The Phenomenological Critique and Self-disturbance: Implications for Ultra-High Risk ("Prodrome") Research

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Recent years have witnessed widespread interest in the early phase of schizophrenia and other psychotic disorders. Strategies have been introduced to attempt to identify individuals in the prepsychotic or prodromal phase. The most widely used of these approaches is the ultra-high risk (UHR) approach, which combines known trait and state risk factors for psychotic disorder. However, researchers guided by phenomenological theory have argued that modern psychiatry’s neglect of subjective experience has compromised researchers’ understanding of psychotic disorder and has thereby limited efforts at prospective and early identification. Phenomenological research indicates that disturbance of the basic sense of self may be a core marker of psychotic vulnerability, particularly of schizophrenia spectrum disorders. It is argued that identifying self-disturbance in the UHR population may provide a means of further “closing in” on individuals truly at high risk of psychotic disorder, thus supplementing the UHR identification approach. This would be of practical value in the sense of reducing inclusion of “false-positive” cases in UHR samples and of theoretical value in the sense of shedding light on core features of psychotic pathology. The strong explanatory power and empirical findings to date invite further research into the role of self-disturbance as a phenotypic vulnerability marker for psychotic disorder.

Key words: schizophrenia/psychosis/prodrome/phenomenology/self/early psychosis

Introduction

Recent years have witnessed an increased interest in the early phase of schizophrenia and other psychotic disorders. This has extended to the pre-onset or prodromal period of these disorders. The focus on this early phase of psychotic disorders has been guided by the view that intervening at this point, when the disorder is not yet entrenched, may improve the longer term outcome of patients.¹² Researching the early phase of disorder also allows a clearer view of the etiological and pathogenic processes at play, before the effects of advanced illness stages cloud the clinical picture.³⁵ These include such secondary illness adversities as isolation, stigma, unemployment and demoralization, treatment effects, and the patient’s attempts to cope and adapt.

However, in the process of identifying and conducting intervention-based research in a population at high risk of imminent onset of psychosis, researchers have neglected the clinical phenomena associated with the prodromal and onset phase of psychotic disorders. Phenomenologically guided research acts as a counterweight to this trend by providing a careful explication of the clinical phenomena with which we are dealing in early psychosis research. In addition to this “balancing” role, phenomenological studies have introduced theoretical models based on the notion of self-disturbance that provide compelling avenues for future research, particularly in the area of early identification and intervention.

In order to put the phenomenological perspective on early psychosis research in context, this article starts by outlining the phenomenological critique of modern psychiatry. The dominant method used to identify patients in the putatively prodromal phase, the ultra-high risk (UHR) approach, is described. After reviewing the findings of phenomenological studies of the early phase of psychotic disorders, suggestions are made for the integration of the UHR and phenomenological approaches to identifying people at heightened risk of psychotic disorder.

Terminology

The term “phenomenology” is used in multiple ways. Rulf⁶ distinguishes between 3 different uses and meanings
of the term. The first use refers to description. For example, in Anglo-American psychiatry, the term phenomenology has been used to denote a description of the diverse signs and symptoms of psychiatric illnesses by an impartial and objective observer. The second use of the term refers to description of subjective experience, without recourse to the notion of identifying invariant elements of such experience. An example of this use of the term is Jasper’s attempt to render psychiatric nosology more intelligible by drawing on patients’ reports of their subjective experience. The final use of the term is grounded in the philosophical school of phenomenology that originated in the early years of the 20th century. (In fact, the term “phenomenology” was coined in the mid-18th century, and several prominent philosophers, including Kant, Hegel and Marx, employed it at various times in their writings. However, it is Husserl who is commonly referred to as the “father of phenomenology” due to supplying the term with new meaning and significance.) This school is concerned with articulating the essential features (“eidos”) of many aspects of human consciousness. Central figures in this school include the Continental philosophers Husserl, Heidegger, and Merleau-Ponty. It is this final use of the term that the current article adopts.

The Phenomenological Critique of Contemporary Psychiatry

In order to recognize the possible contribution of phenomenology to early psychosis research, it is useful to understand the broader context of the phenomenological attitude toward contemporary psychiatry generally. (For more thorough considerations of the phenomenological critique of modern psychiatry, see Sadler et al and Parnas.) Modern psychiatry has grounded itself on a philosophy of operationalism, which emerged from the ideals of logical positivism, a philosophical position that claims that sensory experience is the only valid source of knowledge about reality. Hempel, a positivist philosopher, introduced the notion of operational definition to the psychiatric community. Operational definitions are descriptions of a variable, term, or object in terms of the specific process or set of validation tests used to determine its presence or quantity. Properties described in this manner must be publicly accessible so that persons other than the definer can independently measure or test for them at will. In other words, operational definitions require that rules or operations are satisfied for a variable to be defined. For example, the weight of an object may be operationally defined in terms of the specific steps of putting an object on a weighing scale. The weight is whatever results from following the measurement procedure, which can in principle be repeated by anyone. It is intentionally not defined in terms of some intrinsic or private essence. The operational definition of weight is just the result of what happens when the defined procedure is followed. Psychiatry’s adoption of operationalism was guided by an attempt to forge an “objective” (ie, theory free or metaphysics free) account of mental phenomena. This has been referred to as an empiricist-behavioral approach, of which the main psychiatric diagnostic systems, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM), are classic examples.

