions; 11 of these patients had PPD (0.4%), none had SdPD, and 48 (1.9%) had SPD, of a total of 885 (35.9%) patients with at least one personality disorder.

As a point of reference, we would like to note here that Meehl [13], drawing on theoretical considerations, suggested a base rate of 0.10 for schizotaxia and predicted that approximately 10% of schizotypes would decompensate into schizophrenia. Moreover, he suggested that close to 2/3 of all psychiatric patients suffered from schizophrenia spectrum disorders.

The Search for Aetiological Factors

Most of the epidemiological studies devoted to aetiological factors of Cluster A personality disorders are concerned with genetics or gene–environment interactions; these are addressed in a separate section, where several aetiological models are also presented.

M. Bleuler [14] suggested that environmental factors, mainly pertaining to family structure, functioning and emotional climate, should not be overlooked as potentially implicated in pathogenetic processes, a position shared by Meehl [15]. Few inquiries found significant correlations between type of familial environment and the development of Cluster A personality disorders or features [16–18]. Other environmental factors have been proposed: Susser *et al.* [19] found prenatal exposure to famine to be a risk factor for SdPD; Venables [20] suggested that maternal exposure to influenza might be related to positive schizotypy scores, whereas cold temperatures might be related to anhedonic traits. The results from the

Copenhagen High Risk study (see below) indicate that high-risk adult offspring with SdPD diagnoses suffered less early environmental stress than did the high-risk subjects who developed schizophrenia [21].

''Co-morbidity''

Epidemiological studies addressing both general and clinical populations find high rates of psychiatric (and somatic) co-morbidities in subjects with personality disorders. In Torgersen *et al.*'s [6] sample, 29% of those with at least one personality disorder met criteria for at least another one (5.2% met criteria for more than three personality disorders). Similar findings were reported by Stuart *et al.* [22]. In a clinical sample, Fossati *et al.* [23] found that over 70% of the patients diagnosed with SPD received one or more additional personality disorder diagnoses; significant positive associations were observed between SPD and both SdPD and PPD. The frequency of Axis I disorders is also elevated (notably for dysthymic and anxious disorders) [24,25]. Moreover, an association between SPD and obsessive–compulsive disorder (OCD) has been observed: in one study approximately 50% of the OCD subjects fulfilled the DSM-IV SPD criteria [26].

Clinical and Operational Diagnosis and Diagnostic Frequency

The pre-operational diagnostic systems offered several unclearly defined possibilities for diagnosing conditions corresponding to SPD (e.g. ICD-8 included latent, pseudoneurotic schizophrenia, schizoid personality, borderline cases), which were used differently at different sites. The introduction of an explicit SPD category into the operational classification systems (such as DSM-III/IV and ICD-10), in principle, should entail a modifying influence on the definitions of all other non-psychotic and non-organic disorders. It is an intrinsic feature of a closed conceptual system (a classificatory system is one typical example) that adding a new concept to it (such as SPD) entails widespread repercussions on the conceptual validity (diagnostic status) of all remaining (non-psychotic) categories. Since no systematic studies were conducted to examine the potential effect of the SPD category on the diagnostic validity of other entities (e.g. anxiety disorders, certain depressions, dysthymic states, dissociative and somatoform disorders, social phobias, and OCD), a clinician using contemporary diagnostic schemes is confronted by many dilemmas and ambiguities. For example, numerous patients with such non-psychotic diagnoses would fulfill the SPD criteria, if these were rigorously applied, and if, as it seems to be the case in the ICD-10, the schizotypy diagnosis hierarchically overrides these other categories.

