

Schizophrenia, Consciousness, and the Self

by Louis A. Sass and Josef Parnas

Abstract

In recent years, there has been much focus on the apparent heterogeneity of schizophrenic symptoms. By contrast, this article proposes a unifying account emphasizing basic abnormalities of consciousness that underlie and also antecede a disparate assortment of signs and symptoms. Schizophrenia, we argue, is fundamentally a self-disorder or ipseity disturbance (*ipse* is Latin for “self” or “itself”) that is characterized by complementary distortions of the act of awareness: hyperreflexivity and diminished self-affection. Hyperreflexivity refers to forms of exaggerated self-consciousness in which aspects of oneself are experienced as akin to external objects. Diminished self-affection or self-presence refers to a weakened sense of existing as a vital and self-coinciding source of awareness and action. This article integrates recent psychiatric research and European phenomenological psychiatry with some current work in cognitive science and phenomenological philosophy. After introducing the phenomenological approach along with a theoretical account of normal consciousness and self-awareness, we turn to a variety of schizophrenic syndromes. We examine positive, then negative, and finally disorganization symptoms—attempting in each case to illuminate shared distortions of consciousness and the sense of self. We conclude by discussing the possible relevance of this approach for identifying early schizophrenic symptoms.

Keywords: Schizophrenia, self-disorder, consciousness, negative symptoms, positive symptoms, hyperreflexivity.

Schizophrenia Bulletin, 29(3):427–444, 2003.

It has long been recognized that schizophrenia involves profound transformations of the self. Eugen Bleuler (1911, p. 143) noted that the patient’s ego tends to undergo “the most manifold alterations,” including splitting of the self and loss of the feeling of activity or the ability to direct thoughts. Kraepelin (1896) considered “loss of inner

unity” of consciousness (“orchestra without a conductor”) to be a core feature of schizophrenia.

But although self-disorders have certainly been recognized, they have seldom been seen as playing an especially central role. More often they have been treated on a par with other characteristics of this multifarious illness, such as the various abnormalities of thought, perception, affect, or belief. The notion of self is not mentioned at all in the diagnostic criteria for schizophrenia of either *DSM-IV* or *ICD-10*. In recent years, several authors have emphasized the importance of this domain or suggested ways of classifying self-abnormalities, but without detailed exploration of its nature and pathogenic consequences (Rado 1960; Scharfetter 1981; Spitzer 1988; Cutting 1997). The deepest explorations of this topic are to be found in the continental phenomenological tradition, but many of these contributions are virtually unknown in the English-speaking world (e.g., Berze 1914; Minkowski 1927; Blankenburg 1971/1991; Kimura 1992; Sass 2001; also Sass 1992a, chap. 7, 1998). (Here we use the term *phenomenology* in the standard philosophical sense—to refer to the study of “lived experience,” in this context, to the *subjective* dimension of mental disorders.)

This article has two main purposes. The first is to demonstrate the affinities among the diverse schizophrenic symptoms by showing their rootedness in certain disturbances of selfhood or self-experience. We aim to illuminate basic abnormalities of experience that underlie or antecede, and so unify, what have increasingly been treated as a disparate signs and symptoms (e.g., Cahill and Frith 1996; Mojtabai and Rieder 1998), thereby reviving a much-needed sense of the unity of the disorder. We specifically hope to clarify essential affinities that may occur in what, from a descriptive psychiatric standpoint, may seem to be the distinct or even antithetical signs and symptoms of the so-called positive, negative, and disorganization syndromes (Liddle 1987; Liddle et al. 1994). Part of the

Send reprint requests to Dr. J. Parnas, Department of Psychiatry, Hvidovre Hospital, Brøndbyøstervej 160, DK-2650 Hvidovre, Denmark; e-mail: jpa@cfs.ku.dk.

point of our phenomenological analysis will be to reveal the superficiality of this tripartite distinction and to prevent it from obscuring underlying affinities and forms of interdependence among these domains.

Our second purpose is to draw attention to clinical manifestations of self-disorders that may be detectable at prodromal and even premorbid phases of the illness and that may reflect or constitute generative disorders at the core of the illness. This is a task of obvious significance given recent recognition of the importance of early diagnostic detection and therapeutic intervention in schizophrenia (McGlashan and Johannessen 1996; Yung and McGorry 1996; McGorry and Jackson 1999) and the unavailability of clinically useful and accurate predictors of imminent psychosis (Parnas 1999). Behaviorally defined, prodromal features of schizophrenia have been found to be too common in the general population to serve as such predictors (McGorry et al. 1995). A recent Israeli draftee cohort study concluded that “behavioral deviations alone, without exploring subjective experience, lack the specificity necessary to predict future schizophrenia” (Weiser et al. 2001, p. 962). For this reason, nearly all early therapeutic programs target *already psychotic* cases, albeit in their early stages (Larsen et al. 2001).

We believe that a theoretically informed, phenomenologically rich account may ultimately help with the difficult task of specifying early symptoms that are truly predictive of a schizophrenic break or relapse (Gaebel et al. 2000; Parnas and Handest 2003; Parnas, in press). If these self-disorders are, in fact, precursors of later, more florid or chronic developments, then an understanding of their nature should also be relevant to pathogenetic research, helping to orient the search for primary neural correlates as well as for key developmental processes.

Despite great effort over the course of a century, the etiology and pathogenesis of schizophrenia remain largely unknown. This is due, in no small measure, to researchers’ inability to specify the fundamental nature of the illness or to define its clinical boundaries (Heinrichs 1993). There is increasing recognition of “the intrinsic limitations of the [purely] operational approach” in psychiatry (Maj 1998, p. 460), including overreliance on criteria (such as *DSM-IV*) that may sacrifice validity for reliability, and of the need for a renewed focus on “the science and art of psychopathology” (Andreasen 1998, p. 1659; Tucker 1998) in order to define what schizophrenia is and which patients have it. A recent polydiagnostic study carried out in Copenhagen with a variegated patient population (Jansson et al. 2002) shows, very dramatically, the inconsistency among the recent diagnostic systems. This underscores the need to consider what Kendler (1990) has called “non-empirical aspects of validity”—namely, the way in which a disease entity is conceptualized in the first place. In our

view, schizophrenia is a disorder involving subtle but pervasive and persistent aspects of subjective experience; hence any adequate conceptualization of its nature or boundaries requires—among other things—the adoption of a phenomenological approach (Sass 1992a; Parnas and Zahavi 2002).

We argue that, although the major symptoms and signs of schizophrenia are heterogeneous in many respects, they can nevertheless be understood in a fairly unified way. Schizophrenia, we propose, is a self-disorder or, more specifically, an ipseity disturbance in which one finds certain characteristic distortions of the act of awareness. *Ipeity* refers to the experiential sense of being a vital and self-coinciding subject of experience or first person perspective on the world (*ipse* is Latin for “self” or “itself”). As we analyze it, this ipseity disturbance has two fundamental and complementary aspects or components. The first is hyperreflexivity, which refers to forms of exaggerated self-consciousness in which a subject or agent experiences itself, or what would normally be inhabited as an aspect or feature of itself, as a kind of external object. The second is a diminishment of self-affection or auto-affection—that is, of the sense of basic self-presence, the implicit sense of existing as a vital and self-possessed subject of awareness. (The term *affection* used here has nothing to do with liking or fondness. “Self-affection” refers to subjectivity *affecting itself*—that is, manifesting itself to itself in a way that involves no distinction between a subject and an object. This self-manifesting is seen as a necessary condition for consciousness to arise in the first place; on this view, nothing can be present *to me* unless I am in some sense *self-aware* [Henry 1973].) These complementary distortions are necessarily accompanied by certain kinds of alterations or disturbances of the subject’s “grip” or “hold” on the conceptual or perceptual field (Merleau-Ponty 1962, pp. 250, 302; Dreyfus 2002)—that is, of the sharpness or stability with which figures or meanings emerge from and against some kind of background context (figure 1).

Phenomenology of Normal Self-Experience and Intentionality

In contemporary Anglo-Saxon psychiatric usage, the term *phenomenology* refers to a description of psychiatric signs and symptoms of mental disorders that relies on a common-sense view of how things seem to appear. It is tacitly assumed that we all recognize and can readily describe the phenomena at issue—for example, the essential *experiential* differences between a remembered event and a remembered fantasy. In this framework, consciousness and subjective experience tend to be treated on a par with

Figure 1. Self-disturbance in schizophrenia

Specifically, a disturbance of IPSEITY
(*ipse* = “self” or “itself”)

IPSEITY =

The experiential sense of being a vital and self-identical *subject* of experience or *first person perspective* on the world

Two main aspects of this self- or IPSEITY DISTURBANCE:

HYPERREFLEXIVITY

= exaggerated self-consciousness involving self-alienation and

DIMINISHED SELF-AFFECTION

= diminished intensity or vitality of one’s own subjective self-presence

A third aspect:

DISTURBED “HOLD” OR “GRIP”

= loss of salience or stability with which objects stand out in an organized field of awareness

spatiotemporal objects of the natural world, as “things” amenable to the same descriptive approach used in describing a stone or a waterfall. Karl Jaspers (1963) proposed a more restrictive use of the term *phenomenology* as a study of *inner experience*. Our use of this term refers to an endeavor inspired by phenomenological philosophy, a tradition specifically aiming at grasping the *essential structures of human experience and existence*, both normal and abnormal (see Parnas and Zahavi 2002 for a comprehensive account of phenomenology in psychiatry; see Sass and Parnas, in press; Sass 1992*b*; Petitot et al. 1999; Sokolowski 2000).

Phenomenology calls attention to the fact that it is possible to investigate consciousness in several ways. One may consider it not only as an empirical object endowed with mental properties, as a causally determined object in the world, but also as the *subject* of intentional directedness to the world—that is, as the subject *for* the world or, to paraphrase Wittgenstein (1922), *the limit of the world*. The term *phenomenon* refers to that which shows itself, which manifests itself as an appearance; and consciousness is a *condition* of such manifestation. Consciousness does not create the world but is the enabling or *constitutive dimension*, the “place” in which the world is allowed to reveal and articulate itself. If anything ever *appears* at all, it always appears in the medium of consciousness. Viewed as the constitutive dimension of appearing, consciousness is not considered as a container filled with separable, substantial, “thing-like” components in causal interaction. It is, rather, a meaningful and dynamic network of intertwining acts, themes, motivations, and so on, largely connected by relations of mutual implication, and grounded in intersubjective frameworks and bodily propensities and expectations that are gradually built up over time. A fundamen-

tal feature of consciousness is its object-directedness or *intentionality*, the fact that consciousness is always a consciousness *of* something—that is, it has an intrinsically self-transcending nature (in this specific philosophical sense, “intentionality” does not mean volition): one does not merely love, fear, see, or judge; one loves, fears, sees, or judges *something*. Thus consciousness is not a self-enclosed Cartesian theater cut off from the world but is intrinsically directed toward and embedded in the world.