Using this line of thinking as the basis for psychiatric taxonomy and discourse has resulted in a number of endemic problems. Parnas and Zahavi summarize the situation. First, there is the problem that doing away with theoretical assumptions is not as easy as was initially hoped for. In fact, what is claimed to be objective, atheoretical, and free of metaphysical trappings is replete with such presuppositions. The problem starts with the fact that operational definitions are not applicable to many psychiatric terms. In order to compensate for this, psychiatry has relied on a mixture of ordinary and technical language (see the DSM’s well-known statement that “affect is to mood as weather is to climate”). However, ordinary language is by no means devoid of theoretical or metaphysical assumptions. Further, the claim that diagnostic systems, such as the DSM, are atheoretical is belied by the patently metaphysical assumptions shot through many of the manual’s defining terms and references to hypothetical processes (eg, “incorrect inference” in the definition of delusion). Both these points indicate that modern psychiatry has failed to satisfy one of the objectives of employing operational definitions in the first place.

Second, the empiricist-behavioral approach emphasizes behavioral terms, with an attendant neglect of the patient’s subjective experience. This has been fostered by the fact that behavioral terms are more amenable to operational definition and may increase reliability. This is certainly of great pragmatic utility. However, the dominance of this approach, with its need for operational definition, sacrifices an understanding of how human experience (specifically, its pathological varieties) relates to expression. Perhaps more fundamentally, if we regard psychopathology as being at least in some sense a disorder of conscious experience, then we are left with a profoundly deficient understanding of what psychopathology even is.

With its allegiance to the empiricist-behavioral approach, modern psychiatry has lacked a suitable theoretical framework to address human experience or subjectivity. When attempts have been made to address subjectivity, the psychiatric researcher is left without the requisite conceptual tools. Instead, this form of research has tended to live out Abraham Maslow’s statement “If the only tool you have is a hammer, you tend to treat everything as if it were a nail.” That is, the subjective has been approached in operational terms, based on
Why Does Subjectivity Matter?

A crucial first step in approaching a psychopathological state is to recreate its experiential dimension. This is required if the psychopathologist takes the task of understanding the phenomena he or she is dealing with seriously. Apart from the inherent value of understanding phenomena, a thorough description of the first-person experience of a psychopathological state is required in order to lay the groundwork for any causal account. “Given a misdescription, the explanation will be either worthless or misleading.”25(p11) Aside from this necessity, psychopathology is in a fundamental sense a disorder of conscious experience: what brings a patient to the psychiatrist is a disturbance in their experience of self, others, and world, not a complaint about abnormal activity of neurotransmitters, for instance, even if the latter plays an essential causal role in the origins of the condition.26 So, in this sense, an understanding of the subjective dimension is a humanistic imperative.26,27 If we think of the psychiatric session as an interpersonal encounter rather than an overhaul or fine-tuning of a malfunctioning mechanical system, then this implies a need to understand the experiential suffering in a person’s separation from normal modes of being-in-the-world.

Even if one adopts the view that subjective, first-person experience should not be given a privileged position in our understanding of psychopathology, it still places a limit on other forms of analysis. As Sass and Parnas28 argue, phenomenological description must, at the very least, act as a “constraining condition” on other forms of explanation. It would not make sense to articulate neurobiological hypotheses, for instance, that contradict human experience. Even if experiential phenomena were purely epiphenomena of other processes, such as neurobiological processes, and do not play any causal role in themselves, any causal explanation would have to account for these experiential phenomena. In order for a reductionism (to neurobiological processes, to genetic patterns, etc.) to be coherent, the entity (subjective experience) to be reduced must be properly described and understood.

