

# SELF, SOLIPSISM, AND SCHIZOPHRENIC DELUSIONS

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**ABSTRACT:** We propose that typical schizophrenic delusions develop on the background of preexisting anomalies of self-experience. We argue that disorders of the Self represent the experiential core clinical phenomena of schizophrenia, as was already suggested by the founders of the concept of schizophrenia and elaborated in the phenomenological psychiatric tradition. The article provides detailed descriptions of the pre-psychotic or schizotypal anomalies of self-experience, often illustrated through clinical vignettes. We argue that delusional transformation in the evolution of schizophrenic psychosis reflects a global reorganization of consciousness and existential reorientation, both of which radiate from a fundamental alteration of the Self. We critically address the contemporary cognitive approaches to delusion formation, often finding them inconsistent with the clinical features of schizophrenia or implausible from a phenomenological point of view.

**KEYWORDS:** self-awareness, subjective experience, pre-schizophrenic prodrome, phenomenology, psychosis, cognitivism

The greatest hazard of all, losing one's self, can occur very quietly in the world, as if it was nothing at all. No other loss can occur so quietly; any other loss—an arm, a leg, five dollars, a wife etc.—is sure to be noticed.

—Søren Kierkegaard

## I. INTRODUCTION

**T**HE ARGUMENT OF this paper, based on empirical research, clinical experience, and phenomenological considerations, is that disorders of the Self represent the psychopathological core of schizophrenia. The notion of “core” refers to a basic, *generative* disorder (“trouble générateur”: Minkowski 1997), *clinically detectable in the pre-illness stages* and operative in the formation of the schizophrenic psychosis as its underpinning, and lending coherence to the various symptoms of the advanced stage (e.g., delusions). In our view, the emergence of delusions in schizophrenia cannot be comprehended as an effect of a modular dysfunction in the chain of “information-processing,” but should, rather, be seen as an instance of a quite profound Self-World transformation, as a construction of a “delusional world” reflective of a solipsistic position inchoate in the pre-onset or prodromal stages of the illness.<sup>1</sup> These views can be accommodated within a framework of the so-

called neuro-developmental hypothesis of the origins of schizophrenia, essentially proposing that noxious environmental and genetic factors, acting pre/post-natally and during early infancy, contribute to the vulnerability to schizophrenia (Murray and Lewis 1987; Asarnow et al. 1995; Woods 1998). The nature of this vulnerability is hypothesized here to comprise a fragile constitution of selfhood.

The present paper presents in clinical detail anomalous self-experiences in the pre-onset (i.e., prodromal) phases of schizophrenia and in the schizotypal disorders (i.e., sub-clinical, non-psychotic forms of schizophrenia) that are considered as being crucially informative in a pathogenic sense (Meehl 1962; Parnas 1999a). To put it differently, one cannot comprehend the delusional transformation in schizophrenia unless the subtler, fundamental features, *predating* the onset of psychosis, are also taken into account. Well-crystallized *psychotic* symptoms are “state” phenomena, with marked intra- and inter-individual variations (Parnas and Bovet 1995b; Parnas et al. 1996), reflecting fleeting mental organization of a complexity quite distant from the underlying vulnerability to the illness. Such symptoms are therefore not the most relevant starting clues for charting the evolution of schizophrenia (Huber 1983; Klosterkötter 1988; Parnas 1999a). To use an analogy: Exclusive focus on the well-crystallized psychotic symptoms would correspond, in internal medicine, to exclusive studies of stroke victims to uncover the causes of hypertension.

## 2. SELF AND SCHIZOPHRENIA: EARLY DESCRIPTIONS

A variety of self-disorders in schizophrenia have always been recognized, at least implicitly, as essential components of its clinical picture. An absent reference to a Self is frequently merely terminological, because the relevant phenomena are addressed in other terms and/or in another theoretical framework.

Self-disorders were already described in detail at the turn of the nineteenth and twentieth century; French psychiatrists, especially, published numerous case histories of patients, who today

would have been diagnosed as suffering from schizophrenic and schizotypal disorders and were characterized by profoundly altered self-experience (Janet 1903; Hesnard 1909; de Clérambault 1942). Eugene Bleuler (1911) considered “basic disorder” of personality,<sup>2</sup> including various alterations of behavior and the schizophrenic “dementia” as the so-called “complex fundamental” (diagnostic) features of schizophrenia, stating that the illness invariably involves an affliction (“Spaltung”) of the Self: “Ganz intakt ist dennoch das Ich nirgends” (Bleuler 1911, 58). The schizophrenic autism, another of E. Bleuler’s “fundamental” symptoms, may also be conceived of as inclusive of self-disorders (Manfred Bleuler 1972; Parnas and Bovet 1991). Kraepelin (1896, 1913) claimed that a *disunity of consciousness* (“orchestra without a conductor”) is the core feature of schizophrenia. This disunity was closely linked to “a peculiar destruction of the psychic personality’s inner integrity, whereby emotion and volition in particular are impaired” (1913, 668, our translation).

A contemporary of Bleuler and Kraepelin, Joseph Berze (1914), explicitly proposed that a *basic alteration of self-consciousness* (“primary insufficiency”) was a *primary disorder* of schizophrenia. He described this “primary insufficiency” as a peculiar change, a *diminished luminosity and affectability* of self-awareness. Jaspers (1923) proposed the following experiential modes in which a *Self is aware of itself*: (a) *activity*, comprising awareness of one’s existence and action, (b) *unity*, (c) temporal-diachronic *identity*, and (d) me/not me *demarcation*. The sense of Self, says Jaspers, may be affected in any of these modes. The vignettes that Jaspers provided to illustrate self-disorders are often suggestive of schizophrenia, but he stopped short of pursuing the potential theoretical significance of such disorders. Kurt Schneider (1959) addressed Self-disorders in his description of passivity phenomena, allegedly reflective of a loss of “ego-boundaries.” Scharfetter (1980, 1981) modified Jaspers’ domains of self-experience to comprise, in a hierarchical order of increasing experiential complexity, vitality, activity, continuity, demarcation, and identity. Scharfetter considered many delusional phenomena as reflecting compensato-

ry reactions to self-disorders. Most of his clinical examples of altered self-experience in schizophrenia are, however, of a clearly psychotic intensity.

Detailed descriptions of self-disturbances, frequently associated with the explorations of the sense and the nature of the Self, are to be found in phenomenological psychiatry (Minkowski 1927, 1997; Laing 1959; Blankenburg 1969, 1971, 1986; Tatossian 1979; Kimura 1997). The main implication from this line of work is that alteration of the Self represents *the primary disorder* of schizophrenia, conferring on it a unique Gestalt and reflecting its pathogenetic nucleus:

La folie . . . ne consiste pas ni dans un trouble du jugement, ni de la perception, ni de la volonté, mais dans une perturbation de la structure intime du moi (Minkowski 1997, 114).

### 3. RECENT STUDIES

Little empirical research offers *prospective* data on self-experience in schizophrenia. One follow-back study using objective data did, however, reveal fluidity of self-demarcation, lack of a coherent narrative-historical self-identity, and other self-disturbances to be prominent features of the pre-schizophrenic states at school age (Hartmann et al. 1984). None of the completed prospective high-risk projects or birth cohort studies collected data relevant to self-experience.