Recent empirical data from Denmark illustrate that such problems are quite real in the daily clinical use of the schizotypy diagnosis (as a *syndrome* diagnosis). In one study, operational research diagnoses (ICD-10) were assigned to 100 consecutive first admission patients (younger than 40 years of age) at the Department of Psychiatry of Hvidovre Hospital in Copenhagen [27]: 37% were diagnosed with schizophrenia or another non-affective psychosis, 25% were schizotypes, 36% suffered from disorders outside the schizophrenia spectrum, and 2% suffered from organic disorders. Yet, according to the statistics from the Danish Institute of Psychiatric Demography, the frequencies of ICD-10 schizophrenia and schizotypy as the principal *clinical* diagnoses in patients discharged in 2001 and 2002 from seven, mutually independent, psychiatric departments (jointly serving Greater Copenhagen) ranged from a low of 17% (schizophrenia) and 0.4% (schizotypy) to a high of 36% (schizophrenia) and 10% (schizotypy; mean = 2.7%). Thus, the frequency of the schizotypy diagnosis as made by clinicians was incommensurably lower than its strictly operational prevalence. The observed inter-departmental differences cannot be accounted for by socio-economic differences in the catchment area populations, nor was a low frequency of schizotypy diagnosis at a given site reflective of a more frequent use of schizophrenia diagnosis (in the sense that schizotypy simply becomes absorbed by the schizophrenia diagnosis). On the contrary, there was a positive and significant association between the tendencies (high or low) to use both diagnostic categories within each department ($n = 7$; Spearman's rho = 0.818; $p = 0.024$). In other words, the less frequent the schizophrenia diagnosis was at a given site, the lower the frequency of the schizotypy diagnosis was as well. These findings question a widely held assumption that criteria-based diagnostic systems have improved everyday clinical reliability.

The frequency of the operational DSM SPD diagnosis (in this case, Axis II diagnosis) in patient populations varies across the studies, but generally is lower than 25%. Fossati *et al.* [23] reported that 66% of mixed in/out patients (yet with unclear representativeness) had a personality disorder; the rate for SPD was approximately 5%, and close to 10% among inpatients. In other clinically based studies, prevalence rates of DSM-III-R PPD ranged from 1% to 30% [3], whereas the rates for SdPD ranged from 1% to 16% [28].

EVOLUTION OF THE SCHIZOPHRENIA SPECTRUM AND SCHIZOTYPY CONCEPTS

Although historically several theorists have approached this topic from a truly diachronic perspective [29,30], we attempt here to portray the

evolution of the schizophrenia spectrum concept as a layering or interpenetration of different conceptual perspectives, with each perspective having its own theoretical background and specific focus. The first four perspectives rely on purported prototypical clinical descriptions, mainly from third person perspectives, and with the notion of autism at the core of the described features. The next three approaches address the investigated phenomena from the patient's (subjective) first person perspective, and each claims some basic distortion of selfhood and intersubjectivity as specifying or defining the nature of schizophrenia and its related disorders (thus addressing the issue of the conceptual [31] or ''non-empirical'' validity of schizophrenia spectrum disorders [32]). Finally, the last and most recent approach addresses the construction of the DSM-III Cluster A diagnostic categories.

The first thing to be noted is that the very idea of a spectrum of illness is as old as psychiatry itself. In his ''Traité des maladies mentales'' from 1860, Morel [33] pointed to the difficulties encountered in recognizing ''the demarcation line dividing sanity from madness''. He observed ''temperamental'' predispositions to mental illness and acknowledged that if certain ''neuropathic states'' were manifestations of the ''incubation period of madness'', many people appeared to spend their whole lives in such states,

TABLE 1.1 Outline of the evolution of the schizophrenia spectrum and schizotypy concepts

Authors	Focus
Earliest descriptions: e.g. Kahlbaum	*Intersubjective* peculiarities of behaviour
Eugen Bleuler	*Autism* as a trait phenomenon: radical intersubjective displacement, clinically manifest in several modalities
Kretschmer	*Autism* and coexisting hyper- and hyposensitivity
Zilboorg, Hoch, Polatin, Kety *et al.*	Pseudo-neurotic/borderline schizophrenia: polymorphic features, *disintegration*
Minkowski	*Autism* as a ''generative disorder'': altered structure of experience
Gadelius, Berze, Gruhle, Blankenburg	*Altered structure* of subjective experience (altered structure of consciousness)
Rado, Meehl	*Schizotypal organization:* anhedonia and proprioceptive diathesis
DSM-III	Operational criteria for *schizoid, paranoid and schizotypal personality disorders*

without ever succumbing to psychosis. This idea was then further elaborated during the next 100 years by numerous authors.

Kraepelin [34], Berze [35], Hoch [36] and many others described some of the relatives of dementia praecox patients as people with eccentric personalities, and used a variety of designations to name these states. ''Heboidophrenia'' was a term proposed by Kahlbaum [37] in 1890 and ''praekatatonia'' was another, proposed by Gadelius [38] in 1909. The terms ''schizoid personality'' and ''schizoidia'' were informally coined at staff conferences at Eugen Bleuler's clinic around 1910 [14] to denote peculiarities observable in some relatives of schizophrenic patients, as well as the features that seemed to characterize schizophrenic patients premorbidly (i.e. prior to their illness onset).