Finally, phenomenological analysis is in no way incompatible with other types of analysis that fit more neatly into the operational paradigm, such as neurocognitive and neurobiological approaches. It is simply another level of analysis, informed by different principles, and not seeking to displace these other forms of analysis. In fact, a productive integration might be achieved between these forms of analysis, examples of which are provided further below. The promise of this form of integration is suggested by the recent resurgence of interest in the phenomenological approach and a restatement of its importance to various areas of research. The discipline of philosophy has witnessed renewed interest in subjective experience.29–31 In psychology, the notion of a “new” paradigm of research has been introduced to capture the increasing emphasis on principles of human science as opposed to natural science in psychological research approaches.32,33 Pleas for such a resurgence have been made within psychiatry in the area of schizophrenia research. For instance, Schizophrenia Bulletin recently dedicated an issue to the role of phenomenology in the future of schizophrenia research. In this issue, Andreasen,21(p112) for one, argues that the quest for reliability and validity in diagnostic manuals has inadvertently led to a serious decline in research into and teaching of the complexities of descriptive psychopathology and argues for a return to phenomenological questions. In another context, Parnas20(p112) writes: “Entire domains of anomalous experience, highly relevant to early differential diagnosis, have vanished from the accepted body of clinical knowledge (e.g., anomalies of self-awareness, identity, temporality, varieties of delusional experience, subtle anomalies in affective, perceptive and cognitive experience) ...”

The Phenomenological Critique Applied to “UHR” Research

The possibility of treating psychotic disorders during the prodromal phase is an alluring prospect for a number of reasons. The prodromal phase is characterized by a considerable array of psychiatric symptoms and disability, including self-harming and other health-damaging behaviors.34,35 A substantial amount of the disability that develops in psychotic disorders accumulates prior to the appearance of the full positive psychotic syndrome and may even create a ceiling for eventual recovery.5 In addition, recent studies have indicated that at some point in the transition from prodromal phase to full-blown psychotic disorder, alterations in brain structure (and
presumably function) occur. If the prodrome can be recognized prospectively and treatment provided at this stage, then existing disability could be minimized, recovery may be possible before symptoms and poor functioning become entrenched, and the possibility of preventing, delaying, or ameliorating the onset of diagnosable psychotic disorder arises. Neurobiological changes that occur around the time of onset of full-blown psychotic disorder could also be prevented, minimized, or reversed. Thus the prodromal phase presents 2 possible targets for intervention: (1) current symptoms, behavior, or disability and (2) prevention of further decline into frank psychotic disorder.

The “prodrome” is a retrospective concept: onset of frank psychosis cannot be predicted with certainty from any particular symptom or combination of symptoms; the fact that an individual was “prodromal” can only be asserted once frank psychosis has emerged. Therefore, Australian researchers introduced the term “at risk mental state” (ARMS) to refer to the phase prospectively identified as the possible precursor to full-blown psychosis. Given the lack of specificity of many prodromal symptoms of schizophrenia and other psychotic disorders, strategies were needed to increase the accuracy of prediction of psychosis from the presence of an ARMS. The Personal Assessment and Crisis Evaluation (PACE) clinic adopted a “close-in” strategy to identifying this population, which combines established trait and state risk factors for psychosis with common signs and symptoms from the prodromal phase of psychotic disorders, as well as narrowing identification to the age range of highest risk (late adolescence and early adulthood). Criteria used to operationalize this approach were termed the “ultra high risk (UHR)” criteria, in order to denote the combination of risk factors employed and to distinguish the criteria from the “high-risk” criteria based on family history factors alone.

The UHR criteria require that a young person aged between 14 and 30 years who is referred for health care meets criteria for one or more of the following groups: (a) Attenuated Psychotic Symptoms Group: have experienced subthreshold, attenuated positive psychotic symptoms (hallucinations, delusions, thought disorder) during the past year; (b) Brief Limited Intermittent Psychotic Symptoms Group: have experienced episodes of frank psychotic symptoms that have not lasted longer than a week and have spontaneously abated; or (c) Trait and State Risk Factor Group: have a first-degree relative with a psychotic disorder or the identified patient has a schizotypal personality disorder and they have experienced a significant decline in functioning during the past year. Early work at PACE indicated that young people meeting these intake criteria had a 40% chance of developing a psychotic episode in the 12 months after recruitment, despite the provision of supportive counselling, case management, and antidepressant medication if required. This substantial rate of transition to psychosis provided support for the validity of the UHR criteria in identifying the prodromal population. The UHR criteria were adopted by multiple preschizophrenia research clinics internationally, with rates of transition to full psychotic disorder in UHR individuals ranging from 35%–54% over a 12-month period.