An important contribution in this field is the work of Gerd Huber and his colleagues in Germany: In a series of retrospective and, more recently, prospective clinical studies, they identified subtle cognitive, perceptual, motor, and corporeal disturbances, designated as “basic symptoms,” many of which are specific to schizophrenia and precede its onset (Huber et al. 1979; Huber 1983; Klosterkötter 1988; Klosterkötter et al. 1997, 2001). Several of these disturbances reflect anomalies in self-experience (e.g., varieties of depersonalization, disturbances of the stream of consciousness, and distorted bodily experiences). The “basic symptoms” are thoroughly described in a prototypical manner in the Bonn Scale for the Assessment of Basic Symptoms or BSABS (Gross et al. 1984), translated into Danish and routinely used in our psychopathological assessments.

In a Norwegian study using naturalistic in-depth interviews with twenty first-onset schizophrenic patients (Møller and Husby 2000), three domains of the pre-onset subjective change were revealed: *All* patients had profound and alarming changes of self-experience; nearly all patients complained of ineffability of their altered self-experience; and a great majority reported preoccupations with metaphysical, supernatural, or philosophical issues.

Our own pilot retrospective study of the schizophrenic prodromes in nineteen first-onset patients (Parnas et al. 1998) indicated a nearly identical profile of results. More recently, we have completed systematic and detailed psychopathological data collection, including items pertaining to self-disorders and basic symptoms (BSABS) on 155 first-admission cases, which were diagnosed according to International Classification of Diseases (ICD-10) research criteria (WHO 1992): fifty-seven suffered from schizophrenia, forty-three from schizotypal disorder, and the remaining fifty-five patients suffered from other, non-schizophrenia spectrum disorders (“The Copenhagen Prodromal Study,” Handest and Parnas, in prep.). Self-disorders were measured with an a priori constructed scale, summing up the individual scores on the interview items pertaining to the anomalies of self-experience. In a separate project, lifetime frequencies of anomalies of self-experience were compared between twenty ICD-10 patients with residual schizophrenia and twenty remitted bipolar patients matched for sex and age (Parnas and Handest, submitted). Preliminary data analyses indicate collectively that self-disorders are (a) highly specific to the schizophrenia spectrum conditions (note that self-disorders are *not* a part of the ICD-10 diagnostic criteria of schizophrenia), (b) mark the picture of the pre-schizophrenic prodromes, and (c) occur frequently in hospitalized schizotypal conditions. Self-disorders correlate positively with the duration of the pre-onset social dysfunction, are significantly associated with the retrospective information on infantile or early childhood developmental disorders, and aggregate significantly in the patients with a “positive” family history of schizophrenia. Self-disorders correlate

with the “negative” and “positive” symptom-scales of the PANSS, i.e., the Positive and Negative Syndrome Scale (Kay et al. 1987).

The vignettes and quoted statements stem from our own studies and clinical work unless indicated otherwise. Socio-demographic characteristics of the subjects in the vignettes from our studies are usually altered to preserve the subjects’ anonymity. Morbid self-experience is defined here as an experience in which one’s first-person experiential perspective or *one’s status as a subject of experience or action are somehow distorted*.

#### 4. ANOMALOUS SELF-EXPERIENCE IN THE PRE-ONSET PHASES OF SCHIZOPHRENIA AND IN THE SCHIZOTYPAL DISORDER

The majority of first-admitted schizophrenia spectrum patients in our series had been treated *before* their first psychiatric hospitalization by practicing psychologists or psychiatrists, usually with a diagnosis of major depression and an attempt at treatment with antidepressant medication. One reason for this lack of early correct diagnosis is linked to the cryptic ways in which the patients verbalize their complaints.<sup>3</sup> They present non-specific complaints such as depression, fatigue, and lack of concentration or anxiety. Blankenburg (1971) speaks in this context of “non-specific specificity”: a trivial (non-specific) complaint of fatigue turns out, on more close evaluation, to be caused by a pervasive inability to grasp the everyday significations of the world and a correlated perplexity (a condition highly suggestive of schizophrenia, hence “specificity”). As observed by Berze (1914), self-disorders frequently reveal themselves only after an attempt to penetrate behind such surface complaints by an interviewing clinician who is familiar with the potential manifestations of self-disorders. The difficulty, which the patients have in describing their experiences, is multi-determined. The linguistic resources for characterizing dimensions of subjectivity, especially of the non-propositional type, are not readily available. This is doubly true of anomalous self-experience that affects the very condition of experience and impedes its

reportability. Adding to these difficulties is the fragility of the forms of consciousness in question, with their unstable wavering of implicit/prereflective into explicit/reflective modalities.

The varieties of anomalous self-experience described below are *intimately interrelated*, yet distinguished for the sake of clarity of exposition.

#### PRESENCE AND ITS ALTERATIONS

The phenomenological concept of *presence* indicates that in our everyday transactions with the world, the sense of self and the sense of immersion in the world are inseparable: “Subject and object are two abstract moments of a unique structure which is *presence*” (Merleau-Ponty 1945, 430, our italics).

From a phenomenological perspective, we can distinguish here two intentional *moments*: a certain *luminosity* of self-presence or pre-reflective self-awareness (*ipseity*) (Henry 1963) and a correlative pre-reflective embeddedness in the world.<sup>4</sup> These intentional moments deserve a closer phenomenological exposition, because disturbances of presence appear to be the very earliest type of the prodromal experience in schizophrenia (Parnas et al. 1998; Møller and Husby 2000).

We may speak of a pre-reflective self-awareness whenever we are *directly*, non-inferentially conscious of our own occurrent thoughts, perceptions, feelings, or pains; these appear in a first-personal mode of givenness that immediately reveals them as our own, i.e., entails a built-in self-reference. Thus if the experience is given in a first-personal 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 (Zahavi and Parnas 1998). First-personal givenness is not something incidental to the being of experience, 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*. To be aware of *oneself* is consequently not to apprehend a pure Self *apart* from experience, but to be acquainted with an experience in its first-personal mode of presentation, that is, from “within.” The subject of experience is *a feature or function of its given-*

ness (Zahavi 1999). Ipseity is here considered as a *medium* in which specific modes of experience become articulated and thus equals the most basic form of selfhood.

Unreflected immersion in the world is phenomenologically considered as a pre-reflective, perceptual intentionality. Phenomenology distinguishes between a thematic, explicit, or objectifying perceptual intentionality, and a non-reflective, tacit sensibility, constituting our primary *presence to the world*. This so-called operative intentionality (Merleau-Ponty 1945; Husserl 1972) is pre-reflectively functional without being explicitly engaged in any epistemic acquisition. It procures a basic texture or organization, and hence a coherence and familiarity, to the field of experience. It is upon such texture that *explicit* intentionality configures its categorical, recognizing, or judgmental disclosures. It is in the pre-reflective mode that habits or dispositions become sedimented and exercise their intentional role. The call for action in this mode does not originate from an explicit content in the mind (i.e., from a represented goal) but rather from the thing itself, perceived as a certain deviation from the optimal Gestalt and leading to a globally attuned response (Dreyfus and Dreyfus 1999). Operative intentionality is therefore considered as a necessary component of our non-reflexive, automatic attunement to the world, i.e., “common sense” (Parnas and Bovet 1991; Parnas 2000).