Phenomenology distinguishes between a thematic, explicit, or reflective intentionality (e.g., when I look at this chair to the left from me) and a more basic, nonreflective or tacit sensibility—called “operative intentionality” (Merleau-Ponty 1962, p. xviii)—that constitutes our primary *presence to the world*. Operative or prereflective intentionality is the mode in which habits and dispositions come to be sedimented; it furnishes the background texture or organization of the field of experience and thus serves as a necessary foundation for more explicit or volitional acts of judgment, perception, and the like.

A phenomenological analysis typically focuses less on the contents than on the *form* of awareness (Jaspers 1963, p. 59; Parnas and Zahavi 2002). This includes the mode of presentation of an appearing object—for example, the experienced differences between an imagined house and a perceived house, which Husserl (phenomenology’s founder) referred to as *noematic* aspects; and the subjective processes or structures that make these appearances possible, which are known as the *noetic* aspects. (“Noesis” refers to the act of consciousness and “noema” to its intentional correlate, viz. the object and world of which we are aware [Bernet et al. 1993; Sokolowski 2000, p. 59*f*].) The noetic structures of interest include the various modes of intentionality (e.g., perceiving vs. remembering vs. fanta-

sizing) as well as certain structures of ongoing self-awareness and embodiment whose distortion we consider fundamental in schizophrenia.

In our everyday transactions with the world, the sense of *self* and the sense of *immersion* in the world are inseparable; we are self-aware *through* our practical absorption in the world of objects. "Subject and object are two abstract moments of a unique structure which is *presence*," writes Merleau-Ponty (1962, p. 430). From a phenomenological standpoint, we can distinguish two interdependent aspects of the intentional act: a prereflective embeddedness in the world along with a tacit or prereflective self-awareness or *ipseity*. We may speak of a prereflective self-awareness whenever we are *directly*, noninferentially, or nonreflectively conscious of our own occurring thoughts, perceptions, feelings, or pains; these appear always in a first person mode of presentation that immediately reveals them as our own; that is, it entails a built-in self-reference. To put it differently, when the experience is given in a first person mode of presentation to me, it is, at least tacitly, given as *my* experience and counts as *a case of primitive or basic self-awareness*, that is, ipseity. First person givenness is not a mere varnish that the experience could lack without ceasing to be an experience; it is precisely its first personal givenness that makes the experience *subjective*. Consequently, to be aware of *oneself* is not to apprehend a pure self *apart* from experience but to be acquainted with an experience in its first person mode of presentation—that is, from "within" (Zahavi and Parnas 1998). The subject of experience is *a feature or function of its presentation*.

Of particular relevance here is the work of Michel Henry (1963, 1985, 2000), an influential contemporary French philosopher in the phenomenological tradition. Henry describes the prereflective self-awareness of ipseity as "self-affection," a "being-affected by self." This "self-feeling of self" (sometimes referred to as the prereflective *cogito*) is not something we do but something that simply happens. It is an unmediated feeling or sense of aliveness, a sense of a certain tonality or luminosity of consciousness that founds our existence and is a necessary condition for more elaborate levels of self-awareness and for our encountering of the world. This sense of one's own existence and activity should not be thought of in mechanical or vitalistic terms; it provides not merely the energy but the very medium in which experience is constituted or articulated. One can therefore describe consciousness as a flame that, at the same time, illuminates objects and illuminates itself (Henry 1963; Kern 1989; see Zajonc 1993). Ipseity or vital self-affection may verge on ineffability; it is nevertheless something quite real, having very real consequences. Disturbed ipseity primarily affects one's in-the-moment sense of existence and self-coinciding (and

the correlative sense of the existence of the world), which is more basic than the sense of continuity over time or any sense of social identity. (Note that dissociative identity disorder patients, who lack continuity of self, generally have little or no disturbance in their moment-to-moment ipseity.)

The forms of awareness inherent in the act or arc of awareness are illuminated by the philosopher Michael Polanyi's (1964, 1967; Grene 1968) notion of a continuum stretching between the *object* of awareness—which is known in a focal or explicit way—and that which exists in the "tacit dimension"—that is, that which is experienced in what Polanyi terms a more subsidiary, implicit, or tacit manner. We have tacit awareness of the perceptual background or context of awareness as well as of the structures and processes of the embodied, knowing self. One might exemplify these two ways of knowing—focal versus tacit—by distinguishing the body *image* from what might be called the body *schema*. Whereas the first refers to an objectified or objectifiable *representation* (conscious or unconscious) of one's own body, the second refers to an implicit or background awareness of one's body as a sensorimotor *subject* that encounters and actually constitutes the world of perceptual awareness as well as one's most basic sense of self (Merleau-Ponty 1962, pp. 99–104; Gallagher and Meltzoff 1996; Dillon 1997, pp. 121–123). A tacit or subsidiary awareness of kinesthetic and proprioceptive sensations serves as the medium of prereflective selfhood, ipseity, or self-awareness, which, in turn, is the medium through which all intentional activity is realized. Any disturbance of this tacit-focal structure, or of the ipseity it implies, is likely to have subtle but broadly reverberating effects that upset the balance and shake the foundations of both self and world.

The hyperreflexivity and diminished self-affection that we see as central in schizophrenia involve distinctive disruptions of this tacit-focal structure (Sass, in press-a). In our view, these two features are best conceptualized not as separate processes but as mutually implicative aspects or facets of the intentional activity of awareness. Thus, whereas the notion of hyperreflexivity emphasizes the way in which something normally tacit becomes focal and explicit, the notion of diminished self-affection emphasizes a complementary aspect of this very same process—the fact that what once *was* tacit is no longer being inhabited as a medium of taken-for-granted selfhood.

The Three Syndromes of Schizophrenia

The distinction of positive versus negative symptoms, as generally used in the Anglophone literature, is based on the commonsensical assumption that positive and negative

symptoms reflect, respectively, an *excess* and a *lack*, with the deprivative *a* preceding each function that is supposedly lacking (anergia, avolition, etc.). The concept of negative symptomatology is often said to be perfectly atheoretical, merely a behavioral description. Actually, however, the overt behavioral lack at issue is often taken to indicate an underlying and fundamental diminishment of an “inferred function one normally expects to be present” (Sommers 1985, p. 368; Dworkin et al. 1998, p. 393)—namely, a paucity of psychological activity or subjective life, and in particular of the higher mental processes involving self-awareness, reasoning, abstraction, complex emotional response, or volition (e.g., Cahill and Frith 1996; see also *DSM-IV* regarding “diminution or absence of affect” and “diminution of thoughts” [APA 1994, pp. 276–277]). The rationale of the positive-negative distinction may at first seem straightforward enough, but if taken to capture underlying realities, both its logic and its clinical accuracy turn out to be problematic (Parnas and Bovet 1994; Sass 2000).

One strictly logical issue concerns a certain arbitrariness that seems inherent in classifying something as positive or negative. The absence of one thing will, after all, inevitably allow for, indeed necessitate, the presence of something else—if only of whatever state supervenes. Thus, Schneiderian first rank symptoms are generally considered positive symptoms because they involve the presence of experiences normally absent—hallucinations and delusions—but the symptoms in question necessarily imply the simultaneous *absence* of something normally *present*—the sense of ownership or intentional control. Asociality, the absence of socially oriented behavior—a key negative sign—is often accompanied by the presence of strange or socially inappropriate, self-directed behavior.

As we shall see, the so-called positive symptoms tend to involve qualitative and, in some ways, paradoxical alterations that can hardly be captured in simple quantitative terms. Moreover, the subjective experience of patients with so-called negative symptoms may involve “positive” phenomena that differ sharply from what the overt behavioral lack seems to suggest. The disorganization symptoms concept also relies on a deceptively simple quantitative model: the notion of a diminishment or absence of organization. But if one takes a close look, one discovers certain unconventional or alternative *kinds* of organization that are fairly specific to schizophrenia (as opposed, say, to mania, depression, or dementia) and need to be described in more specific, qualitative terms.

We acknowledge, of course, that patients can be more or less active and expressive, more or less alert or shut down, more or less coherent and controlled. It should be noted, however, that most patients show symptoms from each of the three syndromes at some time in the course of

their illness and that, at times, many patients will simultaneously manifest symptoms from two or even all three of the syndromes (Andreasen 1985; Liddle 1987, p. 150; Maurer and Haefner 1991). Given these well-established facts, it is now generally accepted that the positive, negative, and disorganization syndromes do not represent distinct *types* of schizophrenia. It is often assumed, however, that they do reflect “discrete pathological processes occurring within a single disease” (Liddle 1987, p. 150). Cahill and Frith (1996) state, for instance, that their modular, symptom-oriented model implies that “persons experiencing ‘negative’ symptoms could not also experience ‘positive’ symptoms” (p. 392). We shall argue that it may generally be more appropriate to think of positive, negative, and disorganization symptoms as representing distinguishable aspects of a unitary although not entirely homogeneous process.

Positive Symptoms

The most prominent elements of the so-called positive syndrome are Schneider’s “first rank symptoms” of schizophrenia (Schneider 1959; Mellor 1970). Most of these symptoms are actually *defined* by a kind of diminished self-affection—that is, by a loss of the sense of inhabiting one’s own actions, thoughts, feelings, impulses, bodily sensations, or perceptions, often to the point of feeling that these are actually in the possession or under the control of some alien being or force. Along with this diminishment, the very distinction between self and other may disappear. One patient with schizophrenia spoke, for example, of “no longer [being] able to distinguish how much of myself is in me and how much is already in others. I am a conglomeration, a monstrosity, modelled anew each day” (Freeman et al. 1958, p. 54).

For Karl Jaspers, these symptoms were quintessential examples of schizophrenic incomprehensibility—recalcitrant to any kind of empathy or psychological explanation. The most influential recent attempt at an explanation is the work of C. D. Frith (1992), who postulates a neurophysiologically based decline in the feedback (“efference copy”) that indexes the willed or intentional nature of human action or, in a more recent formulation, a failure in the comparator mechanism that derives predicted consequences of an action from a cognitive model of an intended sequence of motor commands (Frith et al. 2000). Frith has sometimes interpreted this disturbance as a consequence of a more general incapacity for “meta-representation”—that is, a diminishment of the general ability of patients “to reflect (consciously) upon their own mental activity” (Frith 1992; Mlakar et al. 1994, p. 557) or to “represent [their] own states, including [their] intentions”

(Frith, 1994, p. 154). (For criticisms of the metarepresentation notion, see Campbell 1999; Currie 2000; Gallagher 2000; Parnas and Sass 2001.)