The concept of schizoidia gave rise to detailed clinical descriptions and very vibrant scientific controversies during the first half of the 20th century. Diem's [39] ''simple'' schizophrenia, Bleuler's [40] ''latent'' schizophrenia, and later proposals of ''ambulatory schizophrenias'' [41], ''pseudoneurotic schizophrenia'' [42], ''schizotypal organization'' [15,43,44], ''psychotic character'' [45], and ''borderline schizophrenia'' [46] together have formed the conceptual basis for the elaboration of the ''schizotypal personality disorder'' as it was defined in the DSM-III and its successive revisions.

Prototypical Approaches Linked to the Concept of Autism

Earliest Clinical Descriptions: Intersubjective Peculiarities

The very first and rather loose descriptions, from 1890 to 1920, stressed the schizoids' eccentricity, lack of attunement, seclusiveness, and the difficulties that these people encountered in their relationships with the ''outer world'' and mainly so in the interpersonal domains.

> (...) heboidophrenia (is) characterized (by) deviations of (...) this complex of mental qualities which chiefly constitute the psychic individuality of human beings in social relationships, (...) deviations and unusualness of life's drives, which have to be conceived of as defects (...) of habits (...) [37].

> Among the *praekatatonic,* there are a great many who definitively shut their ears to arguments, and are entirely preoccupied with some craze or other (Gadelius, 1910, quoted in [38]).

> To this diagnostic group [schizoid psychopathy] belong autistic people, who may appear as curt, cold, often hurting, but (...) who may achieve

> great success in some specific professions; (...) or odd and eccentric people with strange ideas, which they are unable to justify; (...) and people who fail in all domains, but who do not learn anything neither from what one might tell them, nor from what they encounter in their life [47].

Kretschmer: The ''Psychaesthetic Proportion''

In 1921, Kretschmer published a book on bodily and psychological types, written in a particularly brilliant style, which ensured a widespread dissemination of the concept of schizoidia among psychiatrists and psychologists, as well as among the general public. Kretschmer [48] described two fundamental ''temperament types'' (''schizothymia'' and ''cyclothymia''), which intrinsically corresponded to the two ''endogeneous'' psychoses, schizophrenia and manic-depressive. The transition happened through morbid characterological accentuations, schizoidia and cycloidia respectively. Personality deviation was seen here as a subsyndromic component on a continuum from normality to psychosis. A fundamental concept introduced by Kretschmer was ''psychaesthetic proportion''. Schizothymia and schizoidia are not marked by dullness and hyposensitivity or hypersensitivity; rather, they are a mixture of both hypo- and hypersensitivity. Whereas the apparent coldness of schizoids strikes every superficial observer, it is essential, warned Kretschmer, not to overlook a ''deeper'' level of extreme sensitivity, the constantly wounded, ''mimosa-like'' nature of the schizoid, whom Kretschmer called ''of the Hölderlin type''.

> He alone, however, has the key to the schizoid temperament who has clearly recognized that the majority of schizoids are not *either* over-sensitive *or* cold, but that they are over-sensitive *and* cold at the same time, and, indeed, in quite different relational mixtures.

Kretschmer described various ''subtypes'' of schizoid temperament, determined by varying proportions of hyperaesthetic and anaesthetic dimensions, and other character features such as a liability to outward emotional expression (e.g. a shut-in dreamy type and an acting out type). In schizoids, the psychaesthetic proportion does not fluctuate smoothly, but in a jerking way. Kretschmer noted that, with aging, this proportion is progressively dominated by the anaesthetic pole. Bleuler [49] shared most of Kretschmer's views. But rather than ''schizothymia'' and ''cyclothymia'', he proposed the terms ''schizoidia'' and ''syntonia'', because, he argued,

these modes of reaction do not solely concern affectivity, but cognition as well and, among normal individuals, ''cyclothymia'' is not cyclic at all. In summary, the important aspects of Kretschmer's contribution are (a) the linking of major psychosis with a corresponding personality disorder; and (b) the conceptualization of schizoidia as intrinsically marked by inconsistent, or even apparently contradictory, hyper- and hypo-sensitivity, a kind of inner discordance that was then pointed out by numerous other authors.