The most prominent feature of altered presence in the pre-onset stages of schizophrenia is an unstable sense of the groundedness, fullness, or reality of the self and a frequent, intimately correlated feeling of alienation from the world. The patient feels that a profound change is *afflicting* him, but he cannot verbalize and pinpoint *what exactly* is changing, because it is not *a something* that can easily be expressed in propositional terms. What becomes problematic is a pervasive and normally tacit medium of being. The patient appears to be saying that he feels bereft of the foundation of his existence. The phrasings of such complaints may range from a trivial “I don’t feel myself” or “I am not myself” to “I am losing contact with myself,” “I am turning inhuman,” or “I am becoming perverse,

a monster,” etc. The patient senses an inner void and complains of the lack of an “inner nucleus,” which seems normally constitutive of his field of awareness and *crucial to its very subsistence*. These complaints may take a predominantly existential turn: The patient does not feel being fully existing or alive, *fully awake or conscious*, or fully *present and affected*. Altered presence may also be described as a lack of immersion or as a “phenomenological distance” within perception and action. In a normal perceptual experience, the object perceived is given directly, in the flesh so to say, but now it appears somehow filtered, deprived of its fullness. Perception is not lived but is more like a mechanical, purely receptive sensory process, unaccompanied by its affective feeling-tone.<sup>5</sup>

*Case 1.* Robert, a twenty-one-year-old unskilled worker, complained that for more than a year, he had been feeling painfully cut off from the world and had a feeling of some sort of indescribable inner change, prohibiting him from normal life. He was troubled by a strange, pervasive, and a very distressing feeling of not being present or fully alive, of not participating in the interactions with his surroundings. He was never entirely *involved in the world*, in the sense of engaged absorption in daily life. This experience of disengagement, isolation, or ineffable distance from the world was accompanied by a tendency to observe or monitor his inner life. He summarized his affliction in one exclamation: “My first personal life is lost and is replaced by a third person perspective” (He was not at all philosophically read). To exemplify his predicament more concretely, he said that, for instance, listening to music on his stereo would give him an impression that the music somehow lacked its natural fullness, “as if something was wrong with the sound itself,” and he tried to regulate the sound parameters on his stereo equipment, to no avail, and only to finally realize that he was somehow “internally watching” his own receptivity to music, his own mind receiving or registering of musical tunes. He, so to speak, witnessed his own sensory processes rather than living them. It applied to most of his experiences in that, instead of living them, *he experienced his*

*own experiencing*. He reflected on self-evident daily matters and had difficulties “in letting things and matters pass by”<sup>6</sup> and linked it to a long-lasting attitude of “adopting multiple perspectives,” a tendency to regard any matter from all possible points of view (Parnas 2000, 124–25).

We should add here that psychiatrists tend to describe such patients as “an-hedonic” (deficient in feeling pleasure), but an-hedonia is only one particular aspect of this diminishment of basic tonality, luminosity, or *affectability* of self-awareness accompanied by a sense of inexplicable inner fissure or void. (A similar description is to be found in Berze [1914].)

The incertitude of which Robert complains reflects a sort of poly-valence (rather than ambivalence) and seems to be linked to a more global fragmentation of meaning, a loss of “natural evidence” or “loss of common sense,” *which is the hallmark of the schizophrenic autism and perplexity* (Parnas and Bovet 1991). Robert resembles Anne, a patient described in detail by Blankenburg (1971). Anne’s main and monotonous complaint was her inability to grasp the world’s natural significance and appeal. Nothing was *self-evident*, and Anne had a distressing difficulty in the automatic understanding of people and situations: “It is *not* the question of knowledge; it is *prior to* knowledge . . . ; it is so small, so trivial; every child has it!” It is therefore important to note that the lack of “natural evidence” or of “common sense” does not refer to a deficient stock of propositional knowledge but to a deficient ante-predicative, *pre-conceptual*, or immediate grasp of the world’s significations.<sup>7</sup>

The experience of meaning fragmentation is, in the case of Robert, linked to a lack of “perspectival abridgement,” a lack of a *dominant point of view*, blocking out potential rival perspectives and necessary for fluid attunement to the world (Sass 1992). Such abridgement can only be realized in the experiential medium of reliable selfhood. Disturbances of presence and fragmentation of immediate meaning are usually associated with hyper-reflexive forms of awareness (Case 1), discernible in the emotional life, perception, cognition, and action (see also be-

low). Hyper-reflexivity refers to forms of exaggerated self-consciousness in which a subject takes itself as its own object (Sass 1992).

*Most likely, the disturbances of presence constitute a foundation of the more explicit and articulated anomalies of selfhood described in the following sections.*

#### SENSE OF CORPOREALITY AND ITS ALTERATIONS

In incipient schizophrenia, there is a variety of dissociations of the bodily experiential modes, with a striking tendency to experience one’s body *predominantly as an object*, i.e., there is an increasing experiential distance between subjectivity and corporeality. The following vignette illustrates many experiential aspects of such a fissure or disjunction.

*Case 2.* “I am no longer myself . . . I feel strange, I am no longer in my body, it is someone else; I sense my body but it is far away, some other place. Here are my legs, my hands, I can also feel my head, but cannot find it again. I hear my voice when I speak, but the voice seems to originate from some other place.” He has difficulty in localizing his own person: “Am I here or there? Am I here or behind?”

When he does something, he has a feeling of observing his actions as a witness without being actively involved: “One might think that my person is no longer here . . . I walk like a machine; it seems to me that it is not me who is walking, talking, or writing with this pencil. When I am walking, I look at my legs which are moving forward; I fear to fall by not moving them correctly.” When he watches himself in a mirror, he is afraid of staying there or is not sure on which side of the mirror he actually is . . .

*His reason is intact; he knows very well that he is himself* (Hesnard 1909, 138, our translation and italics)

The most frequent early change is a sense of being detached, disconnected from one’s body, which feels somehow alien or not “fitting” the subject, e.g., a patient may say that he feels “as if his body was too small to be inhabited,” or as somehow indefinably uncomfortable to live with.

A more clear distortion of experience consists of the loss of bodily coherence: Bodily parts are felt as if they were disconnected or isolated from each other. This feeling may take an alarming intensity, where the psycho-corporeal unity disintegrates, a sense of fragmentation is accompanied by a (pre-)psychotic panic of literal dissolution (“going into pieces”).

Yet another experientially more articulated disturbance consists of a *feeling* of morphological change: the body or its parts feel heavier/lighter/smaller/larger/longer/shorter, a feeling that may be accompanied by optical illusions involving an actual visual experience of bodily change. The most known of the latter is the “mirror phenomenon” (“signe du miroir” [Abely 1930] or “Spiegelphänomen”), in which the patient inspects his face in the mirror because of feelings of self-alteration: The eyes may look dead, empty, the face may seem deformed; a more subtle variety of this phenomenon consists of avoiding one’s mirror image because it is perceived as somehow threatening or provoking, of having difficulty in recognizing oneself in photographs, or of becoming amazed by one’s look in the photographs.

Disturbance of subjectivity may manifest itself in motor performance. Motor or verbal acts may occur without or despite the patient’s intention and interfere with his actions or speech, but are *not* regarded as being made by some external forces.

*Case 3.* A former paramedic reported that many years before the onset of his illness, he occasionally found himself (for example, when driving in an ambulance and to the driver’s surprise) involuntarily uttering a few words entirely unconnected with his occurrent thoughts. He would then immediately continue to speak in a relevant way or express a few clichéd remarks to cover up this embarrassing episode.

Motor block (complete blockage of intended actions) occurs as a sudden and brief sense of paralysis during which the patient is unable to move or speak. Another and frequent phenomenon is the *deautomatization of motor action* in which habitual performances (such as dressing or teeth brushing) suddenly require conscious

attention and a sense of mental and physical effort as shown in the next case.