In our view, these manifestations of external influence and diminished self-possession *are* open to a kind of psychological comprehension. But, far from involving diminished capacity for self-conscious awareness, **the ipseity disturbance is actually associated with an exaggerated self-consciousness that is rooted in diminished self-affection and hyperreflexive distortion of the normal structure of awareness.** To understand how exaggerated self-consciousness could be associated with diminished self-affection and disturbed ipseity, it is useful to recall Polanyi's account of the role of tacitness in the act of awareness. As he points out, tacitness is, in a way, the medium or index of selfhood or normal self-affection, for what we tacitly know, we inhabit or indwell. For this reason, the sense of self does not require a separate channel of self-monitoring or a second, self-directed act of reflection—as is often assumed (Frith 1992; Rosenthal 1997). Processes of self-monitoring or self-reflection are, in fact, likely to alienate or divide the self.

Perhaps the clearest instance of “indwelling” is the relationship a person has with his or her own body in the course of normal, world-directed activity. “It is the subsidiary sensing of our body that makes us feel that it is *our* body,” Polanyi explains. “The subsidiary sensing is *the meaning our body normally has for us*” (1968, p. 405). To direct focal or explicit attention on what had been tacitly experienced is, however, to objectify or alienate that phenomenon, to cause it to be experienced as existing at some kind of remove (for what is “focal” is also “distal” in Polanyi's terminology). If a person ceases to be interested in what lies out there in the world, or desists from adopting an active, exploratory posture, then gradually the person's focus of attention, and with it the tendrils of selfhood, may pull backward.

In schizophrenia this backward migration seems to proceed until what might have been thought to be inalienable aspects of the self come to seem separate or detached. This may affect not only a tool but also one's arms or legs, one's face, the feelings in the mouth or throat, the orbital housing of the eyes—even one's speaking, thinking, or feeling. All these may come to seem objectified, alien, and apart, perhaps even like the possessions of some foreign being—thereby causing the person's action and expression to lose its qualities of ease or unconscious grace, and giving rise, at times, to delusions of influence. Our account is compatible with research showing that patients with schizophrenia do not habituate readily or use contextually appropriate, memory-based schemata to orient perception and disattend to familiar stimuli or irrelevant information (Gray et al. 1991; van den Bosch 1994; also Hemsley

1998, on the relevance of these cognitive abnormalities for a disrupted sense of self). Because the latter category of input includes kinesthetic sensations and other self-directed experience, this lack of habituation or disattending could provide the source of the hyperreflexive sensations (automatic or “operative” forms of hyperreflexivity) that soon come to attract more volitional forms of attention (“reflective” hyperreflexivity [Merleau-Ponty 1962, p. xviii; Sass 2000]). It is interesting that this progressive process—from mild to extreme estrangement—seems to be potentiated by the adopting of a passive, observational stance and that many schizophrenia patients are able, at times, to minimize such symptoms by throwing themselves into some kind of habitual and unthinking activity (Breier and Strauss 1983; Sass 1992a, p. 73).

A similar analysis helps to clarify some additional first rank symptoms of schizophrenia that we have not yet mentioned. These include “thoughts aloud” (*Gedankenlautwerden*) and thought broadcasting—that is, hearing one's own thoughts as if spoken aloud, and experiencing one's thoughts as if they were simultaneously available to other persons. They also include the specific auditory hallucinations or quasi-hallucinations known as “running commentary” and “voices arguing”—namely, a voice describing the patient's ongoing actions or thoughts, and hallucinatory voices discussing the patient in the third person. Various authors over the last century have suggested that auditory hallucinations of verbal material actually involve unrecognized perceptions of one's own “inner speech” (Johnson 1978; Cahill and Frith 1996; David 1999). To account for the apparent failure to recognize the source of one's auditory hallucinations, Frith (1987) postulates a modular account involving a “deficit” in the “self-monitoring system,” which he describes as a “sub-component of the willed action system” (Cahill and Frith 1996, pp. 378, 392). A rather different pathogenetic account is suggested by the occurrence of certain altered states of self-awareness that tend to precede these auditory verbal hallucinations (states described by Ey [1973], Tissot [1984], and Naudin et al. [2000]). What happens is that the patient experiences his or her own subjectivity as becoming in a certain way *ready* for something strange to happen. Experientially, there is an increasing gap between the sense of self and the flow of consciousness. Mental processes and inner speech no longer exist at what Husserl (1989, sect. 41) called the “zero point” of orientation: they are no longer permeated with the sense of selfhood but have become more like introspected objects, with increasingly reified, spatialized, and externalized qualities.

It is worth noting that the sentences or phrases that are “heard” in thoughts aloud, thought echo, or thought-broadcasting experiences often have the grammatical peculiarities characteristic of normal inner speech, which

usually serves as the tacit medium of thinking itself. These peculiarities include omission of explicit causal and logical connections, a tendency to presuppose rather than assert, and absence of explicit markers of identity of speaker, listener, time, or place (Vygotsky 1962; Sokolov 1972; Sass 1992a, p. 194). The specific content of the audioverbal hallucinations is also relevant. Among the most characteristic auditory hallucinations in schizophrenia are a voice describing the patient's ongoing behavior or experience, and two or more voices discussing the patient in the third person. Whereas thoughts aloud, thought echo, and thought broadcasting appear to involve an externalization of a more *basic* level of thinking, these characteristic auditory hallucinations are emblematic of the self-consciousness that *generates* this self-alienation.

It appears, then, that the auditory-verbal hallucinations most characteristic of schizophrenia ("first rank symptoms") involve a sense of alienation *from* and a bringing-to-explicit-awareness *of* the processes of consciousness itself. This calls into question the usual understanding of the positive-negative distinction: in a sense, these positive symptoms do not involve the addition of anything new but only an *awareness* of what is always present (e.g., of inner speech, the perfectly *normal* medium of much of our thinking) in the context of diminished self-presence. These hallucinations appear, in some sense, to represent the perfectly *normal* phenomena of ordinary human experience—which, however, are radically transformed because of being lived in the *abnormal* condition of hyperreflexive awareness and diminished self-affection.

Negative Symptoms

Until recently, Anglo-American psychiatry had made little effort to explore the subjective dimension of the so-called negative symptoms (Selten et al. 1998), which include poverty of speech, affective flattening, avolition, apathy, anhedonia, and a general inattentiveness to the social or practical world. First person reports from patients that were inconsistent with traditional assumptions were often dismissed as inaccurate—as signs of the "lack of insight" said to be characteristic of this disorder (Andreasen 1982, p. 785; Selten et al. 1998, pp. 81, 87). Recent research on subjective reports suggests, however, that the underlying experiences are not, in fact, direct analogues of what is observed at the behavioral level (e.g., van den Bosch et al. 1993; Selten et al. 2000a). Patients who, from the observer's standpoint, seem to demonstrate absence of thoughts, lack of motivation or energy, anhedonia, asociality, or inability to feel intimacy and closeness often do not seem to have the subjective experiences one might expect (Selten 1995, p. 212; Selten et al. 1998). Many so-called

negative symptoms in schizophrenia are not, in fact, straightforward deficit states but involve the presence of positive aberrations of various kinds.

Recent findings show, for instance, that whereas subjective and objective reports of negative symptoms are highly correlated in cases of depression, they may not be correlated in schizophrenia (Selten et al. 1998, 2000a). There is no correlation, for example, between the level of distress associated with negative symptoms and their observed severity (Selten et al. 2000b). Also, whereas depressive patients report a quantitative decline in energy, mental intensity, and the ability to think efficiently, schizophrenia patients typically report a *qualitative* alteration of thought and perception that is far more difficult to describe (Cutting and Dunne 1989).

Earlier reports indicated that patients displaying catatonic withdrawal are usually acutely conscious of surrounding events and may show heightened arousal and that asocial behavior is often accompanied by an underlying yet fearful yearning for contact (Arieti 1961; McGlashan 1982). Now it has been shown that patients who display flat affect report an intense emotional reactivity that contradicts their lack of overt affective expression (Bouricius 1989; Hurlbut 1990, p. 254; Berenbaum and Oltmanns 1992; Kring et al. 1993)—a claim corroborated by electrodermal measurements showing higher reactivity than for normal subjects (Kring and Neale 1996). (This is not to deny the presence of anhedonia in a subset of schizophrenia patients—one-third according to one study [Limpert and Amador 2001, p. 122].) Results from an ongoing Copenhagen study have demonstrated substantial positive correlations between negative symptom presentation (as measured by the Positive and Negative Syndrome Scale [PANSS] [Kay et al. 1987]) and scores on several Bonn Scale for the Assessment of Basic Symptoms (BSABS)—derived rational subscales targeting perceptual disorders, subjective disorders of cognition (e.g., thought pressure), perplexity (loss of immediate meaning, hyperreflexivity, deautomatization of movement), and subjective anomalies of self-awareness (Handest 2003). In a recent in-depth interview study with six patients with long-term chronic schizophrenia and an extreme negative symptom or "deficit syndrome" presentation, all subjects denied any diminishment of affect and thinking. All six did describe qualitative alterations in these realms as well as a variety of self-disturbances, including self-estrangement, self-consciousness, a tendency to become lost in their thoughts, and disruption of spontaneous movement (Dintino 2002). So far, however, there has been very little attempt, at least in the English language literature, to offer a detailed or theoretically informed understanding of the experiences in question.

The richest account of the subjective side of the negative or predominantly "deficit" syndrome is provided in a

classic of European phenomenological psychiatry: Wolfgang Blankenburg's *The Loss of Natural Self-Evidence: A Contribution to the Study of Symptom-Poor Schizophrenics* (*Der Verlust der Natürlichen Selbstverständlichkeit*, 1971, French translation 1991; also 2001; see also Sass 2000, 2001). In Blankenburg's view, the central defect or abnormality in schizophrenia in general appears in its purest and most easily discernable form in patients with the negative syndrome. This distinctive but subtle abnormality is best described as "loss of natural self-evidence"—that is, loss of the usual common-sense orientation to reality, of the unquestioned sense of obviousness, and of the unproblematic background quality that normally enables a person to take for granted so many aspects of the social and practical world (Parnas and Bovet 1991; Stanghellini 2000). This accords with studies showing that schizophrenia patients do especially poorly on practical or commonsensical problems (Cutting and Murphy 1988, 1990).