E. Bleuler: The Concept of Autism

Bleuler's elaboration of autism had a major influence on the conceptualization of schizoidia (including Kretschmer's views). Autism was defined as a detachment from outer reality accompanied by the predominance of inner fantasy life, an unfortunate definition that did not account for apparently extraverted schizophrenics or schizophrenics with obvious paucity of mental life [50]. Autism was considered to be diagnostically pathognomonic for schizophrenia (schizoidia and latent schizophrenia as well), although it was seen as secondary from a pathogenetic point of view. Despite its debatable abstract definition, autism was a central clinical concept of pre-World War II psychiatry. It was not a symptom or sign (Bleuler designated it as a ''complex fundamental symptom''), but rather a generic term indicating a peculiar intersubjective displacement of a patient with schizophrenia, a displacement that could manifest itself in many domains of behaviour, expression, and experience. This notion of ''displacement'' points to the fact that the intersubjective functioning or skill is not simply reduced but also qualitatively altered. The patient's world and the shared or intersubjective world are not superposable, but only overlapping by varying degree. Thus, under the heading of autism, Bleuler, Kretschmer and others described a variety of manifestations of this intersubjective deficit: poor ability to enter into contact with others; withdrawal and inaccessibility (in the extreme cases, negativism); indifference; rigid attitudes, opinions and behaviours (the patient was typically unyielding to external influences); overvalued and strongly held strange ideas; existential patterns with an altered hierarchy of values and goals; inappropriate behaviour; idiosyncratic logic and odd ways of thinking; and even a propensity to delusional thinking. Although Bleuler referred to the patient's ''inner life'' in his definition of autism, all the clinical features were basically described as ''third-person'' phenomena (i.e. as observable ''external'' behaviours or ''signs''), without systematic attempts to describe the patient's subjectivity and world-view from his/her own perspective.

It is also important to note that the concept of ''latent schizophrenia'' was not introduced by Bleuler [40] in order to designate yet another clinical subtype within his ''group of schizophrenias'', but rather in order to capture the constitutional ground, the potentiality of an individual to develop the disease. Such individuals may exhibit any of the autistic features described above, usually in attenuated form: they are often irritable, bizarre, ''lunatic'', lonely, and may present subtle catatonic or paranoid symptoms in a diluted, masked way. Latent and simple schizophrenia, according to Bleuler, were rarely diagnosed, although they were not infrequent among relatives of schizophrenics and among ''reformers of the world, philosophers, writers, and artists'' [40].

The diagnostic importance of autism pervades the subsequent clinical descriptions of schizoidia. For a person to be diagnosed as having a schizoid personality (in the assessment of premorbid personality in schizophrenia), Kasanin and Rosen [51] required that all five of the following traits be present: few friends; preference for solitary amusements; shy and a follower in groups; close-mouthed; and extremely sensitive. Kallmann [52], in a study of 2000 offspring of schizophrenic patients, subdivided schizoidia into ''eccentric borderline cases'' (a precursor of borderline schizophrenia) and ''schizoid psychopaths'', who were characterized by secretiveness, social withdrawal, and impulsive delinquency of an illogical or senseless nature (subsequently designated as ''pseudopsychopathic'' schizophrenia).

Further Descriptions of Autism: Shifting Focus Towards Disintegration

Gradually the focus shifted from strictly behavioural descriptions towards the issues of personality disintegration and disturbed sense of identity, i.e. underlying subtle characteristics of the autistic existence. Several authors [36,53] stressed the peculiarities of schizoid sexuality, ranging from abstinence to chaotic experiences. Psychoanalytic literature also focused on disintegrative aspects of personality. Deutsch [54] described the so-called ''as-if'' personalities, emphasizing the dissociation between ''inner'' and ''outer'' aspects of psychic life, whereas Fairbairn [55] stressed the schizoids' ''overvaluation of the internal at the expense of the external world''. Zilboorg [41] emphasized chaotic sexuality, hypochondriac complaints, and conflicts with the law. He stressed that the outward appearance of shallowness of affect should not be mistaken for its absence or for some disturbance of the ''emotional sphere''; rather, ''the emotion appears lacking in the schizophrenic only because that part of his

personality which deals with external realities of life (...) acts more as a perceptive registering apparatus (...) and does not seem integrated with his affective, intellectual life''. Minkowski [50] summarized this lack of coherence in schizophrenia in the following statement:

> Expressions like ''discordance'' (Chaslin), ''intrapsychic ataxia'' (Stransky), ''intrapsychic disharmony'' (Urstein), ''loss of inner unity'' (Kraepelin), ''schizophrenia'' (Bleuler) point to the idea that it is not *this* or *that* function that is disturbed, but much more their *cohesion*, their harmonious interplay, in their globality. To make use of an image, the essential disorder does not alter one or many faculties, whatever their order in the hierarchy of functions, but rather resides *between* them, in the ''interstitial space'' [italics added].