*Case 4.* A female library assistant reported that before the onset of her illness, she was alarmed by a frequently recurring experience in which replacing returned books from a trailer to the library shelves suddenly required attention. She had to think *how* she was to lift her arm, grasp a book with her hand, turn herself to the shelf, and so forth.

#### STREAM OF CONSCIOUSNESS AND ITS ALTERATIONS

A fundamental change in the stream of consciousness in the early phases of schizophrenia consists of an emerging experiential gap between the Self and its contents (in a similar way as described above for the changed sense of corporeality). Mental content becomes quasi-autonomous, bereft of its natural dimension of myness. Thoughts may appear as if from nowhere, are felt as ego-less, decentered from the Self, and may sometimes possess an unusual significance (Conrad 1958). They interfere with the ongoing stream of thoughts (*thought interference*) and may be described by the patient through specific private designations such as “automatic,” “acute” thoughts, or “thought-tics,” etc. The patient still self-ascribes his thoughts as his own; their content is often neutral, but there is no sense of ongoing inner resistance or mental struggle (as in the case of obsessions).

Patients report increasing hyperreflexive objectivation of the introspective experience. Inner speech becomes transformed from *a medium of thinking* into an object-like entity with quasi-perceptual characteristics (“Gedankenlautwerden”). Other patients may exhibit a subtler *spatialization* of inner experience. They describe their thoughts or feelings in physical terms, as if possessing an object-like spatial quality (“my thoughts are dense and encapsulated”) or locate them spatially (“my thoughts feel mainly in the right side of the brain” or “it feels *as if* my thoughts were slightly behind my skull”). One patient reported that her “experiential point of perspective” (presumably her experiential “I-

pole”) felt “as if” spatially “shifted some centimetres behind” (she had a feeling as if she looked at the world somehow “more from behind”).

Shrinking of the sense of myness strips the experience of its lived context, inviting an introspective, hyper-reflexive awareness (Case 1) (Sass 1992a, 2000).

Case 5. If a thought passed quickly through his brain without him being fully aware of it, he was forced to direct back his attention and scrutinize his mind to know exactly what he had been thinking. In one word, he was preoccupied by the continuity of his thinking. He feared that he may stop thinking for a while, that there might have been “a time when my imagination had been arrested . . .” He awoke one night and asked himself, “Am I thinking? Since there is nothing which can prove that I am thinking, I cannot know whether I exist.” In this manner, he annihilated the famous aphorism of Descartes (quoted in Hesnard 1909, 179, our translation).

Hyperreflexivity may have a compensatory nature, making up for enduring perplexity and “loss of natural evidence” (Blankenburg 1971) as in Case 6, or it appears as a more primary affliction as in Case 7 (both below). In consequence, the thinking processes lose the sense of subjective mastery and are experienced as increasingly alienated.

Case 6. A thirty-four-year-old university graduate reported that for many years trivial matters frequently came to occupy his mind. For example, while reading a novel written in the first person and encountering a sentence like “She said that he must return tomorrow,” he immediately started to reflect on the reasons for using personal pronouns and to finally conclude that “It has something to do with communication.” He then turned his attention to the word “communication” and continued to think on the necessity to communicate. He could also reflect upon the fact that the air distributed itself in the rooms of his apartment. He called this type of thinking, “chopping up a sentence, taking a word out of its flow.”

Case 7. “I bypass a window display of a shop in which there are exposed bicycles and bicycle parts; [in a wheel] all the metal spokes cross each other in sharp angles before they reach the axle . . . the axle turns around with the spokes. No, it is not the axle that rotates; it is the bar, a piece of steel. The axle does not exist; it is just a mathematical line, perpendicular to the plane of the wheel that is determined by the spokes, by forty straight lines. However, this is not necessary either: Only two lines are needed to determine a flat surface. And the circumference?  $2\pi r$  is the expression for the length of the felloe, or more precisely, for the theoretical circumference, outlined by this inexact circle (i.e., the felloe). Are we able to conceive an ideal line by paying attention to the lines in nature? Is Spencer’s claim that mathematics originates from experience and induction correct? . . . These associations . . . would not seem to me as sick if I were able to master them, like someone who calmly reflects on the matters that he is working with, contemplating some professional problems. But when I am thinking in this way, without being able to stop it . . . I have no mastery over the course of these ideas . . . it seems to me *as if it is not me* who generates them . . .” (Hesnard 1909, 146, our translation and italics).

This state of mind may intensify into a *thought pressure* (“Gedankenjagen”), in which the patient is overwhelmed by a myriad of unconnected thoughts going in different directions; loss of meaning or lack of an organizing theme is a cardinal feature of this symptom, in addition to the fact that the contents may appear affectively neutral (as opposed to depressive ruminations). One patient reported a feeling “as if” his consciousness consisted of multiple emanating sources, disconnected from each other and each “pulsating” at its own pace. A seemingly opposite experience is of a *thought block*, in which thoughts abruptly disappear from the stream or more gradually fade away. A variant of this phenomenon is a sudden and total *discontinuity of self-awareness*: The patient may report that for some seconds he loses awareness of his activity, e.g., he does not know how and why he got from



his living room to the kitchen or he finds himself somewhere in the city without knowing how he got there. Less characteristic phenomena comprise difficulties in initiating and carrying through the thinking process: The patient may complain of a diminished ability to generate thoughts or of a general slowness of cognition and inability to reach the desired goal (*disturbances in thought intentionality and goal-directedness*). Communication of meaning to other people may also be distorted (*disturbed self-expression*). The patient has an experience of a disaccord between his cognitive-emotional state and its outward expression. He perceives his own behavior, gestures, facial expression, or language as somehow disfigured and out of control, a condition usually associated with hyperreflexive forms of self-awareness.

Hyperreflexivity and diminished mynness are often associated with a peculiar *splitting or a doubling of the Self* (“Ich-Spaltung”) into an *observing* and *observed* ego, neither of each assuming ipseity function (Case 1). Such experience becomes especially prominent immediately before the onset of a frank psychotic episode. It may be felt as a form of inner struggle or an oscillation between the good and the evil “parts” or between different selves (which themselves may be described in spatialized terms). This is, at least initially, felt and communicated on the “as if” metaphorical level. Normal processes of reflection and imagination also involve an ego-split, but they possess a natural flexibility and happen in a unified field of experience in which the sense of mynness or self-presence never calls itself into question.

#### SELF-DEMARCATON AND ITS ALTERATIONS

Inability to discriminate Self from not-Self in schizophrenia was described as *transitivism* by Bleuler (1911). This phenomenon attracted attention by numerous authors, usually in connection with psychotic symptoms such as delusions of external influence, mind reading, thought broadcasting, certain hallucinations, and psychotic “projection” in psychoanalytic terms (loss of ego-boundaries [Fenichel 1945]), and in connection with the more recent neurocognitive investigations (Frith 1992). Typically, in the neurocog-

nitive literature the sense of mental self-possession is regarded as being generated by inferential self-monitoring mental processes. From a phenomenological perspective, the “me/not-me” demarcation (deficient in transitivistic experience) is automatically constituted in every experience; such border is just *an aspect* of non-reflexive self-awareness. *Inferential reflection seems to arise only post hoc* as a consequence of a deficient sense of mynness (see also section 6) as in Case 8.

*Case 8.* A young schizotypal patient frequently contemplated his “ego-boundary.” He thought about “this fluid transition between me and the world”: “It must consist of a mixture of air molecules, sweat droplets, and tiny fragments of skin debris.”