Loss of natural self-evidence might at first seem a fairly straightforward negative symptom, a privation of something normally present—namely, common sense. But as Blankenburg points out, such patients seem to experience states of heightened reflexive awareness in which they have an acute awareness of aspects, structures, or processes of action and experience that the normal person would simply presuppose and fail to notice. His central case example, a patient named Anne, speaks of being "hooked to" or "hung up on" (pp. 44; 79–80) obvious or self-evident problems and questions that healthy people simply take for granted. "It is impossible for me to stop myself from thinking," Anne says (pp. 46; 82). Her constant need to think is, however, accompanied by a constant inability to understand (pp. 38; 11, 72).

Research shows that persons with schizophrenia often rely on analytic, sequential, conscious, and quasi-voluntary cognitive procedures in circumstances that normally call forth more automatic or spontaneous forms of holistic and parallel processing (Frith 1979; Cutting 1985, pp. 294–300, 305; Sass 1992a, pp. 390–396). This analytic and self-conscious focus may often develop in compensation for a failure of schema-controlled automatic processing (Gray et al. 1991; van den Bosch 1994; Hemsley 1996). It seems likely, however, to contribute in turn to a sense of overload, effortfulness, and confusion: "not sure of my own movements any more. . . . It's not so much thinking out what to do, it's the doing of it that sticks me. . . . I take more time to do things because I am always conscious of what I am doing. If I could just stop noticing what I am doing, I would get things done a lot faster" (McGhie and Chapman 1961, pp. 107–108).

In Blankenburg's view (pp. 54; 94), loss of natural self-evidence underlies the distinctively schizophrenic

"perplexity" (*Ratlösigkeit*) described in classic German psychopathology (Störing 1939). "Perplexity" refers to a self-aware, anguishing, and (to the patient) perfectly inexplicable sense of being unable to maintain a consistent grasp on reality or to cope with normal situational demands. To understand this symptom, it is important to recognize that, when the tacit dimension becomes explicit, it can no longer perform the grounding, orienting, in effect *constituting* function that only what remains in the background can play. Whereas normal people have a *natural* relationship to what Anne calls their "manner of thinking" or "framework," she herself feels at an enormous distance from any such thing: "In my case, everything is just an *object* of thought" (Blankenburg 1971/1991, pp. 79; 127). This hyperawareness precludes spontaneity and may help to account for the loss of the *esprit de finesse* common in schizophrenia, as well as for a diminished sense of vitality, motivation, or even legitimacy as a perspective on the world (pp. 81, 94–105, 128, 144–157). Blankenburg (1986) considers loss of natural self-evidence to be the essence of the "primary autism" of schizophrenia and as helping to account for the social withdrawal ("secondary autism") as well as for the slowing and inactivity that is characteristic of the negative syndrome.

Blankenburg's perspective is complemented by the more nomothetic and longitudinal work on "basic symptoms" done by a group of German researchers who, over 40 years or more, have been gathering first person data and carefully mapping subjective experiences in the prodromal, active, and residual states of schizophrenia (Huber et al. 1979; Huber 1983; Gross 1989; Klosterkötter 1992; Klosterkötter et al. 2001). The best-known work on the basic symptoms examined their role as precursors to the first rank symptoms. Actually, however, these symptoms represent the subjective dimension of seeming deficiency states that are presumably "substrate close" (Gross 1986, p. 1142) because they occur in virtually identical form both before and after the development of productive positive symptoms.

The basic-symptom research demonstrates that even the most clearly negative symptoms, such as apathy or avolition, are accompanied by a panoply of positive experiential disturbances in the domains of cognition, perception, bodily experience, action, and emotion. One cluster of the basic symptoms are the cenesthesias: sensations of movement or of pulling or pressure inside the body or on its surfaces; electric or migrating sensations; awareness of kinesthetic, vestibular, or thermic sensations; and sensations of diminution or enlargement of the body or its parts. Generally unpleasant and frequently accompanied by feelings of declining vital energy, physical awkwardness, or motoric blockage, these experiences appear to involve hyperreflexive awareness of bodily sensations that would

not normally be attended to in any direct or sustained fashion and that are no longer serving as a medium of self-affection (Klosterkötter 1992). They reflect a correlation, found also in Kim et al's (1994, p. 432) study of a chronic schizophrenia group, between "loss of smoothness" of action and thought and a "disturbed sense of self." Other "basic symptoms" involve abnormalities of the core sense of the self as a thinking, feeling, or willing being. To think clearly may begin to seem difficult; thoughts seem to disappear, come to a halt, or appear as objects of introspective awareness. Emotions can seem unnatural, absent, unsatisfying, or somehow inappropriate or out of kilter. Although experiences akin to the basic symptoms rarely occur in healthy persons or in neurotic or character disorders (Huber 1986, p. 1137), many of them *are* remarkably similar to the experiences reported by normal subjects who adopt an abnormal kind of detached, introspective stance toward their own bodily experience (see Angyal 1936; Hunt 1985, p. 248; 1995, p. 201; Sass 1994a, pp. 90–97, 159–161).

Good first-person descriptions of schizophrenic "negative symptoms" are extremely rare. We are therefore fortunate to have the autobiographical descriptions of Antonin Artaud, a poet, essayist, and general man-of-the-theater who has been described as virtually the only person with schizophrenia who has described negative symptoms in real detail (Selten et al. 1998; see also Sass 1994, 1996, 2000). Artaud describes a consciousness invaded by experiences of the body-subject that would normally recede into the unnoticed background or medium of awareness. Here we see, on a brute, bodily level, one kind of experience that can underlie Blankenburg's "loss of natural self-evidence" and that can lead to motoric slowing or even complete withdrawal from action. Artaud writes of "the limbo of a nightmare of bone and muscles, with the sensation of stomach functions snapping like a flag in the phosphorescences of the storm" and "images of bloody old cottons pulled out in the shape of arms and legs, images of distant and dislocated members." This hyper-reflexive awareness leads to a sense of "shifting vertigo, a sort of oblique bewilderment" and to "a sort of deathlike fatigue" (Artaud 1965, pp. 28–29, 44; 1976, pp. 64–65) that occurs when effort must be exerted to achieve forms of bodily and cognitive integration that would normally occur automatically (what Blankenburg calls "schizophrenic asthenia," 1971/1991, pp. 84–85, 101–104; 132–33, 153–56).

Disorganization Symptoms

The "disorganization" syndrome comprises a variety of abnormalities in the organization of thought, speech, and

attention—including tangentiality and derailment, incoherence and pressure of speech, poverty of content of speech, and distractibility. We believe that each of these signs suggests abnormalities of cognitive focus that are consistent with our discussion of hyperreflexivity and diminished self-affection. There seems to be a loss of the ability to be directed toward or committed to a particular focal topic or goal, along with a concomitant awareness, distracting and disruptive, of issues, dimensions, and processes that would usually be presupposed. There is indeed disorganization, but of a kind that can be described more precisely and distinguished from forms of disorganization more characteristic of other psychopathological groups, such as patients with mania (Holzman et al. 1986). Especially common in schizophrenia are various types of perspectival shift or drift that dissolve the sustained "perspectival abridgment" (the automatic blocking-out of alternative perspectives) that is necessary for practical action or clear communication, while encouraging hyperreflexive preoccupations of a hyperabstract, quasi-philosophical, or overly literal kind (Sass 1992a, chaps. 4, 5; 2001).

Much of normal human activity and cognition occurs automatically and out of awareness—as is necessary for efficient functioning (Bargh and Chartrand 1999). But the specifically schizophrenic kind of *attentional disturbance*—in contrast, say, with that of the manic, depressed, or organic patient—appears to involve an "excessive *self-awareness*," often involving heightened and disruptive awareness of what has been called the "*cognitive unconscious*" (Frith 1979). Research shows that the types of *formal thought disorder* most characteristic of schizophrenia and schizotypal individuals involve less a failure to stay focused on particular *objects* of awareness (as in mania) than a more fundamental failure to stay anchored within a single *frame of reference*, perspective, or orientation (Angyal 1964; Holzman et al. 1986; Sass 1992a, chap. 4; in press-b). Often this involves a shift among conceptual levels, including hyperabstract as well as hyperconcrete (or hyperliteral) perspectives, both of which may represent the coming-to-awareness of the normally presupposed components of thought and experience (Sass 1992a, chap. 5). Whereas formal thought disorder in manic patients is "extravagantly combinatorial, usually with humor, flippancy, and playfulness," suggesting acceleration of thought processes and easing of inhibitions, schizophrenic thought disorder appears "disorganized, confused, and ideationally fluid," with "interpenetrations of one idea by another [and] unstable verbal referents" that convey "an impression of inner turmoil and bewilderment, and may cause confusion in the listener as well" (Solovay et al. 1987, pp. 13, 20).

What of the *disturbances of language* most characteristic of schizophrenia? These are distinct from the

aphasias, for they particularly affect what linguists call the pragmatic dimension of speech (Schwartz 1982; Sass 1992a, chap. 6), especially the subtle and shifting relationships between what can be asserted and what would normally be presupposed—that is, between what emerges as the shared focus at a given moment of a conversation and what normally serves as the taken-for-granted background.

Most attempts to explain these disorganization symptoms have assumed they are rooted in purely cognitive and often rather modular dysfunctions, such as particular kinds of associational disturbance, failure of attention or working memory, or an incapacity for the planning or monitoring of discourse or thought (Hoffman et al. 1982; Goldman-Rakic 1994; Spitzer 1997). Such functions may indeed be disturbed. We have noted, however, that these disruptions of the sense of existing in a coherent perceptual or cognitive universe are especially likely to involve hyperreflexive distortion of the normal forms of awareness; we suggest as well that they are closely bound up with a decline of vital self-affection.

Normal self-affection is a condition for the experience of appetite, vital energy, and point of orientation: it is what grounds human motivation and organizes our experiential world in accordance with needs and wishes, thereby giving objects their “affordances” (Gibson 1979)—their significance for us as obstacles, tools, objects of desire, and the like. Although clearly associated with a sense of energy, vitality, and the capacity for pleasure, self-affection is something more basic: a matter of “mattering”—of constituting a lived point of orientation and the correlated pattern of meanings that make for a coherent and significant world. In the absence of this vital self-affection and the lines of orientation it establishes, the structured nature of the worlds of both thought and perception will be altered or even dissolved, for then there can no longer be any clear differentiation of means from goal, no reason for certain objects to show up in the focus of awareness while others recede, no reason for attention to be directed outward toward the world rather than inward toward one’s own body or processes of thinking. Psychiatrists often describe such patients as anhedonic; the diminished capacity for feeling pleasure is, however, only an *aspect* of a more profound alteration of ipseity or self-awareness.