The phenomenological attitude toward the UHR approach consists of 2 primary points: first, that this method picks up on expressions rather than essential features of psychotic disturbance and, second, that in order to identify core aspects of psychotic disturbance, it is necessary to closely examine the associated disturbances of subjective experience. Let us address these in turn. Using low-intensity or intermittent positive psychotic features to predict full-blown psychosis is certainly of great pragmatic value. However, as Parnas maintains, using this as a method to predict psychosis onset leaves us in a position ie, “theoretically highly tautological”: we are predicting the emergence of a full-blown condition by the low-level emergence of signs and symptoms of this condition, but this does not clarify the nature of the disturbance producing such signs and symptoms. To draw an analogy, it is akin to predicting extreme heat by an increase in temperature, without identifying the fire that might be causing this change. In other words, the criteria are lacking the equivalent of a psychiatric formulation of an individual’s difficulties, instead relying on a manifestation of the underlying difficulties in symptom-based, behavioral terms. It is not the symptoms as such that put an individual at risk but the underlying or core disturbance of psychotic vulnerability. Phenomenologically oriented researchers have argued that this reliance on attenuated psychotic symptoms defined in operational terms reveals “an alarming ignorance” of distortions of subjectivity in psychotic disorders.

In order to overcome this situation, it is necessary to consider what Kendler has termed the “nonempirical aspects of validity” so that we know how best to conceptualize the disease entity in the first place. Close examination of distortions of subjective experience in psychotic disorders may clarify the precise nature of the disturbance, at least on a psychopathological or phenotypic level, which can then assist with prospective identification of the prodromal phase. This focus on subjectivity may be particularly relevant to schizophrenia and other psychotic disorders given the profound alteration of subjective experience associated with such conditions. The focus on subjectivity has been sidelined since the early days of schizophrenia research in favor of a neurocognitive and neurobiological emphasis. Although “information processing” cognitive models of psychotic symptomatology, the most popular psychological models of psychotic disorders, are suggestive of the types of disturbance of subjective experience in psychosis, they do not address subjectivity
directly. Indeed, the type of analysis cognitive models provide and the language employed ("interpretive bias", "metacognition", etc.) are not directly suited to subjectivity because they are essentially an outgrowth of behaviorism, founded on the same positivist logic of approaching phenomena in terms of relationships between operationalized variables, rather than "on its own terms" (see Smith et al,22 Smith et al,33 and Rychlak51).

The "basic symptoms" research initiated in Germany in the 1960s has targeted nonpsychotic experiential anomalies of affect, cognition, perception, and body-motor experience. Apart from such anomalies being found in retrospective studies of the psychotic prodrome,52,53 they have also been found to be strongly predictive of subsequent development of schizophrenia over a longer term (10-year) follow-up period in a clinical sample.4 Klosterkötter et al4 report that over a mean follow-up period of 9.6 years, the transition rate to schizophrenia among 110 individuals who reported at least 1 basic symptom at baseline interview was 70%, with a mean time to onset of 5.6 years. Researchers guided by phenomenological theory have argued that many of the basic symptoms can in fact be thought of as reflecting disturbance in self-experience,20,24,54–56 to be discussed below. This proposal is consistent with basic symptom researchers’ attempts to link basic symptoms with underlying neurocognitive and neurobiological dysfunction,57,58 but it places greater emphasis on providing a psychological explanatory model to the subjective anomalies catalogued in basic symptoms research.

Although the UHR and basic symptoms approaches have developed as 2 distinct methods of identifying people at high risk of psychosis, the distinction between the 2 is perhaps overstated, as we have argued elsewhere.59 It is plausible that the same presenting complaint may be rated both as an attenuated psychotic symptom, thus meeting UHR criteria, and as a basic symptom. This is particularly the case with the so-called level 2 basic symptoms.60 Regardless of this "overlap" between the approaches, it is true that anomalous subjective experience is not well represented in the UHR identification approach.

The argument outlined above needs to remain cautious not to place the UHR approach in a "straw man" position. Specifically, the UHR identification process does not claim to identify core or essential features of psychotic vulnerability but rather provide a practical strategy for identifying those at risk of imminent onset of psychotic disorder.61 Nevertheless, it is important that the UHR criteria serve a facilitative rather than limiting function. That is, that they define a population in whom the issue of true vulnerability can be researched, rather than narrow thinking to equating psychotic vulnerability with the operationalized UHR criteria. It is to this end that incorporating the phenomenological perspective into the UHR approach may be of value.

Self-disturbance as a Core Marker of Psychotic Vulnerability

Phenomenologically oriented researchers, most prominently Louis Sass and Josef Parnas and colleagues, have proposed that a disturbance of the basic sense of self is a psychopathological trait marker of psychotic vulnerability, particularly of the schizophrenia spectrum.3,24,46,54,62,63 This formulation is based on a combination of empirical research, clinical experience, and phenomenological considerations.