A few years later, Hoch and Polatin [42] described the ''pseudoneurotic forms of schizophrenia'' (which other psychiatrists called ''borderline cases''). They emphasized their similarity to psychopathological pictures observed in recovered schizophrenics and in biological relatives of schizophrenics. In these forms of illness, ''the basic mechanisms of schizophrenia'' were present, differing ''qualitatively and quantitatively from mechanisms seen in the true psychoneuroses''. They emphasized that no single symptom was diagnostic of schizophrenia and its pseudoneurotic forms; rather the diagnosis rests on a ''constellative evaluation'', taking into account quantitative aspects and the simultaneous occurrence of several symptoms. They emphasized the autistic orientation of these patients (yet admitting that ''there is no objective way to demonstrate it clinically''), a diffuse and widespread ambivalence, inappropriate emotional connections (''many of these patients show the cold, controlled, and at the same time, hypersensitive reactions to emotional situations''), pan-anxiety, frequent depressions, and anhedonic states, and the presence of subtle formal thought disorder. Hoch and Polatin also noted a chaotic organization of their patients' sexuality with ''polymorphous perverse manifestations''. Pseudo-neurotic patients may suffer from micro-psychotic episodes characterized by hypochondriac ideas, ideas of reference, and depersonalization.

A ''pseudo-psychopathic'' variant of these disorders [56], typically encountered in forensic psychiatric contexts, was later described. It applied to seemingly antisocial offenders, who, on a closer evaluation, appeared to harbor autistic features, that also transpired through the nature of their offence, which was typically senseless, illogical or bizarre, and without (even a short-term) personal gain, normally characteristic of criminal conduct.

The US-DK Adoption Studies of Schizophrenia, conducted by Seymour Kety and his collaborators [46], played a decisive role in the formation of

TABLE 1.2. Kety *et al.*'s clinical criteria for borderline or latent schizophrenia

Thinking: strange or atypical mentation; the ignoring of reality, logic or experience; fuzzy, murky, vague speech
Experience: brief episodes of cognitive distortion (e.g. transient delusional ideas), feelings of depersonalization, strangeness or unfamiliarity with or towards the familiar; micropsychosis
Affectivity: anhedonia (i.e. never experiences extreme pleasure, never happy); no deep involvement with anyone
Interpersonal: may appear poised, but lacking in depth (''as if'' personality); sexual maladjustment (i.e. chaotic fluctuation, mixture of hetero- and homosexuality)
Psychopathology: multiple neurotic manifestations, which shift frequently (obsessive concerns, phobias, conversion, psychosomatic symptoms, etc.); severe widespread anxiety

the DSM-III criteria for SPD [30]. Kety introduced the concept of a ''spectrum'' of pathological conditions aetiologically (genetically) related to schizophrenia:

> We had recognized certain qualitative similarities in the features that characterized the diagnoses of schizophrenia, uncertain schizophrenia, and inadequate personality, which suggested that these syndromes formed a continuum: this we called the schizophrenia spectrum of disorders [46].

Kety's criteria used in the Danish Adoption Study for ''borderline schizophrenia'' were strongly influenced by Hoch and Polatin's ''pseudo-neurotic schizophrenia'' [30,46] and are presented in detail in Table 1.2.

The Search for Psychological Organization

Minkowski and the Notion of ''Generative Disorder''

Eugène Minkowski was a French psychiatrist influenced by Bleuler (at whose clinic he trained) and by the philosopher Henri Bergson, who, together with William James, provided the first modern (proto-phenomenological) accounts of the structure of consciousness. Minkowski's psychopathological efforts aimed at ''bringing back all the richness of symptoms and clinical pictures contained within dementia præcox to a fundamental disorder, and specifying its nature'' [50]. This was a task that many, including Bleuler, had already attempted without great success, perhaps because of inadequate conceptual resources. It was a search for

something unifying and specific to the schizophrenic disorders. Most psychiatrists agreed on the existence of this something that conferred a conceptual-clinical validity on these disorders in the first place, even though they all had difficulty specifying it in non-trivial propositional terms.