The hyperreflexivity and loss of perspectival abridgment of schizophrenic thought disorder can be understood as resulting from a weakening of normal, affect-laden “concerns,” grounded in self-affection, that normally orient the general meaning and significance of events (Dworkin et al. 1998, pp. 390, 412). Diminished self-affection is also implicated in the disturbances of concentration and of immediate recall that Klosterkötter et al. (2001) refer to as “secondary dynamic deficiencies.”

Under these conditions, marked also by a “primary” decline of “thought initiative” and “thought energy,” “the intended goal of action is not sufficiently effective in eliciting the single steps to achievement of the goal, without increased concentration,” which leads to a loss of the automaticity of action and cognition (Huber 1986, p. 1140). Certain memory impairments characteristic of schizophrenia can also be understood in light of this diminished self-affection, for they appear to involve a failure to “involve the self at encoding” (Danion et al. 1999, p. 644).

The relevance of both hyperreflexivity and diminished ipseity for understanding the disorganization symptoms is nicely illustrated in some passages in which Antonin Artaud (1976) describes his own thinking as a “violent flow” of mutually interfering thoughts and as a “prolific and above all unstable and shifting juxtaposition” (p. 293). As Artaud’s account shows, the violent flow and consequent disorganization he experiences do not involve thoughts, images, or feelings of a normal sort—or of the sort we would be likely to find in, say, delirium, mania, agitated depression, or borderline conditions. It is really a kind of hyperreflexive cascade—a proliferation of meta-perspectives and a tendency to experience his own mind almost as if from an external standpoint. “The brain,” he writes, “sees the whole thought at once with all its circumstances, and it also sees all the points of view it could take and all the forms with which it could invest them, a vast juxtaposition of concepts, each of which seems more necessary and also more dubious than the others, which all the complexities of syntax would never suffice to express and expound” (p. 293).

Artaud describes himself as “losing contact *with*” but at the same time becoming focally aware of “all those first assumptions which are at the foundation of thought” (p. 290). Explicit awareness of the *conditions* of thought undermines his capacity for sustained and focused thinking:

This slackening, this confusion, this fragility . . . correspond to an infinite number of new impressions and sensations, the most characteristic of which is a kind of disappearance or disintegration or collapse of first assumptions which even causes me to wonder why, for example, red (the color) is considered red and affects me as red, why a judgment affects me as a judgment and not as a pain, why I feel a pain, and why this particular pain, which I feel without understanding it. (p. 294)

Here we have a dramatic illustration of a hyperreflexive proliferation of viewpoints that precludes the achievement of any conceptual grip or hold. But as Artaud also makes clear, this slippage seems the counterpart of an *absence* of something equally basic—a decline of the vital

reactivity and spontaneous directedness (self-affection) that gives bias, direction, and a kind of organization to one's thinking. Thus Artaud writes of the "essential illumination" and the "very substance of what is called the soul" (Artaud 1976, p. 169; 1965, p. 20) and states that in the absence of what he calls this "phosphorescent point," there was "a kind of constant leakage of the normal level of reality" (p. 82). Under these conditions of diminished self-affection, no charged purpose or idea, no "criterion" (p. 169), emerged to compel his attention or around which his mind could organize itself. "My incorrigible inability to concentrate upon an object," he explains, "derives from the very substance of what is called the soul and that is the emanation of our nervous force which coagulates around objects" (1965, p. 20).

Hyperreflexivity and diminished self-affection are complementary facets of a fundamental transformation (an ipseity disturbance) that erodes any sense of conceptual hold or perceptual grip. Together they provide what Artaud calls "the destructive element which demineralizes the mind and deprives it of its first assumptions," thereby making "the ground under [his] thought crumble" (pp. 290, 94).

Prodromes of Schizophrenia

We now draw attention to clinical manifestations that may be detectable in prodromal or even premorbid phases. If subtle self-disorders are precursors of later, more dramatic symptoms, this would support our claim that disorder of self is the primary and essential feature of schizophrenia, pathogenetically primary in relation to subsequent psychopathology.

There is little empirical research that offers prospective data on subjective aspects of self-experience in schizophrenia. One follow-back study (Hartmann et al. 1984) did, however, reveal fluidity of self-demarcation, lack of a coherent narrative-historical self-identity, and other self-disturbances to be prominent features of preschizophrenic states at school age. More recently, a prospective study by Klosterkötter et al. (2001) confirmed earlier retrospective reports from this same group (Huber, Klosterkötter) in showing that a multitude of anomalous experiences mark the prodromal phases of schizophrenia. These "basic symptoms" include varieties of depersonalization, disturbances of the stream of consciousness, and distorted bodily experiences that, in our view, are suggestive of hyperreflexivity and diminished self-affection. In a Norwegian early intervention project using naturalistically oriented, in-depth interviews with 20 first onset schizophrenia patients (Møller and Husby 2000), three domains of self-perceived change were revealed: all patients had profound

and alarming changes of experience of the self; nearly all patients complained of the near-ineffability of their self-alteration; and the great majority reported preoccupation with metaphysical, supernatural, or philosophical issues. Our own pilot study of 19 first onset patients (Parnas et al. 1998) indicates a nearly identical profile of results.

Recently, lifetime BSABS-measured prevalences of anomalies of subjective experience were compared between 21 *DSM-IV* patients with residual schizophrenia and 23 remitted *psychotic* bipolar patients (Parnas et al. 2003). Schizophrenia patients scored higher on the rational subscales targeting perplexity, subjectively experienced cognitive disorders, perceptual disorders, and self-disorders. Yet in a multivariate logistic regression model only self-disorders continued to discriminate strongly between the diagnostic groups.

In a separate project, data collection, including items pertaining to self-disorders and basic symptoms (BSABS), was completed on a sample of 151 first admission cases diagnosed according to ICD-10: 51 patients with a schizophrenia spectrum psychosis, 50 with schizotypal disorders, and 50 with nonschizophrenia-spectrum disorders (the Copenhagen Prodromal Study; Handest 2003; Parnas and Handest 2003). Anomalies of self-experience discriminated strongly both the schizophrenia and the schizotypal patients from the rest of the sample and appeared as the most prominent clinical feature in preonset stages of schizophrenia (see Parnas and Handest 2003 for detailed clinical descriptions of the varieties of the anomalies of self-experience).

The data from these studies indicate collectively that self-disorders are specific to the schizophrenia spectrum conditions (note that self-disorders are *not* a part of the ICD-10 or *DSM-IV* diagnostic criteria of schizophrenia) and mark the prodromes of schizophrenia. The presence of profound self-disorders among the first admission schizotypal patients may be a risk marker for a future psychotic decompensation. Self-disturbances correlate with both the negative and positive symptom scales of the PANSS (Kay et al. 1987).

It is important to realize that the nature of these self-disorders in the prodromal or prepsychotic phases may not be immediately obvious. Typically, the patient complains that a profound change is afflicting him or her yet cannot pinpoint *what exactly* is changing because it is not *a something* that can be easily expressed in propositional terms. Often the disorders reveal themselves only after some attempt to penetrate beyond the surface of common and sometimes clichéd complaints that lead to the contact with treatment facilities—such as anxiety, diminished initiative, or decreased mood. Complaints may range from a seemingly trivial "I don't feel myself" or "I am not myself," to "I am losing contact with myself," or even "Something

inside me turned inhuman” or “I am becoming a monster.” Prodromal patients usually feel detached from the standard cornerstones of identity. They may complain of being “occupied by, and scrutinizing, my own inner world,” of “excessive brooding [and] analyzing and defining myself and my thoughts,” of feeling “like a spectator to my own life,” of “painful distance to self,” or of having “thoughts . . . so numerous that I didn’t manage talking to people” (Møller and Husby 2000, pp. 221–223, 228). The patient may sense a sort of “inner void” or “lack of inner nucleus” (Parnas and Handest 2003). One patient reported that his feeling of his experience *as his own experience* only “appeared a split-second delayed.” Some of these complaints indicate that the *luminosity* or vitality of consciousness was somehow disturbed or diminished: “I have no consciousness,” “My consciousness is not as whole as it should be,” “I am half-awake,” “My I-feeling is diminished,” “My I is disappearing for me,” “It is a continuous universal blocking” (Berze 1914; pp. 126–127).

The following vignette, selected from a series of first admission cases (Parnas et al. 1998; Parnas 2000), illustrates many early clinical manifestations that may be detectable in prodromal or even premorbid phases of schizophrenia:

Robert, a 21-year old high-school graduate, now unskilled worker, complained that for more than a year he had been feeling cut-off from the world. He had lost his initiative and energy and had a tendency to an inverted sleep pattern. Robert was troubled by a strange and very painful feeling of not being really present or fully alive and of not participating in interaction with his surroundings, and of an enhanced tendency to observe his inner life. **“My first-personal life has been lost and is replaced by a third-person perspective,”** he said. To illustrate what he meant, Robert described how, in listening to music on his stereo, he sometimes had the impression that the musical tune lacked its natural fullness—“as if something was wrong with the sound itself.” He realized that he was somehow “watching” his own receptivity to the music, his own mind’s receiving or registering of musical tunes. He also reflected on self-evident daily matters and had difficulties “in letting things and matters pass by,” a tendency that he linked to a long-lasting attitude of “adopting multiple perspectives on the same matter,” as he put it. Periodically Robert experienced his own movements as reflected upon and de-automatized. His thinking processes could acquire a distressingly acoustic quality. (Parnas 2000, pp. 124–125)

From a phenomenological perspective, we see distortions of the intentional act as well as of the field of experience. Robert has lost the normally tacit and prereflective “myness” of experience that is a condition and medium of spontaneous, absorbed intentionality; instead there is a sense of “phenomenological distance” within both perception and action. The perceived object appears somehow filtered, deprived of its fullness of presence—largely, we would argue, because the sensory process lacks the tonality of auto-affection. Perception now seems a mechanical, purely receptive sensory process, unaccompanied by its normal feeling-tone and deformed by now-intrusive processes of knowing—an aspect of hyperreflexivity. Robert, in fact, seems to experience a general transformation of the implicit/explicit organization of the act of awareness, with normally foundational and constituting processes becoming objectified. Thus he reports inner speech being increasingly transformed from a *medium* of thinking into an object-like entity having quasi-perceptual, acoustic-like characteristics—a likely precursor to the symptom “thoughts-out-loud” (Klosterkötter 1992).