In the prodromal phases of schizophrenia and in schizotypal conditions, one may observe subtle transitivistic phenomena that are purely experiential, that is, unaccompanied by delusional elaborations (i.e., a “loss of reality testing”). Case 9 is paradigmatic of such experiences.

*Case 9.* A young man was frequently confused in a conversation, being unable to distinguish between himself and his interlocutor. He tended to lose the sense of whose thoughts originated in whom and felt “as if” his interlocutor somehow “invaded him,” an experience that shattered his identity and was intensely anxiety provoking. When walking on the street, he scrupulously avoided glancing at his mirror image in the windowpanes of the shops, because he felt uncertain on which side *he actually was*. He used to wear a wide and tight belt to feel “more whole and demarcated.” He was very attracted to the philosophy of Merleau-Ponty, whom he considered as the only philosopher who truly had grasped the fundamental subject-object reversibility.

#### SOLIPSISM

Møller and Husby observed in their study (confirming a common clinical experience) that young pre-schizophrenic patients become preoccupied with philosophical, supernatural, and metaphysical themes. It seems as if for many

patients a fundamental transformation of their worldview is taking place: “Had to define and analyze everything I was thinking about; needed new concepts for the world and human existence; absorbed by new ideas or interests, gradually taking over my way of life and thinking” (Møller and Husby 2000).

Anomalies in self-experience described in the preceding sections motivate such a quest because the patient is shattered in the very foundation of his being and self-presence. He experiences phenomena, which are beyond commonsensical, naturalistic folk metaphysics: “Reality” is increasingly mind-dependent; “other minds” become malevolent projective constructions; causality seems non-physical; the Self-World polarity or subject-object articulation is blurred and self-awareness endures a transformation in which the constitutive and therefore normally tacit mental processes become available for an introspective gaze (Parnas 1999b). The term “solipsism,” denoting here a paradoxical mixture of increasing subjectivization of the world and self-dissolution, seems to capture such a position (Sass 1994).

*Case 10.* A young patient reported that he had, in brief moments, a feeling that only the objects in his current field of vision were real, *as if* the rest of the world, including most familiar places and persons, did not really exist. Probed about suicidal intentions, he replied: “No, I could never kill myself. *I can’t imagine the world not being represented [by me].*”

It is the solipsistic sentiment that inspires the patient to suspect an existence of a hidden ontological domain only accessible to him. Feelings of *centrality* may be prominent in such conditions:

*Case 11.* A former physician, when working in the emergency room of a small provincial hospital, experienced, during fleeting moments, a feeling that he was the only true doctor in the entire world and that the fate of humanity was in his hands. He immediately suppressed this feeling as entirely nonsensical.

*Case 12.* When I hear a dog barking or a cat screaming far away, I instantly get a feeling that

they bark and scream *at me*. When I listen to the radio, I get this thought that one is trying to let me understand something. *I know* that it is pure rubbish (Gross et al. 1984, 78, our translation and italics).

*Mimetic experiences* may occur and are usually accompanied by a feeling of centrality: The patient, while in motion, experiences similar movements of inanimate objects or of people. He may feel, in the “as if” mode, that he is somehow forced to imitate others or that others imitate him.

*Case 13.* Luc, age seventeen years, reports: “I made the same gestures as others, but *ahead of* them.” Then he corrects himself: “*following* them,” but this does not seem satisfactory either. He hesitates between these two versions and ends up choosing the one in which he *precedes* the others (Grivois 1995, 107, our translation and italics).

Solipsism may be a source of a quite specific type of subtle grandiosity observable in the schizophrenia spectrum conditions: The patient may regard other people as pitiable, ontologically ignorant morons, solely chasing the material aspects of life. In the later, more chronic stages of the disease, the entire ontological-epistemological framework of experience, normally revolving around “naïve realism” (in the Western world), is dramatically transformed (Sass 1992b; Bovet and Parnas 1993), leading to “beliefs” that, on a purely contentual basis, are classified as the so-called bizarre delusions (defined as “physically impossible”; American Psychiatric Association 1994).

## 5. TRANSITION TO PSYCHOSIS AND TYPICALITY OF SCHIZOPHRENIC DELUSIONS

We have so far described the anomalies of self-experience that occur in the initial prodromal phase of schizophrenia and in schizotypal conditions. Yet, pre-schizophrenics and schizotypal patients frequently manifest behavioral abnormalities in early infancy and childhood. The overall picture emerging from prospective studies on the childhood antecedents of schizophrenia is

that impairments are detectable in several domains, even though their exact significance and time sequences are unknown. There is evidence of: (1) during infancy and childhood, erratic, zig-zag-like neuro-motor development, dysfunctions in perceptual, cognitive, and motor domains, and disturbed emotionality (Fish et al. 1992; Walker et al. 1994); (2) during school-age, aggressivity, especially in boys, and introversion, especially in girls, disturbed emotional rapport, formal thought disorder (Parnas et al. 1982; Parnas and Jørgensen 1989; Tyrka et al. 1995), disturbed interpersonal relations and neo-phobia (Hartmann et al. 1984); and (3) from age two to fifteen, linguistic difficulties (Crow et al. 1995). These data suggest collectively that future schizophrenia spectrum individuals are not only impaired in the cognitive-affective domain but also exhibit a generally unstable perceptuo-motor organization (Parnas and Bovet 1995b; Parnas et al. 1996). These multi-modal disturbances precede and may be associated with the anomalies of self-experience. They may also be observed among genetically predisposed (high-risk) children, who do not necessarily develop a long-lasting psychosis:

*Case 14.* Maria, now in late adolescence, born to a mother with severe schizophrenia and placed in foster family care immediately after birth (and subsequently adopted to the family), followed up regularly in an ongoing high-risk schizophrenia project (Parnas and Carter, in press). During the neonatal period, she exhibited severe neuro-irritability, with difficulties of sleeping/eating rhythm, excessive screaming, and an inability to calm down. At six-month psychological evaluation, there was no eye contact; similarly, a severe contact disturbance was noted at twelve-month evaluation. At twenty-four months, psychological testing was impossible to carry out because of pronounced restlessness and attentional difficulties. At thirty-six months, psychological assessment revealed severe but transient *regression* on motor- and language-developmental assessment.

In early childhood Maria exhibited severe compulsive phenomena and a pronounced fragility of the sense of selfhood, e.g., when given a dollhouse as a birthday present, she was afraid of “not remaining Maria any longer.” At the age of

twelve, she had a brief psychotic episode, dominated by delusions (not fulfilling the diagnostic criteria of schizophrenia), and was treated successfully with a small dose of an antipsychotic drug. Since puberty, her condition was permanently marked by the lack of “natural evidence” (hyper-reflexivity and a tendency to ask questions concerning self-evident matters) and a fragility of the sense of Self (e.g., worried about changing into someone else because of physical changes linked to puberty; yet she was cognitively well aware of the absurdity of such worries). Her academic school performance is now excellent; she functions well among her peers, has several girlfriends, and apart from certain fragility of self-hood and a tendency to hyper-reflexivity, she has no psychiatric symptoms.