The notion of a disorder of the self as being a core feature of schizophrenia is not new and the phenomenological notion of self-disturbance is certainly not the only model of self-disturbance in schizophrenia that has been proposed (eg, see discussion of the dialogical self54,65). Self-disturbance played a prominent role in early descriptions of schizophrenia (see Parnas3 and Parnas and Sass23). Bleuler66 wrote of a "basic disorder" of personality as a fundamental feature of schizophrenia. Kraepelin67 famously claimed that a disunity of consciousness ("orchestra without a conductor") is the core feature of schizophrenia. Berze68 proposed that a basic alteration of self-consciousness ("primary insufficiency") was a primary disorder of schizophrenia. Since the early 20th century, anomalous self-experience has not played a central role in Anglo-American schizophrenia research but has continued as a focus for phenomenological psychiatrists. For instance, Minkowski,69 a pupil of Bleuler, argued that the "trouble générateur" of schizophrenia was the self’s loss of vital contact with reality (ie, reduced sense of basic, dynamic, and vital connection with the world). For Blankenburg and Blankenburg and Mishara,71 the central defect in schizophrenia is "loss of natural self-evidence"—ie, "loss of the usual common-sense orientation to reality, unquestioned sense of obviousness, and unproblematic background quality that normally enables a person to take for granted so many aspects of the social and practical world."24(p434) For further discussion of these approaches, see Sass72 and Chung.73

In order to understand the type of self-disturbance being referred to in recent phenomenological writings, it is necessary to distinguish between several "levels" or types of selfhood. Parnas62 identifies 3 levels of selfhood from a phenomenological perspective (see also Parnas3). First, there is a prereflective level of selfhood, which refers to a first-person givenness of experience—the (implicit) awareness that this is "my" experience. This is sometimes referred to as the "basic" or "minimal" self or as "ipseity" (see also Sass and Parnas,24 Zahavi and Parnas,74 and Zahavi75). Second, at a more explicit or complex level, we can speak of a reflective self-awareness. This is an awareness of self as an invariant and persisting subject of experience and action—my sense of myself as the same person through time, for example. This level...
of selfhood presupposes the basic sense of self because to have a sense of temporal unity, for instance, assumes a knowledge that moment-to-moment experience is mine in the first place. Finally, there is the social or narrative self. This refers to individual characteristics such as personality, habits, style, and so on. The phenomenological model of self-disturbance in schizophrenia spectrum disorders suggests that the disorder of self occurs at the first or most basic level of self-awareness, in contrast to the disordered self in nonschizophrenia spectrum personality disorders, such as borderline or narcissistic personality disorder, in which the self is disturbed on the level of the social self, with a more basic sense of self remaining intact. There is empirical support for this difference in self-disturbance between diagnostic groups from the Copenhagen Prodromal Project (see below).

The fact that psychotic symptomatology, including prodromal symptomatology, is not restricted to any particular modality of consciousness (ie, it can appear as a disruption of cognitive functioning or sensory perception, etc.), and indeed can manifest as disturbance of different senses (eg, auditory vs visual hallucinations, etc.), suggests that there is a more fundamental or core disturbance in operation that is expressed in these different aspects of consciousness. The notion of a general instability underlying major modalities of conscious experience was recognized by Minkowski: “...it is not this or that function which is disturbed, but much more their cohesion, their harmonious interplay, in its globality. To make use of an image, the essential disorder does not alter one or many faculties, whatever be their order in the hierarchy of functions but resides between them, in the ‘interstitial space’. Phenomenologists argue that the basic sense of self is the ground or medium for conscious experience. If this is disturbed, then it has a reverberating effect through the different modalities of conscious experience. The philosopher Dennett wrote that the self is the center of narrative gravity, which, like the center of gravity of a physical body, cannot be isolated and touched, but around which our memories, the stories we tell about ourselves, and the decisions we make, all revolve. However, the self might also be thought of as the center of experiential gravity and that when this central organizing dynamic is disturbed, the various modalities of consciousness are thrown off-kilter, resulting in the aberrations of experience we see in psychotic symptoms.

Various types of disturbances of self-experience are evident in the prodromal period. They include disturbed sense of presence, corporeality, stream of consciousness, self-demarcation, and existential reorientation, all of which are intimately interrelated. These phenomena have been described in detail elsewhere (see Parnas and Sass, Sass, Parnas, Parnas and Handest, and Parnas et al) and will only be addressed in brief here.

Presence

Phenomenology proposes that our basic sense of self and sense of immersion in the world are co-constituting and therefore inseparable. Normal human experience consists of being absorbed in activity among a world of objects and this absorption provides us with a sense of “inhabiting” our self in a prereflective, tacit, or automatic fashion. This is referred to as presence. Our experiences appear to us in a first-person mode of presentation—ie, we automatically or prereflectively experience them as our experience. This sense of “mineness” constitutes a basic form of self-awareness. The sense of presence or basic self-awareness is the background upon which explicit, thematic, or objectifying conscious activity takes place. For instance, my awareness of what the person sitting next to me is saying to me takes place against the implicit background that it is I who is aware of and listening to this person speak—this is not something I question, it simply sits quietly in the background of awareness, providing me with a sense of “mineness” to immediate experience.