The disturbances of self-affection and reflexivity necessarily imply correlative disruptions of the field of experience. This is apparent in Robert’s incertitude, aptly described as polyvalence (rather than ambivalence), and in a loss of natural self-evidence and incipient fragmentation of meaning—all hallmarks of schizophrenic autism (Parnas and Bovet 1991) and perplexity (Störriing 1939). Oscillating, often hyperreflexive forms of awareness undermine the normal “perspectival abridgment” inherent in being directed toward a stable external and intersubjective world (Sass 1992a, p. 149). It is understandable that a person with disturbances of the framework/focus or implicit/explicit structure of thinking, feeling, and perceiving will manifest an equivalent disruption to the normal flow of willed action and speech. Robert’s avolition, anergia, and intermittent “poverty of speech” are not, then, simple, mechanical shortages of energy or initiative; they follow from more fundamental but also more complex distortions of the act of awareness.

The characteristic schizophrenic self-disturbances—as described above—seem to be distinct from the disturbances of consciousness or self to be found in any recognized neurological disorder (Feinberg 2002) or any psychiatric condition outside the schizophrenia spectrum, including mania (Parnas et al. 2003), depression, paranoia, delirium, and dementia. This is not to deny that a number of the characteristic symptoms of schizophrenia do bear a marked, if sometimes superficial, resemblance to symptoms more characteristic of other psychiatric conditions. Good examples are schizophrenic or schizotypal perplexity (*Ratlösigkeit*) as opposed to obsessive-compulsive doubting, “schizophrenic asthenia” as opposed to neurasthenic fatigue, perspectival slippage as

opposed to manic flight of ideas, and profound ontological insecurity as opposed to forms of anxiety or identity problems more common in borderline or dissociative disorders. The anhedonia, anergia, flat affect, and poverty of speech found in various stages of schizophrenia are only superficially similar to the withdrawal, exhaustion, mental fogginess, and affective inaccessibility common in severe depression (Limpert and Amador 2001). The theoretical and clinical account presented in this article should help to clarify what is distinctive about the schizophrenic symptoms and thus to aid in assessing clinical prognosis (as well as in orienting etiologic and pathogenetic research). A good grasp of the phenomenological dimension can help clinicians and researchers to make more refined diagnostic discriminations that, we believe, will ultimately be possible to validate through longitudinal research.

Conclusion

We have argued that schizophrenia is best understood as a particular kind of disorder of consciousness and self-experience. We described specific alterations of self-experience and the self-world relationship that we see as fundamental to the illness, especially diminished self-affection, hyper-reflexivity, and related disruptions of the field of awareness. We would argue as well that these general forms or experiential infrastructures, described by phenomenology, do indeed channel, often in psychologically comprehensible ways, longer-term developmental transitions. The emergence, progression, or transformation of schizophrenic symptoms need not be seen merely as a contingent, random popping-up into consciousness of “primary” eruptions from a malfunctioning substrate but as a reorganization of consciousness in accordance with patterns and developmental trajectories channeled by specific transformations of ipseity and the act of awareness.

References

- American Psychiatric Association. *DSM-IV: Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, D.C.: APA, 1994.
- Andreasen, N. Negative symptoms in schizophrenia. *Archives of General Psychiatry*, 39:784–788, 1982.
- Andreasen, N. Positive vs. negative schizophrenia: A critical evaluation. *Schizophrenia Bulletin*, 11(3):380–389, 1985.
- Andreasen, N. Understanding schizophrenia: A silent spring. [Editorial]. *American Journal of Psychiatry*, 155:1657–1659, 1998.
- Angyal, A. The experience of the body-self in schizophrenia. *Archives of Neurology and Psychiatry*, 35:1029–1053, 1936.
- Angyal, A. Disturbances of thinking in schizophrenia. In: Kasanin, J.S., ed. *Language and Thought in Schizophrenia*. New York, NY: Norton, 1964. pp. 115–123.
- Arieti, S. Volition and value: A study based on catatonic schizophrenia. *Comprehensive Psychiatry*, 2:74–82, 1961.
- Artaud, A. *Antonin Artaud Anthology*. Edited by J. Hirschman. San Francisco, CA: City Lights Books, 1965.
- Artaud, A. *Antonin Artaud: Selected Writings*. Edited by S. Sontag. Translated by H. Weaver. New York, NY: Farrar, Straus, and Giroux, 1976.
- Bargh, J.A., and Chartrand, T.L. The unbearable automaticity of being. *American Psychologist*, 54:462–479, 1999.
- Berenbaum, H., and Oltmanns, T.F. Emotional experience and expression in schizophrenia and depression. *Journal of Abnormal Psychology*, 101:37–44, 1992.
- Bernet, R.; Kern, I.; and Marbach, E. *An Introduction to Husserlian Phenomenology*. Evanston, IL: Northwestern University Press, 1993.
- Berze, J. *Die Primäre Insuffizienz der Psychischen Aktivität: Ihr Wesen, ihre Erscheinungen und ihre Bedeutung als Grundstörungen der Dementia Praecox und den hypophrenen Überhaupt*. Leipzig, Germany: F. Deuticke, 1914. Excerpt translated in: Berze, J. Primary insufficiency of mental activity. In: Cutting, J., and Shepherd, M., eds. *The Clinical Roots of the Schizophrenia Concept*. Cambridge, U.K.: Cambridge University Press, 1987. pp. 51–58.
- Blankenburg, W. *Der Verlust der Natürlichen Selbstverständlichkeit: Ein Beitrag zur Psychopathologie Symptomarmer Schizophrenien*. Stuttgart, Germany: Ferdinand Enke Verlag, 1971. French translation: Blankenburg, W. *La Perte de L'Evidence Naturelle: Une Contribution a la Psychopathologie des Schizophrenies Pauci-Symptomatiques*. Translated by J.-M. Azorin and Y. Totoyan. Paris, France: Presses Universitaires de France, 1991.
- Blankenburg, W. First steps toward a psychopathology of “common sense.” (1969) Translated by A. Mishara. *Philosophy, Psychiatry, and Psychology*, 8:303–315, 2001.
- Blankenburg, W. Autismus. In: Müller, C., ed. *Lexicon der Psychiatrie*. 2nd ed. Berlin, Germany: Springer, 1986. pp. 83–89.
- Bleuler, E. *Dementia Praecox or the Group of Schizophrenias*. (1911) Translated by J. Zinkin. New York, NY: International Universities Press, 1950.
- Bouricius, J. Negative symptoms and emotions in schizophrenia. *Schizophrenia Bulletin*, 15(2):201–208, 1989.
- Breier, A., and Strauss, J.S. Self-control in psychotic disorders. *Archives of General Psychiatry*, 40:1141–1145, 1983.

- Cahill, C., and Frith, C.D. A cognitive basis for the signs and symptoms of schizophrenia. In: Pantelis, C.; Nelson, H.E.; and Barnes, T.R.E., eds. *Schizophrenia: A Neuropsychological Perspective*. New York, NY: John Wiley and Sons, 1996. pp. 373–395.
- Campbell, J. Schizophrenia, the space of reasons, and thinking as a motor process. *Monist*, 82:609–625, 1999.
- Currie, G. Imagination, delusion, and hallucinations. *Mind and Language*, 15:168–183, 2000.
- Cutting, J. *The Psychology of Schizophrenia*. Edinburgh, Scotland: Churchill Livingstone, 1985.
- Cutting, J. *Principles of Psychopathology. Two Worlds—Two Minds—Two Hemispheres*. Oxford, U.K.: Oxford University Press, 1997.
- Cutting, J., and Dunne, F. Subjective experience of schizophrenia. *Schizophrenia Bulletin*, 15(2):217–231, 1989.
- Cutting, J., and Murphy, D. Schizophrenic thought disorder: A psychological and organic interpretation. *British Journal of Psychiatry*, 152:310–319, 1988.
- Cutting, J., and Murphy, D. Impaired ability of schizophrenics, relative to manics or depressives, to appreciate social knowledge about their culture. *British Journal of Psychiatry*, 157:355–358, 1990.
- Danion, J.-M.; Rizzo, L.; and Bruant, A. Functional mechanisms underlying impaired recognition memory and conscious awareness in patients with schizophrenia. *Archives of General Psychiatry*, 56:639–644, 1999.
- David, A. Auditory hallucinations: Phenomenology, neuropsychology, and neuroimaging update. *Acta Psychiatrica Scandinavica*, 99(Suppl 395):95–104, 1999.
- Dillon, M. *Merleau-Ponty's Ontology*. 2nd ed. Evanston, IL: Northwestern University Press, 1997.
- Dintino, C. "The Subjective Experience of Negative Symptoms in Schizophrenia." Unpublished doctoral dissertation, Graduate School of Applied and Professional Psychology, Rutgers University, 2002.
- Dreyfus, H. Intelligence without representation—Merleau-Ponty's critique of mental representation. *Phenomenology and the Cognitive Sciences*, 1:367–383, 2002.
- Dworkin, R.H.; Oster, H.; Clark, S.C.; and White, S.R. Affective expression and affective experience in schizophrenia. In: Lenzenweger, M.F., and Dworkin, R.H., eds. *Origins and Development of Schizophrenia*. Washington, D.C.: American Psychiatric Press, 1998. pp. 385–424.
- Ey, H. *Traité des hallucinations*. Paris, France: Masson, 1973.
- Feinberg, T. *Altered Egos: How the Brain Makes the Self*. New York, NY: Oxford University Press, 2002.
- Freeman, T.; Cameron, J.L.; and McGhie, A. *Chronic Schizophrenia*. New York, NY: International Universities Press, 1958.
- Frith, C.D. Consciousness, information processing, and schizophrenia. *British Journal of Psychiatry*, 134:225–235, 1979.
- Frith, C.D. The positive and negative symptoms of schizophrenia reflect impairments in perception and initiation of action. *Psychological Medicine*, 17:631–648, 1987.
- Frith, C.D. *The Cognitive Neuropsychology of Schizophrenia*. Hove, U.K.: Lawrence Erlbaum, 1992.
- Frith, C.D. Theory of mind in schizophrenia. In: David, A., and Cutting, J., eds. *The Neuropsychology of Schizophrenia*. Hillsdale, N.J.: Erlbaum, 1994. pp. 147–161.
- Frith, C.D.; Blakemore, S.-J.; and Wolpert, D.M. Explaining the symptoms of schizophrenia: Abnormalities in the awareness of action. *Brain Research Reviews*, 31:357–363, 2000.
- Gaebel, W.; Jänner, M.; Frommann, N.; Pietzcker, A.; Kopcke, W.; Linden, M.; Muller, P.; Muller-Spahn, F.; and Tegeler, J. Prodromal states in schizophrenia. *Comprehensive Psychiatry*, 41(2 Suppl 1):76–85, 2000.
- Gallagher, S. Self-reference and schizophrenia: A cognitive model of immunity to error through misidentification. In: Zahavi, D., ed. *Exploring the Self: Philosophical and Psychopathological Perspectives on Self-Experience*. Philadelphia, PA: John Benjamins Publishing Company, 2000. pp. 203–242.
- Gallagher, S., and Meltzoff, A. The earliest sense of self and others: Merleau-Ponty and recent developmental studies. *Philosophical Psychology*, 9:211–233, 1996.
- Gibson, J.J. *The Ecological Approach to Visual Perception*. Boston, MA: Houghton Mifflin, 1979.
- Goldman-Rakic, P. Working memory dysfunction in schizophrenia. *Journal of Neuropsychiatry and Clinical Neurosciences*, 6:348–357, 1994.
- Gray, J.A.; Feldon, J.; Rawlins, J.N.; Hemsley, D.R.; and Smith, A.D. The neuropsychology of schizophrenia. *Behavioral and Brain Sciences*, 14:1–20, 1991.
- Grene, M. Tacit knowing and the pre-reflective cogito. In: Langford, T.A., and Poteat, W.H., eds. *Intellect and Hope: Essays in the Thought of Michael Polanyi*. Durham, NC: Duke University Press, 1968. pp. 19–57.
- Gross, G. The Bonn scale for the assessment of basic symptoms. In: Shagass, C.; Josiassen, R.C.; Bridger, W.H.; Weiss, K.J.; Stoff, D.; and Simpson, G.M., eds. *Biological Psychiatry 1985*. New York, NY: Elsevier, 1986. pp. 1142–1144.
- Gross, G. The "basic" symptoms of schizophrenia. *British Journal of Psychiatry*, 155(Suppl 7):21–25, 1989.
- Handest, P. "Subjective and Expressive Psychopathology in First-Admission Schizophrenia Spectrum Cases." Unpublished doctoral thesis, University of Copenhagen, Faculty of Health Sciences, 2003.