Minkowski rightly realized that such an organizing principle could not be found on the level of symptoms or even symptom complexes. In order to serve as a symptom unifier, it had to be searched for on a deeper level, in the basic infrastructures of the life of consciousness. Minkowski claimed that a mental state was never an isolated free-floating fragment, because it is always a part expressing the whole from which it originates. This whole is the overall structure of subjectivity (life of consciousness). Each anomalous mental state is a condensed presentation of the more basic experiential and existential alterations, comprising, for example, changes in the organization of lived subjective space, in temporalization, or in the elementary relatedness between the subject and his/her world. Each major psychiatric syndrome, says Minkowski, such as schizophrenia or a mood disorder, is characterized by a specific pattern of such basic changes that constitutes its generative disorder (''trouble générateur''). The generative disorder is a subtle phenomenal core transpiring through the individual symptoms, shaping them, keeping them meaningfully interconnected, and constraining their long-term evolution. Minkowski considered autism to be the ''trouble générateur'' of schizophrenia. But autism was not considered to be a withdrawal to splendid solitude (it cuts across the categories of extra- and introversion), but as a deficit in the basic, non-reflective attunement between the person and his/her world, i.e. a lack of ''vital contact with reality''. Minkowski defined the vital contact as the ability to ''resonate with the world'', to empathize with others, the ability to become affected and to act suitably, as a fluid pre-reflective immersion in the intersubjective world: ''Without being ever able to formulate it, we know what we have to do; and it is that that makes our activity infinitely malleable and human'' [57]. Manifestations of autism involve a peculiar distortion of the relationship of the person to him/herself, and of the person to the world and to other people. There is a decline in the dynamic, flexible, and malleable aspects of these relations, and a corresponding or supervening domination of the fixed, static, rational, and objectified or spatialised elements. Autism is not limited to peculiar expressivity (e.g. lack of emotional rapport or inadequate affective modulation), but transpires as well through the patient's acting and attitudes, reflecting a profoundly changed existential pattern. ''Autistic activity'' shows itself not so much through its content or purpose as such, but more through an inappropriate manner by which such content or purpose is enacted, a certain friction or inappropriateness with the situational context. The pure form of autism (''autisme pauvre''—poor

or empty autism) manifests itself as sterility, lack of attunement to the world, and emptiness, sometimes accompanied by a supervening ''morbid rationalism'' (abnormal, inflexible or rigid hyper-rational attitude; tendency to hyper-reflectivity, and incapacity for intuitive grasp of the world), whereas autism, as defined by Bleuler (''autisme riche''), is a secondary form, associated with compensatory fantasizing mental activity [58,59]. Minkowski, anticipating the diathesis-stress model, considered schizoidia to be a ''constitutionally determined'' core phenotype; a transition into overt schizophrenia could be induced by noxious and non-specific environmental hazards.

The Schizotypal Organization by Rado and Meehl

In the midst of massive psychoanalytic domination, Sandor Rado [43] and Paul Meehl [15] pointed to certain limits of the psychodynamic understanding of schizophrenia and its attenuated conditions: both drew attention to the phenotypic manifestations that were so basic that they resisted any further psychological reduction or explanation. Rado coined the term ''schizotype'' as an abbreviation of ''schizophrenic phenotype''. Neither Rado nor Meehl viewed schizotypy as inherited, as such. It is therefore a mistake to ascribe to Rado (as is too often the case, e.g. numerous websites, and [30,60]) the coining of the term as an abbreviation of schizophrenic genotype. Within a proposal for a new general conceptual framework for classifying mental disorders, which he called ''adaptational psychodynamics'', Rado [43] suggested that:

> When we subject (the) gross manifestations of the open (schizophrenic) psychosis to minute psychodynamic analysis, we discover an underlying ensemble of psychodynamic traits that (. . .) is demonstrable in the patient during his whole life. This finding will define him as a schizotype from birth to death, and will allow us to view his life history as a sequence of schizotypal changes. The ensemble of psychodynamic traits peculiar to the schizotypes may be called *schizotypal organization*.

Two basic inherited deficiencies were underlying schizotypy: an ''integrative pleasure deficiency'' and a ''proprioceptive diathesis''. ''The first defect manifests itself in a weakness of the motivating power of pleasure; the second, in a propensity to a distorted awareness of bodily self''. These defects are viewed ''not merely as symptoms, but as the *two central axes of an organization sui generis*''. Rado ascribes a central role to the ''action-self'', ''the highest integrative system of the organism, and the very basis of its self-awareness'' [44]. Integrative pleasure deficiency reduces the

coherence of the action-self, further damaged by the proprioceptive diathesis. Depending on the severity of these innate deficits, on the one hand, and on the extent of the individual adaptive resources over changing life circumstances, on the other hand, schizotypal disorders can manifest various developmental stages of schizotypal organization: (1) compensated schizo-adaptation, similar to schizoidia; (2) de-compensated schizo-adaptation, with the clinical picture of ''pseudoneurotic schizophrenia''; (3) schizotypal disintegration, i.e. a schizophrenic psychosis; (4) schizotypal deterioration, i.e. ''cessation of certain functions indicative of a progressive withdrawal from any adaptive concern'' [44]. At the first manifestations of decompensation, ''the organism (...) ceases to have a definite selfhood; (...) the psychodynamic life is now the interaction of a *fragmented* organism with a *fragmented* environment'' [43].