Studies have found that disturbance of presence is the earliest and most fundamental feature of the schizophrenic prodrome. There is a characteristic sense that the self no longer “saturates experience,” but is instead alienated from itself. This may appear in various forms, including:

- A diminished sense of basic self, such as sense of inner void, lack of identity, being different from others, etc.
- Distorted first-person perspective, such as decreased or temporally delayed sense of mineness to experience, pervasive sense of distance between the self and experience, and spatialization of the self. These are varieties of depersonalization.
- A decreased ability to be affected by objects, people, events, states of affairs, as though the person is no longer fully participating or entirely present in the world.
- Derealization: an impression that the surrounding world has somehow transformed, is unreal, or is strange.
- Intense reflectivity: tendency to take oneself or parts of oneself or aspects of the environment as objects of intense reflection, eg, thinking about one’s own thinking.
- Loss of “common sense” and perplexity: difficulty automatically grasping the meaning of everyday events; the naturalness of the world and other people is lacking.

Corporeality

A disjunction between one’s subjectivity and bodily experience is frequently observed in the prodromal phase. An experiential distance emerges between the self and bodily experience, suggesting a tendency to experience one’s
body as an object, rather than an “inhabited” aspect of self. Again, this may manifest in various forms, including

- Morphological change, such that the patient perceives or feels “as if” there is some sort of change to his/her body or body parts, such as constriction, enlargement, etc. This may lead to frequent attempts to inspect oneself in a mirror (“mirror-related phenomenon”).
- Motor or verbal disturbances, such as moving one’s body or uttering words that are inconsistent with immediate intentions.
- Deautomatization of motor action, in which habitual acts require conscious attention and effort.

Stream of Consciousness

As with corporeality, the early phase of schizophrenia is marked by an emerging experiential gap between the self and mental content. The sense of “mineness” of mental content is disrupted, as if thoughts were taking on an almost autonomous identity. This may manifest as

- Thoughts interfering with the ongoing stream of thoughts.
- “Inner speech” being transformed from a medium of thinking to an object-like entity with almost perceptual characteristics (“thoughts out loud” or Gedankenlautwerden).
- Spatialization of thoughts and feelings (eg, describing thoughts in physical terms or as if they were located in a particular part of the skull).
- Thought pressure or thought block.

Self-demarcation

Subtle transitivistic (inability to distinguish self from not-self) phenomena are apparent in the prodromal phase, such as:

- Confusion with the other, such that a patient loses sense of whose thoughts, feelings, or expressions originated in whom. Parnas and Sass23 provide an example of a young man compensating for this by wearing a wide and tight belt to feel “more whole and demarcated.”
- Bodily contact as threatening to one’s autonomy or existence.
- Sense of being passive or at the mercy of the world.

Existential Reorientation

A common finding in studies of the prodromal period has been of a developing preoccupation with philosophical, supernatural, and metaphysical themes.83,84 The rupture in “normal” self-experience motivates such a preoccupation; in cognitive terms, the patient is attempting to accommodate his anomalous experience to existing schemas. Feelings of centrality or solipsism may come to the fore.

The anomalies of self-experience noted above are not yet of psychotic intensity. In the transition to a frank psychotic episode, these anomalies are strengthened and thematized in the form of delusions, hallucinations, and passivity phenomena. The loss of presence or “mineness” of experience, for instance, evolves into delusions of influence (see Parnas3 and Parnas and Sass23 for illustration of the progression of these anomalies to frank psychotic symptoms).

The processes that are thought to underlie the anomalous self-experience described above are the complementary distortions of hyperreflexivity and diminished self-presence.24,46 Hyperreflexivity is a form of exaggerated self-consciousness and heightened awareness of aspects of one’s experience. This style of awareness objectifies aspects of oneself that are normally tacit (eg, awareness of the act of breathing or sensations while walking), thereby forcing them to be experienced as if they were external objects. The metaphor of a centrifuge is appropriate: the hyperreflexive attitude spins aspects of the self outward until they form separated and estranged entities. It is important to note that hyperreflexivity is a concept that includes hyperreflectivity (ie, an exaggerated intellectual or reflective process) but is not limited to this: it also refers to acts of awareness that are not intellectual in nature and that may not occur voluntarily, as in the case of kinesthetic experiences “popping” into awareness (see Sass and Parnas28).

Diminished self-presence refers to a weakened sense of existing as a subject of awareness. Sass and Parnas24(p430) consider hyperreflexivity and diminished self-presence to be complementary aspects of “disturbed ipseity.” They write: “… 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.”