- Hartmann, E.; Milofsky, E.; Vaillant, G.; Oldfield, M.; Falke, R.; and Ducey, C. Vulnerability to schizophrenia. Prediction of adult schizophrenia using childhood information. *Archives of General Psychiatry*, 41:1050–1056, 1984.
- Heinrichs, W. Schizophrenia and the brain: Conditions for a neuropsychology of madness. *American Psychologist*, 48:221–233, 1993.
- Hemsley, D.R. Schizophrenia: A cognitive model and its implications for psychological intervention. *Behavior Modification*, 20:139–169, 1996.
- Hemsley, D.R. The disruption of the “sense of self” in schizophrenia: Potential links with disturbances of information processing. *British Journal of Medical Psychology*, 71:115–124, 1998.
- Henry, M. *The Essence of Manifestation*. (1963) Translated by G. Etzkorn. The Hague, The Netherlands: Martinus Nijhoff, 1973.
- Henry, M. *The Genealogy of Psychoanalysis*. (1985) Translated by D. Brick. Stanford, CA: Stanford University Press, 1993.
- Henry, M. *Incarnation. Une philosophie de la chair*. Paris, France: Édition du Seuil, 2000.
- Hoffman, R.; Kirstein, L.; Stopek, S.; and Cichetti, D. Apprehending schizophrenic discourse: A structural analysis of the listener’s task. *Brain and Language*, 15:207–233, 1982.
- Holzman, P.S.; Shenton, M.E.; and Solovay, M.R. Quality of thought disorder in differential diagnosis. *Schizophrenia Bulletin*, 12(3):360–371, 1986.
- Huber, G. Das Konzept substratnaher Basissymptome und seine Bedeutung für Theorie und Therapie schizophrener Erkrankungen. *Nervenarzt*, 54:23–32, 1983.
- Huber, G. Negative or basic symptoms in schizophrenia and affective illness. In: Shagass, C.; Josiassen, R.C.; Bridger, W.H.; Weiss, K.J.; Stoff, D.; and Simpson, G.M., eds. *Biological Psychiatry 1985*. New York, NY: Elsevier, 1986. pp. 1136–1141.
- Huber, G.; Gross, G.; and Schüttler, R. *Schizophrenie. Eine Verlaufs- und sozialpsychiatrische Langzeitstudie*. Berlin, Germany: Springer, 1979.
- Hunt, H.T. Cognition and states of consciousness. *Perceptual and Motor Skills*, 60:239–282, 1985.
- Hunt, H.T. *On the Nature of Consciousness*. New Haven, CT: Yale University Press, 1995.
- Hurlbut, R.T. *Sampling Normal and Schizophrenic Inner Experience*. New York, NY: Plenum, 1990.
- Husserl, E. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, Second Book*. (1952) Translated by R. Rojcewicz and A. Schuwer. Dordrecht, The Netherlands: Kluwer, 1989.
- Jansson, L.; Handest, P.; Nielsen, J.; Sæbye, D.; and Parnas, J. Exploring boundaries of schizophrenia: A comparison of ICD–10 with other diagnostic systems. *World Psychiatry*, 1/2:109–114, 2002.
- Jaspers, K. *General Psychopathology*. (1923 and 1946) Translated by J. Hoenig and M.W. Hamilton. Chicago, IL: University of Chicago Press, 1963.
- Johnson, R. *The Anatomy of Hallucinations*. Chicago, IL: Nelson Hall, 1978.
- Kay, S.R.; Fishbein, A.; and Opier, L.A. The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. *Schizophrenia Bulletin*, 13(2):261–276, 1987.
- Kendler, K. Toward a scientific psychiatric nosology. *Archives of General Psychiatry*, 47:969–973, 1990.
- Kern, I. Selbstbewusstsein und Ich bei Husserl. In: Funke, Gerhard, ed. *Husserl-Symposium Mainz 1988*. Stuttgart, Germany: Akademie der Wissenschaften und der Literatur, 1989. pp. 51–63.
- Kim, Y.; Takemoto, K.; Mayahara, K.; Sumida, K.; and Shiba, S. An analysis of the subjective experience of schizophrenia. *Comprehensive Psychiatry*, 35:430–436, 1994.
- Kimura, B. *Ecrits de Psychopathologie Phénoménologique*. Translated by J. Boudierlique. Paris, France: P.U.F., 1992.
- Klosterkötter, J. The meaning of basic symptoms for the development of schizophrenic psychoses. *Neurology, Psychiatry, and Brain Research*, 1:30–41, 1992.
- Klosterkötter, J.; Hellmich, M.; Steinmeyer, E.M.; and Schultze-Lutter, F. Diagnosing schizophrenia in the initial prodromal phase. *Archives of General Psychiatry*, 58:158–164, 2001.
- Kraepelin, E. *Psychiatrie*. 4th ed. Leipzig, Germany: J.A. Barth, 1896.
- Kring, A.M.; Kerr, S.L.; Smith, D.A.; and Neale, J.M. Flat affect in schizophrenia does not reflect diminished subjective experience of emotion. *Journal of Abnormal Psychology*, 102:507–517, 1993.
- Kring, A.M., and Neale, J. Do schizophrenic patients show a disjunctive relationship among expressive, experiential, and psychophysiological components of emotion? *Journal of Abnormal Psychology*, 105:249–257, 1996.
- Larsen, T.K.; Friis, S.; Haahr, U.; Joa, I.; Johannessen, J.O.; Melle, I.; Opjordsmoen, S.; Simonsen, E.; and Vaglum, P. Early detection and intervention in first-episode schizophrenia: A critical review. *Acta Psychiatrica Scandinavica*, 103:323–334, 2001.
- Liddle, P.F. The symptoms of chronic schizophrenia: A re-examination of the positive-negative dichotomy. *British Journal of Psychiatry*, 151:145–151, 1987.