Meehl [15] listed four core traits and symptoms as indicators of schizophrenia: formal thought disorder (''cognitive slippage''), interpersonal aversiveness, anhedonia, and ambivalence (all traits being diluted Bleulerian fundamental symptoms). Meehl suggested [15] that an ''integrative neural defect'' or ''schizotaxia'' was ''the only direct phenotypic consequence produced by the genic mutation'' (Meehl maintained a preference for a monogenic theory of schizophrenia). This defect was viewed [13] as ''a (ubiquitous) slight quantitative aberration in the synaptic control over the spiking of a neuron''.

> I hypothesize that the statistical relation between schizotaxia, schizotypy, and schizophrenia is a class inclusion: all schizotaxics become, *on all actually existing social learning regimes*, schizotypic in personality organization; but most of them remain compensated. (...) What makes schizotaxia etiologically specific is its role as a *necessary* condition. I postulate that a non-schizotaxic individual, whatever his other genetic makeup and whatever his learning history, would at most develop a character disorder or a psychoneurosis; but he would not become a schizotype and therefore could never manifest its decompensated form, schizophrenia [15].

Exploring the First Person Perspective

Although all of the authors mentioned so far certainly paid attention to their patients' spontaneous complaints, only a few specifically embarked on more systematic projects of exploring and describing the patients' typical ways of self-experience and of experiencing the world. Paul Meehl, in one of his last publications [61], drew attention to an ''unmistakable

phenomenon showing up in a sizable minority of pseudoneurotic patients and in the majority of disintegrated schizotypes'':

> I have treated bright, introspective, and psychologically sophisticated individuals with Hoch-Polatin syndrome who complained of an acutely unpleasant mental state but steadfastly refused to accept my proffered labels (e.g. ''anxiety'', ''shame'', ''guilt'', ''grief'' [object loss], ''depression''). I am persuaded that this is not a semantic or defensive matter; rather it reveals the existence of a special kind of negative mental state that I (...) cannot empathize with because I have never experienced anything close to it in a phenomenal space. (...) Here are some [examples] that I can recall: ''My whole mind just hurts'' (this from a woman—a psychology student—in whom I first noted the symptom some 45 years ago); ''It's a bad pressure in the head'' (query: a headache?), ''No, in my mind, a stress''. (...) I conjecture the phenomenon to be *pathognomonic of schizophrenia*, deserving to be listed along with such signs as Bleuler's associative loosening, schizophasia, thought deprivation, bizarre somatic delusions, and extreme perceptual aberrations as nearly sure indicators of the disease [italics added].

Numerous authors considered various phenomena of ''depersonalization'' to be potential manifestations of schizoidia or ''degraded schizophrenia''. These phenomena were, and are, typically seen as mere contingent ''symptoms''. It is only in the writings of those authors who try to comprehend mental disorders from a more overarching framework (e.g. informed by philosophy of mind or phenomenology) that anomalous subjective experiences and distortions of self-awareness are both described in phenomenological detail and related to a more comprehensive approach to pathological alterations in the structure of consciousness. What seemed to Meehl as a novelty, in fact, has been thoroughly described both in early French [62,63] and German literature on schizophrenia and its subclinical variants. The Viennese psychiatrist Josef Berze published a monograph, in 1914 [64], with rich clinical material (vignettes and quotations) to support his claim that the basic disorder of the schizophrenic conditions was to be found in a diminished sense of self-awareness, usually also associated with a panoply of subjective cognitive and perceptual aberrations (''hypophrenia''). Similar ideas were proposed by a Swedish psychiatrist, Gadelius [38], who provided the following quote, illustrative of the disorder of the self:

> ''My head is quite choked, when I look down at the paper, it is not as it used to be, it is as if I had to push through my whole head to get down to the paper. All the back of my head received all impressions and

> movements instead of being insensible as it ought to be. (. . .) When it is morning it ought to be felt, but I never have the real feeling of morning. Formerly when I woke up I had the feeling of a new day. I have no ordinary perception. I have only the *thinking process* left.''