Considerable empirical evidence has accumulated for the concept of self-disturbance as a phenotypic marker of schizophrenia spectrum disorders present during the prodromal phase. A follow-back study using objective data85 found that fluidity of self-demarcation and lack of a coherent narrative-historical self-identity and other self-disturbances were prominent features of the preschizophrenic states at school age. As mentioned above, basic symptoms, some of which reflect self-disorders (eg, varieties of depersonalization, disturbances of the stream of consciousness, distorted bodily experiences), can be identified early in the preonset phase.86–89 A study using naturalistically oriented in-depth interviews with 20
first-onset schizophrenic patients identified 3 domains of prodromal subjective change: all patients had profound and alarming changes of self-experience; nearly all patients complained of ineffability of self-alteration; and the great majority reported preoccupations with metaphysical, supernatural, or philosophical issues. Similar disturbances of self-experience were reported by and in retrospective studies of the prodrome.

A research group based in Denmark has researched self-disturbance in psychosis in considerable detail. This group collected detailed data on 155 first-admission cases diagnosed according to International Classification of Diseases, Tenth Revision, (ICD-10) research criteria: 57 suffered from a schizophrenia spectrum psychosis, 43 from schizotypal disorder, and the remaining 55 patients suffered from other nonschizophrenia spectrum disorders. In a separate project, the occurrence of self-disturbance on a lifetime basis was retrospectively assessed and compared between 21 ICD-10 patients with residual schizophrenia and 23 remitted bipolar patients. Analysis of these data indicated that self-disturbance is highly specific to schizophrenia spectrum conditions, marks the picture of preschizophrenic pro-dromes, and frequently occurs in hospitalized schizotypal conditions. Self-disturbance correlated positively with the duration of preonset social dysfunction and aggregated significantly in patients with a positive family history of schizophrenia. It correlated both with negative and positive symptom scales of schizophrenia. Five-year follow-up data of the 155 first-admission cases referred to above indicated that self-disturbance functions as a strong predictor of a future schizophrenia spectrum diagnosis in those initially presenting with “neurotic” conditions (odds ratio = 12 [P. J. Copenhagen, personal communication, 2006]). The combination of these empirical studies, clinical experience, phenomenological philosophy, and existing psychopathological scales addressing anomalous subjective experience led to the recent development of a comprehensive self-disturbance scale, the EASE (Examination of Anomalous Self-Experience). To date, the EASE has demonstrated good-to-excellent interrater reliability, with single-item kappa values ranging from 0.6 to 1.0.

Although emerging from different traditions, aspects of the self-disturbance concept are compatible with recent cognitive and neurocognitive theories. For instance, there has been discussion in the “theory of mind” literature that rather than theory of mind being impaired in psychotic conditions it may in fact be exaggerated, in the sense of an overattribution of mental states to self and other, a notion that has been termed the “hyper-theory of mind.” This resembles the concept of hyperreflexivity. There are also similarities between the self-disturbance concept and cognitive research into attentional deficits in psychosis. The interviews of McGhie and Chapman with 26 schizophrenia patients indicated subjective cogni-

tive difficulties such as problems with attention, increased distractibility, heightened sensory impressions, and awareness of processes and actions that would normally be automatic. Again, there is a clear parallel with the notion of hyperreflexivity. It may be that attentional deficits are reflective of a more fundamental disturbance of the self; conversely, it is possible that attentional and executive impairments lead to a disturbed sense of self. The self-disturbance concept is also compatible with recent studies that have linked impoverished self-narratives with impaired functioning and neurocognition.

Neurobiological research has proposed a system called corollary discharge, which refers to a neurobiological system that enables differentiation of internally generated stimuli. This system provides the sense of subjective ownership of action and awareness, ie, that it is “I” who is doing a certain act or that this is my arm. Corollary discharge has been found to be compromised in schizophrenia. This may well be a neurobiological underpinning of the deficient sense of “mineness” or first-person perspective in the self-disturbance concept.

### Integrating Phenomenology With the UHR Approach

The explanatory power and the positive empirical results of self-disturbance in schizophrenia spectrum disorders during the prodromal period invite further research into its predictive utility in high-risk samples. Further prospective research would be of particular value. If self-disturbance is found to be a strong predictor of psychosis onset within the UHR population, then supplementing the UHR strategy with identification of self-disturbance may provide a method of picking up on both a core phenotype of psychotic vulnerability (self-disturbance) and the expression of this vulnerability in the form of attenuated psychotic symptoms close to the onset of psychosis (the UHR strategy). This proposition is supported by research indicating that the presence of basic symptoms (some of which, as noted above, overlap with self-disturbance) within the UHR group enhance homogeneity of the sample and prediction of onset of frank psychotic disorder within 12 months. A similar strategy in the form of combining the UHR with the basic symptom identification approaches has been adopted in the European Prediction of Psychosis Study.