In the psychotic phases of schizophrenia, self-disorders become thematized in the emergence of delusions, hallucinations, and passivity phenomena. The patient loses his sense of autonomy and feels “at the mercy” of the world (“Beeinflussungsstimmung”). Pervasive sentiment of centrality and self-reference (to the point of literal resonance between inner experience and external world events) precedes the emergence of psychotic phenomena (“Anastrophé”: Conrad 1958). Many such symptoms involve fundamental alterations of the sense of possession and control of one’s own thoughts, action, sensations, emotions, and bodily experience (Scharfetter 1980). These psychotic experiences of self-dissolution seem to arise on the background of more primary and subtler disturbances in presence and in other disorders of Self described in the preceding section. The following retrospective *reconstruction* of the evolution symptoms illustrates a transition from a prodromal phase into a frank psychosis.

*Case 15.* Peter’s history of illness:

January 1985: “strange change is affecting him,” feels “self-disgust,” has “lost contact to himself”

August 1985: increasingly preoccupied by existential themes and Indian philosophy, “perhaps meditation could help,” increasingly isolated

January 1987: feels fundamentally transformed, “something in me has become inhuman,” “no contact to his body,” “feels empty,” has to “find a new path in his life”

January 1988: is of the opinion that Indians are superior compared to other human races; they perhaps have a mission to save our planet

September 1992: preoccupied by recurring thoughts about extraterrestrials

January 1993: is convinced that Indians are reincarnated extraterrestrials

April 1994: feels that he is being brought here each day from another planet to assist Indians in their salvatory mission; delusions of external influence

June 1994: first admission to a psychiatric ward at age twenty-four (Møller 2001; details added after pers. comm.)

We notice here that the initial and ineffable self-transformation is progressively articulated and thematized: new interests in existentialism and Buddhist philosophy reflect the emergence of charismatic and eschatological preoccupations. In the operational psychiatric terminology, the initial self-disturbances evolve through “odd or overvalued” ideas and culminate in the emergence of “bizarre delusions.”

Müller-Suur (1950, 1954) and Kepinski (1974), among others, have observed that there is a characteristic *metaphysical* coloring of the content of delusions in schizophrenia, which helps us to distinguish them from non-schizophrenic delusions, a taint, in our view, closely linked to the solipsistic position. According to the *DSM-IV* or *ICD-10*, many examples from the “schizophrenic world” would be considered as *bizarre* delusions on the face of their implausible, or as Jaspers would have said, impossible content. However, that which is perceived as bizarre is not only the content in itself, but also a form of the patient’s experience transparent through the content (Sass 1992b; Bovet and Parnas 1993). The “metaphysical taint” in schizophrenic delusions conveys something to us about the nature of the relatedness between the Self and the world. It is therefore not a perception *per se* of the world, nor a conviction *per se* of the subject, which qualifies such delusional statements as

schizophrenic, but rather a *Gestalt* reflecting the disturbance of the “Self as a founding instance” (Blankenburg 1988), which is perceivable both in the subject’s perception and conviction. What we are confronted with in the delusional transformation is, therefore, a phenomenon of emergence: the emergence of an entirely new existential paradigm.

## 6. COGNITIVE APPROACHES TO SCHIZOPHRENIC DELUSIONS: A PHENOMENOLOGICAL APPRAISAL

We will now briefly address the dominant accounts of schizophrenic delusions, that are articulated in the “information processing” cognitive framework, to provide a contrast to our own phenomenological approach.

Current neuro-cognitive approaches to delusion formation broadly fall into an empiricist or rationalist tradition, a dispute mirroring the debates that already surfaced throughout the nineteenth century’s French psychiatry (Rigoli 2001) and occupied a prominent position in the German psychiatric discourse until World War II (Schmidt 1940). Certain problems that confront both approaches include:

- (1) The lack of any adequate *formal* definition of delusion (Jaspers 1923; Schmidt 1940; Spitzer 1990; Parnas and Bovet 1995a). This crucial conceptual lacuna is frequently ignored in the face of clinical or theoretical demands.
- (2) A tendency to treat delusion as a homogenous phenomenon, when, in fact, the pathways leading to delusion may be different in different disorders or even within the same disorder.
- (3) The extreme ambiguity and obscurity of the concept of “belief” (Needham 1972), a concept central to both cognitive science and analytic philosophy of mind and obviously crucial to the topic in question.
- (4) Reliance by both approaches on a modular theory of mind, now largely forsaken by its major architect on theoretical grounds (Fodor 2001), and whose applicability to schizophrenia is increasingly questioned in the neuroscientific literature (Parnas et al. 1996; Andreasen et al. 1998), mainly because neuropsychological studies of schizophrenia fail to identify a consistently focal dysfunction; rather, they demonstrate multiple and wide-

- spread deficits (Mohamed et al. 1999; Parnas et al. 2001).
- (5) A correlated reliance on the so-called “symptom approach,” i.e., addressing pathogenesis of *isolated* symptoms, rather than syndromes.
  - (6) A tendency to *waver between phenomenological and sub-personal claims*: Usually, if the phenomenological account appears incoherent or inconsistent with clinical evidence, recourse is made to hypothetical neural mechanisms (e.g., the notion of “efferent copy”; see below).
  - (7) As already mentioned, studies of the advanced illness stages have limited explanatory power: To identify, say, a particular cognitive style among deluded people does not show that this particular style is, in fact, a necessary causal factor in the *formation* of delusion (instead of being, say, a consequence).

The empiricist approach to delusions emphasizes a peripheral deficit in the attentional or perceptual processes, leading to *explanatory attempts* in the form of delusions. Maher (1988) elegantly formulated this approach with a specific focus on the logic of explanation, an approach already proposed by Wernicke (1900) in his notion of “explanatory delusions” (Erklärungswahn).

Delusions are best thought of as theories—much like scientific theories—that serve the purpose of providing order and meaning for empirical data obtained by observation. Delusional theories . . . should develop whenever there is (1) a real impairment in sensory functioning . . . , (2) a defect in the processes that select incoming information for processing (i.e. an attentional deficit), or (3) the experience of disturbance in personal expressive behavior, such as language disturbances or motor impairment . . . . A delusional theory, like other theories, is not readily abandoned . . . . (This fact) merely tells us that deluded patients are *like normal people*—including scientists—who seem extremely resistant to giving up their preferred theories, even in the face of damningly negative evidence (Maher 1988, 20–22, italics added).

Maher’s argument is a variant of a more general empiricist, and basically a dualist, assumption that human transactions with the world can be adequately reduced to a logical processing of atomistic sensory input:

*Each of us lives within the universe—the prison—of his own brain.* Projecting from it are millions of fragile sensory nerve fibers, in groups uniquely adapted to sample the energetic states of the world about us:

heat, light, force, and chemical compositions. That is all we know of it directly: *all else is logical inference* (Mountcastle [1975] quoted in Popper and Eccles [1981, 274], our italics).

Yet, it is doubtful whether humans are solipsistic entities whose dealings with the world only depend on theories that are either verified or disproved by sensory evidence. Even in the case of scientists, there can be no talk about solipsism, because, either consciously or not, scientists are committed to a certain paradigm (Fleck 1935; Kuhn 1970). What Kuhn calls a “disciplinary matrix,” i.e., “the entire constellation of beliefs, values, techniques, . . . shared by the members of a given community” (Kuhn 1970, 175) constitutes the *intersubjective horizon* of scientific endeavor. It is precisely due to such a horizon that observations that contradict theories are usually ignored until serious problems arise and lead to a transformation of the entire paradigm.