Gadelius commented:

> In the most unmistakable manner she gives expression to her incapability of living fully. ''She is only half''. She envies other people who can move freely without having to think of their movements, who can walk and stand, dress and have intercourse with their neighbours naturally and freely without giving constant heed to themselves. (. . .) She is worried by continual uncertainty and embarrassment and feels that she cannot do the simplest thing or make the simplest movement spontaneously and naturally. Everything she does, she has to follow with her thoughts, and accordingly feels uncomfortable and stiff.

Berze and Gruhle, in a remarkable monograph on the ''Psychology of schizophrenia'' from 1929 [65], considered diminished sense of automatic self-awareness (immediate first person perspective) as the very core feature of the schizophrenia spectrum disorders, ascribing to it the status of the ''schizophrenic basic mood'' (''schizophrene Grundstimmung''). We describe these phenomena in more detail in the section on the clinical manifestations of SPD.

An important contribution in this particular domain is the work of Wolfgang Blankenburg [66]. His concern, as it was for Minkowski, is to capture the essential features of the transformed experience in schizophrenia. One can characterize Blankenburg's project as an attempt to describe autism from the first person perspective, from the patient's own view and subjective experience. Blankenburg's work integrates contributions of many of his predecessors, especially Bleuler, Minkowski, Berze, and Gruhle.

Blankenburg [66,67] conceives the essence of schizophrenia and its spectrum as a ''crisis of common sense'' or a ''loss of natural self-evidence''. He considers common sense or natural self-evidence to be a non-conceptual and non-reflective ''indwelling'' in the intersubjective world, an automatic pre-understanding of the context and the background, which is a necessary condition for a fluid grasp of the significance of objects, situations, events, and other people. Common sense and basic sense of selfhood are complementary aspects of the subject-world relatedness, and both aspects are typically affected in the schizophrenia spectrum disorders. When natural self-evidence is absent or when the basic sense of selfhood no longer tacitly permeates all experiencing, the world ceases to function as a stable

background; the patient lives unnaturally, in a constant interrogative and insecure attitude, and becomes intersubjectively displaced.

Gerd Huber, Joachim Klosterkötter, and their colleagues in Germany have continued systematically this subjectivity-oriented line of research (but with a nomothetic orientation) for the last decades. In a series of long-term studies, they identified not-yet-psychotic, qualitative experiential anomalies in the domain of emotion, cognition, perception, and bodily experience, which they designated as the ''basic symptoms''. These symptoms were considered ''basic'' because they precede the psychosis temporally and were believed to be more proximate to the biological substrate than the psychotic symptoms [68–71]. In English-speaking psychiatry, McGhie and Chapman [72] described non-psychotic experiential anomalies in young patients with beginning schizophrenia (dividing them into categories nearly isomorphic with the classes of basic symptoms). This work attracted widespread attention and incited an explosive interest in perceptual–attentional disorders in schizophrenia, stimulating efforts to develop psychometric scales for measuring anhedonia and perceptual aberrations.

What was common to the views of Minkowski, Rado and Blankenburg was to link the conceptual validity of the schizophrenia spectrum disorders to the trait-like alterations of closely interdependent infrastructures of consciousness: (a) self-awareness, (b) relatedness to the other, and (c) relatedness to the world (in phenomenological terms: self-awareness, intersubjectivity and intentionality [73]). Although they differed in terminology and in the accent that they assigned to each of these three basic aspects, they all agreed that the conceptual validity of schizophrenia could not be based alone on single clinical symptoms, signs, nor their combinations.

DSM-III: Transforming Prototypes into Categories

In the creation of the DSM-III [74], the psychopathologic content of the classic notion of schizoidia was channelled into the following categories of disorders of personality: schizotypal (peculiar-odd), schizoid (''hypo-esthetic'' introvert), avoidant (''hyper-esthetic'').

Figure 1.1 schematizes the sources of DSM-III-R ''Cluster A'' personality disorders. DSM-III created three distinct diagnoses to catch the sub-psychotic part of what Kety *et al.* [46] called the schizophrenia spectrum of disorders; the elimination, during the mid-1970s, of one small word (''of'') shifted the view of the relatedness of these disorders, from a prototypical, dimensional conception to that of discrete, categorical entities [75].