- Liddle, P.F.; Carpenter, W.T.; and Crow, T. Syndromes of schizophrenia: Classic literature. *British Journal of Psychiatry*, 165:721–727, 1994.
- Limpert, C., and Amador, X. Negative symptoms and the experience of emotion. In: Keefe, R.S.E., and McEvoy, J.P., eds. *Negative Symptom and Cognitive Deficit Treatment Response in Schizophrenia*. Washington, D.C.: American Psychiatric Press, 2001. pp. 111–137.
- Maj, M. Critique of the *DSM-IV* operational diagnostic criteria for schizophrenia. *British Journal of Psychiatry*, 172:458–460, 1998.
- Maurer, K., and Haefner, H. Dependence, independence, or interdependence of positive and negative symptoms. In: Marnaros, A.; Andreasen, N.C.; and Tsuang, M.T., eds. *Negative Versus Positive Schizophrenia*. Berlin, Germany: Springer-Verlag, 1991. pp. 160–182.
- McGhie, A., and Chapman, J. Disorders of attention and perception in early schizophrenia. *British Journal of Medical Psychology*, 34:103–116, 1961.
- McGlashan, T.H. Aphanisis: The syndrome of pseudo-depression in schizophrenia. *Schizophrenia Bulletin*, 8(1):118–134, 1982.
- McGlashan, T.H., and Johannessen, J.O. Early detection and intervention with schizophrenia: Rationale. *Schizophrenia Bulletin*, 22(2):201–222, 1996.
- McGorry, P.D., and Jackson, H.J., eds. *The Recognition and Management of Early Psychosis*. Cambridge, U.K.: Cambridge University Press, 1999.
- McGorry, P.D.; McFarlane, C.; Patton, G.C.; Bell, R.; Hibbert, M.E.; Jackson, H.J.; and Bowes, G. The prevalence of prodromal features of schizophrenia in adolescence: A preliminary study. *Acta Psychiatrica Scandinavica*, 92:241–249, 1995.
- Mellor, C.S. First rank symptoms of schizophrenia. *British Journal of Psychiatry*, 117:15–23, 1970.
- Merleau-Ponty, M. *The Phenomenology of Perception*. (1945) Translated by C. Smith. New York, NY: Routledge and Kegan Paul, 1962.
- Minkowski, E. *La schizophrénie. Psychopathologie des schizoïdes et des schizophrènes*. Paris, France: Payot, 1927.
- Mlakar, J.; Jensterle, J.; and Frith, C.D. Central monitoring deficiency and schizophrenic symptoms. *Psychological Medicine*, 24:557–564, 1994.
- Mojtabai, R., and Rieder, R.O. Limitations of the symptom-oriented approach to psychiatric research. *British Journal of Psychiatry*, 173:198–202, 1998.
- Møller, P., and Husby, R. The initial prodrome in schizophrenia: Searching for naturalistic core dimensions of experience and behavior. *Schizophrenia Bulletin*, 26(1):217–232, 2000.
- Naudin, J.; Banovic, I.; Schwartz, M.A.; Wiggins, O.P.; Mishara, A.; Stanghellini, G.; and Azorin, J.M. Définir l'hallucination acoustico-verbale comme trouble de la conscience de soi. *Evolution Psychiatrique*, 65:311–324, 2000.
- Parnas, J. From predisposition to psychosis: Progression of symptoms in schizophrenia. *Acta Psychiatrica Scandinavica*, 99(Suppl 395):20–29, 1999.
- Parnas, J. The self and intentionality in the pre-psychotic stages of schizophrenia. In: Zahavi, D., ed. *Exploring the Self: Philosophical and Psychopathological Perspectives on Self-Experience*. Amsterdam, The Netherlands: John Benjamins, 2000. pp. 115–147.
- Parnas, J. Self-disorders in schizophrenia: A clinical perspective. In: Kircher, T., and David, A., eds. *The Self and Schizophrenia: A Neuropsychological Perspective*. Cambridge, UK: Cambridge University Press, in press.
- Parnas, J., and Bovet, P. Autism in schizophrenia revisited. *Comprehensive Psychiatry*, 32:7–21, 1991.
- Parnas, J., and Bovet, P. Negative/positive symptoms of schizophrenia: Clinical and conceptual issues. *Nordic Journal of Psychiatry*, 48(Suppl 31):5–14, 1994.
- Parnas, J., and Handest, P. Phenomenology of anomalous self-experience in early schizophrenia. *Comprehensive Psychiatry*, 44:121–134, 2003.
- Parnas, J.; Handest, P.; Jansson, L.; and Sæbye, D. Anomalies of subjective experience in schizophrenia and psychotic bipolar illness. *Acta Psychiatrica Scandinavica*, 108:126–133, 2003.
- Parnas, J.; Jansson, L.; Sass, L.A.; and Handest, P. Self-experience in the prodromal phases of schizophrenia: A pilot study of first admissions. *Neurology, Psychiatry, and Brain Research*, 6:97–106, 1998.
- Parnas, J., and Sass, L. Self, solipsism, and schizophrenic delusions. *Philosophy, Psychiatry, and Psychology*, 8:101–120, 2001.
- Parnas, J., and Zahavi, D. The role of phenomenology in psychiatric classification and diagnosis. In: Maj, M.; Gaebel, W.; Lopez-Ibor, J.J.; and Sartorius, N., eds. *Psychiatric Diagnosis and Classification*. World Psychiatric Association Series. Chichester, U.K.: John Wiley and Sons, 2002. pp. 137–162.
- Petitot, J.; Varela, F.J.; Pachoud, B.; and Roy, J.-M., eds. *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*. Stanford, CA: Stanford University Press, 1999.
- Polanyi, M. *Personal Knowledge*. New York, NY: Harper Torchbooks, 1964.
- Polanyi, M. *The Tacit Dimension*. Garden City, NY: Anchor Books, 1967.

- Polanyi, M. Sense-giving and sense-reading. In: Langford, T.A., and Poteat, W.H., eds. *Intellect and Hope: Essays in the Thought of Michael Polanyi*. Durham, NC: Duke University Press, 1968. pp. 402–431.
- Rado, S. Theory and therapy: The theory of schizotypal organization and its application to the treatment of decompensated behavior. In: Scher, S.C., and Davis, H.R., eds. *The Out-patient Treatment of Schizophrenia*. New York, NY: Grune and Stratton, 1960. pp. 87–101.
- Rosenthal, D.M. A theory of consciousness. In: Block, N.; Flanagan, O.; and Guzeldere, G., eds. *The Nature of Consciousness*. Cambridge, MA: MIT Press, 1997. pp. 729–753.
- Sass, L. *Madness and Modernism: Insanity in the Light of Modern Art, Literature, and Thought*. New York, NY: Basic Books, 1992a.
- Sass, L. Heidegger, schizophrenia, and the ontological difference. *Philosophical Psychology*, 5:109–132, 1992b.
- Sass, L. *The Paradoxes of Delusion: Wittgenstein, Schreber, and the Schizophrenic Mind*. Ithaca, NY: Cornell University Press, 1994.
- Sass, L. “The catastrophes of heaven”: Modernism, primitivism, and the madness of Antonin Artaud. *Modernism/Modernity*, 3:73–92, 1996.
- Sass, L. Schizophrenia, self-consciousness, and the modern mind. *Journal of Consciousness Studies*, 5:543–565, 1998.
- Sass, L. Schizophrenia, self-experience, and the so-called “negative symptoms.” In: Zahavi, D., ed. *Exploring the Self: Philosophical and Psychopathological Perspectives on Self-Experience*. Amsterdam, The Netherlands: John Benjamins, 2000. pp. 149–182.
- Sass, L. Self and world in schizophrenia: Three classic approaches in phenomenological psychiatry. *Philosophy, Psychiatry, and Psychology*, 8:251–270, 2001.
- Sass, L. Schizophrenia and self-experience. In: Kircher, T., and David, A., eds. *The Self and Schizophrenia: A Neuropsychological Perspective*. Cambridge, UK: Cambridge University Press, in press-a.
- Sass, L. Schizophrenia: A disturbance of the thematic field. In: Embree, L., ed. *Aron Gurwitsch’s Relevance for Cognitive Science*. Dordrecht, The Netherlands: Kluwer, in press-b.
- Sass, L., and Parnas, J. Explaining schizophrenia: The relevance of phenomenology. In: Chung, M.; Graham, G.; and Fulford, K.W.M., eds. *Philosophical Understanding of Schizophrenia*. Oxford, U.K.: Oxford University Press, in press.
- Scharfetter, C. Ego-psychopathology: The concept and its empirical evaluation. *Psychological Medicine*, 11:273–280, 1981.
- Schneider, K. *Clinical Psychopathology*. Translated by M.W. Hamilton. New York, NY: Grune and Stratton, 1959.
- Schwartz, S. Is there a schizophrenic language? *Behavioral and Brain Sciences*, 5:579–588, 1982.
- Selten, J.-P. “The Subjective Experience of Negative Symptoms.” Unpublished doctoral dissertation, University of Groningen, 1995.
- Selten, J.-P.; van den Bosch, R.J.; and Sijben, A.E.S. The subjective experience of negative symptoms. In: Amador, X.F., and David, A.S., eds. *Insight and Psychosis*. New York, NY: Oxford University Press, 1998. pp. 78–90.
- Selten, J.P.; Wiersma, D.; and van den Bosch, R.J. Discrepancy between subjective and objective ratings for negative symptoms. *Journal of Psychiatric Research*, 34:11–13, 2000a.
- Selten, J.P.; Wiersma, D.; and van den Bosch, R.J. Distress attributed to negative symptoms in schizophrenia. *Schizophrenia Bulletin*, 26(3):737–744, 2000b.
- Sokolov, A.N. *Inner Speech and Thought*. New York, NY: Plenum, 1972.
- Sokolowski, R. *Introduction to Phenomenology*. Cambridge, U.K.: Cambridge University Press, 2000.
- Solovay, M.R.; Shenton, M.E.; and Holzman, P.S. Comparative studies of thought disorder: Mania and schizophrenia. *Archives of General Psychiatry*, 44:13–20, 1987.
- Sommers, A.A. “Negative symptoms”: Conceptual and methodological problems. *Schizophrenia Bulletin*, 11(3):364–379, 1985.
- Spitzer, M. *Ichstörungen: In search of a theory*. In: Spitzer, M.; Uehlein, F.A.; and Oepen, G., eds. *Psychopathology and Philosophy*. Berlin, Germany: Springer, 1988. pp. 167–183.
- Spitzer, M. A cognitive neuroscience view of schizophrenic thought disorder. *Schizophrenia Bulletin*, 23(1):29–50, 1997.
- Stanghellini, G. Vulnerability to schizophrenia and lack of common sense. *Schizophrenia Bulletin*, 26(4):775–787, 2000.
- Störring, G. Perplexity. (1939) In: Cutting, J., and Shepherd, M., eds. *The Clinical Roots of the Schizophrenia Concept*. Cambridge, U.K.: Cambridge University Press, 1987. pp. 79–82.
- Tissot, T. *Fonction symbolique et psychopathologie*. Paris, France: Masson, 1984.
- Tucker, G.J. Putting *DSM-IV* in perspective. [Editorial]. *American Journal of Psychiatry*, 155:159–161, 1998.
- van den Bosch, R. Context and cognition in schizophrenia. In: den Boer, J.A.; Westenberg, H.G.M.; and van Praag, H.M., eds. *Advances in the Neurobiology of Schizophrenia*. Chichester, U.K.: Wiley, 1994. pp. 343–366. Available at: <http://www.psy.med.rug.nl/0014>.

van den Bosch, R.J.; Rombouts, R.P.; and van Asma, M.J.O. Subjective cognitive dysfunction in schizophrenic and depressed patients. *Comprehensive Psychiatry*, 34:130–136, 1993.

Vygotsky, L. *Thought and Language*. (1934) Translated by E. Hanfmann and G. Vakar. Cambridge, MA: MIT Press, 1962.

Weiser, M.; Reichenberg, A.; Rabinowitz, J.; Kaplan, Z.; Mark, M.; Bodner, E.; Nahon, D.; and Davidson, M. Association between nonpsychotic psychiatric diagnoses in adolescent males and subsequent onset of schizophrenia. *Archives of General Psychiatry*, 58:959–964, 2001.

Wittgenstein, L. *Tractatus Logico-Philosophicus*. (1921) Translated by C.K. Ogden with F. Ramsey. New York, NY: Routledge, 1922.

Yung, A.R., and McGorry, P.D. The prodromal phase of first-episode psychosis: Past and current conceptualizations. *Schizophrenia Bulletin*, 22(2):353–370, 1996.

Zahavi, D., and Parnas, J. Phenomenal consciousness and self-awareness: A phenomenological critique of representational theory. *Journal of Consciousness Studies*, 5:687–705, 1998.

Zajonc, A. *Catching the Light: The Entwined History of Light and Mind*. New York, NY: Bantam Books, 1993.

The Authors

Louis A. Sass, Ph.D., is Professor and Chair, Department of Clinical Psychology, and Research Affiliate, Center for Cognitive Science, Rutgers University, Piscataway, NJ. Josef Parnas, M.D., is Professor of Psychiatry, Hvidovre Hospital, and Danish National Research Foundation, Center for Subjectivity Research, University of Copenhagen, Copenhagen, Denmark.