However, phenomenology would also argue that intersubjectivity is already operative at the level of the perceptual process itself. First, perception is not of atoms of sensory data; rather, it is a perception of a perceptual *field*, the latter being immersed in the “primary experiential datum” of the experiential (lived) world, which is a “unity of concordant total actuality, which is continually re-established in the course of our experiences” (Husserl 1962, 44). Second, the majority of objects that surround human beings possess a reference of *use*, be it as tools, artifacts, or affordances. Third and most importantly, phenomenology emphasizes the role of intersubjectivity in the very nature of intentional relation to the world. The subject is intentionally directed toward objects whose horizontal, incomplete way of givenness attests to their openness for other subjects. My perceptual objects are not exhausted in their appearance for me; rather, each object always possesses a horizon of coexisting profiles, which although being momentarily inaccessible to me—I cannot see the front and the back of a chair simultaneously—could very well be perceived by other subjects. Since the perceptual object is always there for others too, whether or not such other subjects are *de facto* physically present, the object refers to those other subjects

and is for that reason intrinsically intersubjective (Zahavi 2001).

Therefore, *the fundamental weakness in Maher's theory is the absence of explicit reference to intersubjectivity in the co-constitution of perception*. Maher's analogy between the creation of scientific theory and delusion formation is also fundamentally inadequate as far as schizophrenia is concerned. It fails because, whereas a scientist is committed to his paradigm that is his scientific community's set of beliefs, a schizophrenic is weakened in his intersubjective ties. Otherwise, he would have consulted an ophthalmologist for his perceptual aberrations instead of proceeding to develop delusions. Moreover, *schizophrenic* delusions are not encapsulated or isolated islands of mental activity to fit singly disordered perceptions, but possess a global and diffuse quality. It is therefore *impossible* to comprehend delusional transformation in schizophrenia without explicit reference to the solipsistic predicament of a pre-schizophrenic.

The approaches we term rationalist are those that ascribe schizophrenic delusion to a disorder of some central or intellective capacity, such as inferential or probabilistic reasoning, abstraction, attributional style, or self-awareness.

Garety and Freeman (1999) show that schizophrenic patients (mostly of the paranoid type) seem to demonstrate a "jumping-to-conclusions" data-gathering bias and are especially "ready to abandon existing hypotheses and form new ones, again on the basis of little evidence" (131); both observations merely reflect the clinical, definitional aspects of being deluded.

Stone and Young (1997), citing Fodor (1989), invoke a distinction between two potentially competing constraints on belief formation: "observational adequacy," which refers to reliance on perceptual input, and "conservatism," which refers to maintaining consistency with the body of accepted beliefs. Belief formation typically involves appeal to both factors, which exist in a mutual dynamic equilibrium that is highly context-sensitive. Stone and Young make the compelling argument that explaining many delusions (presumably also in schizophrenia) may require postulating two necessary factors: not only an

alteration of perceptual input, but also a cognitive bias, namely, a disequilibrium between the two just-mentioned factors that allows unconventional ideas to be accepted and held.

Our own approach would certainly not deny the importance of biases in reasoning. We are, however, inclined to *interpret* these biases in a somewhat different way. We prefer a less cognitivist or mentalistic interpretation that more directly acknowledges the social or intersubjective nature of human judgment and reasoning. It would not, then, be a matter of cognitive principles or intellectual rules so much as of what might be termed *general existential orientations*: the difference between an attitude that is fundamentally constrained by the intersubjective matrix, as opposed to a solipsistic or quasi-solipsistic orientation that relies almost exclusively on experiences that might well be unique to oneself and in which the automatic or *pre-reflective grasp* of the world's significations is impaired (Parnas and Bovet 1991; Bovet and Parnas 1993; Sass 1994: re the quasi-solipsistic experiences described above). What Stone and Young (1997) characterize as the favoring of observational adequacy over conservatism can equally be understood as the manifestation of a relative indifference to the social world (Stanghellini 2000).

Another type of rationalist approach to delusion is Frith's hypothesis of a deficient "meta-representational" capacity. Frith (1987, 1992) suggested that many "first rank symptoms" of schizophrenia, involving loss of the sense of control or possession of one's own thoughts or movements, result from a defect in the central monitoring of one's own intentions that is itself the expression of a neurologically based degradation of the "efferent-copy" signal, although he acknowledged that his theory did not seem able to account for the full range of schizophrenic symptoms (Frith and Done 1989, 569). For example, a delusion of thought insertion is claimed to arise upon a mismatch between the efferent copy of "the intention to think" and the actual, occurring thought, a mismatch supposedly detected by a "comparator" or a "self-monitoring" module.

Frith's model seems to us problematic on phenomenological and theoretical grounds (see Gal-

lagher 2000, for a detailed critique). First, it is difficult to envisage an intention to think before thinking itself, unless the intention to think is the thinking itself, in which case we are confronting an infinite regress. Yet, Frith speaks of a conscious “feeling of effort” or intention to think (“willed intention”) and associates this with a *conscious monitoring* of efferent copy; thus his analysis relies, not just on a hypothetical sub-personal intention to act or think, but on the *awareness* of such intentions (the sub-personal level is invoked by Campbell [1999] in a friendly rescue operation). This awareness, or “meta-representation,” is the ability to reflect on our representations of the world and to introspect our thoughts, but such proliferation of cognitive meta-levels is more characteristic of schizophrenia (Sass 1992a) than of the normal cognition where thinking is not preceded by intentions to think or followed by introspective scrutiny. On theoretical grounds, it is difficult to understand how an *automatic* (and therefore primitive) self-monitoring *module* should possess a capacity needed to assess a potential match between a copy version of thinking and the actual thinking, because the assertion of identity in this case can only be achieved through a semantic, contextual evaluation. It is therefore not at all obvious that a notion of reflexive meta-representation makes sense in relation to efferent feedback, which, in fact, is a far more basic and low-level capacity that is believed to operate throughout much of the animal kingdom and is perhaps present even in the fruit fly (Currie 2000, 173).

In the 1992 monograph, Frith argues that the deficiency of central monitoring should be understood in explicitly representational terms, namely, as “an inability to represent our own mental states, including our intentions,” that is, to “mentalize.” Frith seems to have been impressed by certain affinities between schizophrenia and childhood autism and proposed that schizophrenic individuals might suffer from an underlying disorder similar to that characteristic of autism, namely, a deficit in “theory of mind,” in the person’s ability to be aware of the nature or perhaps even the existence of one’s own mental states and those of other people.

The notion of a disturbed capacity for awareness of mental states allowed Frith to extend his explanation of schizophrenic delusion beyond Schneiderian symptoms to include delusions of reference and persecutory delusions; the latter, he argues, may often involve the patient’s attempt to explain his inability to ascertain the mental states of others as, for example, when a patient who finds herself unable to “read” or infer the intentions of other people, comes to believe that others are actually disguising their thoughts and perhaps conspiring against the patient (Cahill and Frith 1996, 384; Corcoran et al. 1995; see Kinderman et al. [1998] for a critique and Garety and Freeman [1999, 121], concerning the dearth of evidence of a specific theory-of-mind deficit in paranoid patients).