Combining the UHR and self-disturbance approaches might most practically be achieved by having a two-stepped strategy: using the UHR criteria as an initial screening method and supplementing this with a second step of assessing self-disturbance. Assessing self-disturbance as a second step is appropriate given that it is not suited to rapid, structured screening. The integration of approaches maintains the pragmatic aim of identifying those at imminent risk of psychosis (the UHR strategy) while
enriching this sample by identifying those with a possible core phenotypic marker of psychotic vulnerability (self-disturbance). This is in keeping with the “close-in” or “multiple gate screening” approach that initially inspired the UHR strategy.61

Such attempts to enrich high-risk samples by “narrowing down” on risk factors is particularly indicated given the reducing rates of transition to psychotic disorder in UHR samples and therefore the increased treatment of “false-positive” cases.104 “False positives” are cases falsely identified through the UHR strategy, ie, who were in fact never “destined” to develop a psychotic disorder. Identifying vulnerability factors other than the UHR criteria provides a means of maximizing the identification of individuals who are truly at risk of a psychotic disorder and minimizing those who are not. This is an important goal because it would reduce the unnecessary (and potentially harmful105) implementation of treatments designed to delay or prevent psychosis in those who were never truly at risk of a psychotic disorder.

Additionally, attenuated psychotic symptoms have been found to be present in nonpsychotic psychiatric conditions106–108 and in the general population.109–111 Verdoux and van Os,112 for instance, summarize research indicating that psychosis proneness or schizotypy may be a general risk factor for psychiatric disorder, not for psychotic disorders specifically. Indeed, the prodromal period of psychotic and depressive disorders have been found to be indistinguishable in terms of symptomatic and behavioral change.113,114 This body of research indicates a nonspecificity of attenuated psychotic symptoms, with many even experiencing such symptoms without distress, lowered functioning, or any discernable need for care.106 Identifying self-disturbance in individuals with attenuated psychotic symptoms may be a means of introducing further specificity in high-risk identification strategies. This specificity may extend beyond risk for psychotic disorder broadly defined, but to schizophrenia spectrum conditions in particular, as indicated above.

The integration of the UHR and self-disturbance approaches also has implications for intervention in the UHR population. In terms of resource allocation, greater resources may be channeled into treatment of those who display the “core” vulnerability marker of self-disturbance. In terms of the content of treatment, if further research confirms the core phenotypic nature of self-disturbance, then it is necessary to tailor psychological treatment toward addressing this form of disturbance. Given that the “hyperreflexive attitude” is a central feature of self-disturbance, the current psychological treatment of choice, cognitive behavioral therapy, may not be the most suited to this population. This is because a fundamental aspect of this therapeutic approach is the notion of encouraging “thinking about thinking”115,116 which is precisely what an individual is over-exercising in the hyperreflexive attitude.

Future research should address the limits of self-disturbance as a construct underlying psychotic disorders. The schizophrenia spectrum has been a notoriously heterogeneous concept, composed of an agglomeration of essentially disconnected symptoms. It is possible that self-disturbance may provide a coherent unity to the schizophrenia spectrum concept, as suggested by some of the studies reviewed above (see Parnas and Parnas et al55). Another possibility is that schizophrenia is a collection of many different disorders (the use of the term “schizophrenias” has even been proposed117), in which case, the precise nature of self-disturbance may vary between people diagnosed with schizophrenia. Finally, the research reviewed above indicates the value in researching self-disturbance not only in the prodromal phase of psychotic disorder but also in the various stages of psychotic disorder and in other psychopathological conditions.

Conclusion

The article outlined the phenomenological critique of modern psychiatry, which argues for the importance of keeping subjectivity as a central focus of psychiatric thinking. Phenomenological studies indicate that a phenotype of schizophrenia spectrum disorders is a disturbance of the basic sense of self, from which the more elaborated “first rank” psychotic symptoms emerge. The implications of this view were discussed. The strong explanatory power and empirical findings to date invite further research, particularly prospective research, into the role of self-disturbance as a phenotypic vulnerability marker for psychotic disorder. It was suggested that identifying self-disturbance in the UHR population may provide a means of further “closing in” on individuals truly at high risk of psychotic disorder, thus supplementing the UHR identification approach. This would be of practical value in the sense of reducing inclusion of “false positive” cases in UHR samples (a salient issue given the recently observed reducing transition rates in UHR samples) and of theoretical value in the sense of shedding light on core features of psychotic pathology.

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