Both types of phenomena to which Frith draws our attention—a diminished sense of personal intentionality and difficulties in interpersonal understanding—are key features of schizophrenic pathology, and both seem likely to play a significant role in delusion formation and maintenance. It is not, however, clear that Frith’s use of his overarching concept of a *meta-representational* disturbance is either coherent or apt. The concept of meta-representation clearly implies some kind of higher-level capacity for self-consciousness or meta-awareness, reminiscent, perhaps, of neurologist Kurt Goldstein’s notion of the abstract attitude or the Piagetian notion of formal operations. It is true that Frith (Frith and Corcoran 1996) does allow for the possibility of a misuse or *distortion* rather than a straightforward *decline* in meta-representation. In this way, however, the notion of incapacity for meta-representation seems to be stretched almost to the breaking point, with disturbances of a hypothesized meta-representational module now seeming able to describe just about any kind of disturbance of normal interpersonal cognition or understanding. In any case, in his actual descriptions, Frith often stays rather close to the deficit-construal: Thus Frith describes schizophrenics as being “unable to reflect (consciously) upon their own mental activity (due to abnormalities in the mechanism for meta-representation)” (Mlakar et al. 1994, 557). He writes that, since such persons

are unaware of their goals, they would be “slave[s] to every environmental influence or, on the other hand, be prone to perseverative or stereotyped behavior, because they would not have the insight to recognize that certain goals were unobtainable or inappropriate” (Frith 1992, 151). Frith’s characterization of the schizophrenic disturbance of meta-representation generally suggests a diminishment of the highest and most quintessentially human aspects of the psyche, including the ability to read the thoughts or intentions of others and, above all, to engage in self-conscious or introspective forms of awareness.

The concept of meta-representational deficit seems quite problematic as an explanation of the difficulties with interpersonal cognition or understanding that are prominent in schizophrenia. In contrast with childhood autism, the theory-of-mind deficit is *not*, in fact, found in all or nearly all schizophrenic patients, but only in those with prominent disorders of thought and language, and even there (also unlike in childhood autism), it seems to be a *state* rather than a *trait variable* (Drury et al. 1998; Sarfati and Hardy-Bayle 1999). Like infantile autists, some schizophrenics make errors on theory-of-mind tasks; but unlike autists, schizophrenics are prone to offer various kinds of unconventional or erroneous responses, rather than just those that suggest a failure to mentalize (Sarfati et al. 1997, 12). Some researchers argue, in fact, that the theory-of-mind deficit that may sometimes occur in some schizophrenic individuals is actually a consequence of more general cognitive disturbances involving attention or working memory (Drury et al. 1998; see also Davis and Pratt 1995).

In the context of childhood autism, the notion of a “theory of mind” deficit involving loss of meta-representational capacity has, perhaps, a certain plausibility. (However, see Gallagher [2001] for a succinct phenomenological critique of the cognitivist “theory of mind” approaches.) In schizophrenia, however, as we have pointed out, we are hardly faced with an absence or even diminishment of “mentalizing” or of the capacity for self-consciousness: Consider, for example, that the world of the paranoid schizophrenic may well be bristling with complex, and often malevolent, mental or intentional states, frequent-

ly experienced as being directed toward the patient, and that schizophrenic persons often demonstrate an exaggerated and all-encompassing kind of self-consciousness (see Sass 1992a and also cases 1, 6, and 7 above).

The incapacity-for-meta-representation view seems very far from the clinical realities of these patients and is vulnerable to many of the criticisms that have been directed at prior attempts to characterize schizophrenia as a kind of dementia or organic-like concreteness (Sass 1992).

Another problem is that certain key disturbances of schizophrenia do not seem likely to be explicable in these top-down terms: How, for instance, would a disturbance of meta-representation account for the deficient *pre-reflective* attunement to the world, motor awkwardness, and perceptual distortions so characteristic of these patients?

We would also note that schizophrenics are just as inclined to see things as persons as to see persons as things, and that they are more often hyperabstract than hyperconcrete, which includes a proneness to excessive philosophizing or pseudo-philosophizing. It is too strong to say that these features of schizophrenia actually *contradict* Frith’s emphasis on a meta-representational disturbance. There is, however, nothing in Frith’s theory that seems able to give much of an account of these prominent and distinctive aspects of the illness.

Our own view of schizophrenia as a self-disturbance places greater emphasis on more low-level or immediate disturbances of consciousness that affect both ipseity and the basic, pre-reflective relatedness to the world. One of Minkowski’s (1927) patients expressed this predicament very precisely: “I feel that I can reason quite well, but only in the absolute, because I have lost contact with life.”

## 8. IMPLICATIONS

Contrary to the classical view, schizophrenia is portrayed here as a disorder of consciousness, although certainly of a *different kind* than pathologies observed in the organic delirious conditions. The essential phenomenological features, in the form of self-disorders, are already present in the very first stages of the illness. Psychotic



developments seem to take place as progressive organizations of novel coherence patterns with various degrees of stability and temporal constancy, organizations that articulate themselves around the fundamental alterations of Self-World relatedness (Bovet and Parnas 1993; Parnas 2000).

An emphasis on the pathogenic import of self-disorders allows one to see the schizophrenia spectrum disorders as something other than a contingent agglomeration of essentially disconnected symptoms held together by a convention. Rather, these disorders may constitute a unitary group, qualitatively distinct from the affective and organic disorders, and organized around the disorders of the Self (Parnas 1999b; Sass and Parnas, submitted). Such a unitary view is, of course, not new. It was behind countless attempts to extract a specific, unifying Gestalt from the polymorphic picture of schizophrenia (e.g., Wyrsh 1946), although, as aptly commented by Bleuler, this Gestalt is quite elusive: "The disease is characterized by a peculiar transformation of feeling, thinking and perceiving, found *nowhere* else in this particular fashion" (Bleuler 1911).

Etiological research, if guided by phenomenological concerns, should focus on the early illness stages and even on its earlier, infantile antecedents. Developmental trajectories in infants and children at high risk for schizophrenia should be studied in conjunction with studies of the normal ontogenesis of Self and perception. A multidisciplinary framework, with focus on infantile selfhood (Stern 1985; Rochat 1995), might be an appropriate framework for such a research program.

## NOTES

1. The notion of prodrome refers to a heralding of imminent psychosis and involves a *change* from the habitual way of experiencing and acting. The average duration of a pre-schizophrenic prodromal phase is four to five years (Huber et. al. 1979).

2. The expression "basic disorder of personality," also used in the ICD-8 and 9, refers to universal, *impersonal* aspects of a person, i.e., the fundamental structure of the Self, and not to individuated, unique personality features.

3. Early misdiagnosis may also be attributed to a widespread ignorance of the non-psychotic subjective experience in schizophrenia.

4. The term "luminosity" indicates a fundamental mode of self-awareness, equal to the very being or emergence of consciousness. It is different from the concept of "clarity" (disturbed in delirious conditions); luminosity is a condition of the latter. It denotes a certain welling up of (self)-awareness, its *phenomenality* (Henry 1963). Naturally, a sense of presence and a sense of embodiment are closely inter-related, yet we have decided to describe these two separately to impose a certain simplified taxonomy on the presented multitude of anomalous experiences.

5. Apart from this disjunction of perception, Robert is spared for perceptual anomalies, which are nevertheless quite common at this stage (especially in the visual modality): instability or deformation of the perceptual object, sometimes associated with instability of perspective (e.g., the patient feels "as if" he was looking from the position of his shoulder), dissolution of Gestalt, physiognomization of the world, and increasing or decreasing perceptual intensity and clarity.

6. This is, incidentally, similar to a phrase used by Binswanger to describe the nature of schizophrenia as an inconsistency of natural experience: "that inability to 'let things be' in the immediate encounter with them" (Binswanger 1963, 250).

7. The phenomenological concept of "common sense" is similar to the notion of "background capacities" proposed in the analytic tradition by John Searle (1992).

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