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Self-disorders and Schizophrenia: A Phenomenological Reappraisal of Poor Insight and Noncompliance

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Poor insight into illness is considered the primary cause of treatment noncompliance in schizophrenia. In this article, we critically discuss the predominant conceptual accounts of poor insight, which consider it as an ineffective self-reflection, caused either by psychological defenses or impaired metacognition. We argue that these accounts are at odds with the phenomenology of schizophrenia, and we propose a novel account of poor insight. We suggest that the reason why schizophrenia patients have no or only partial insight and consequently do not comply with treatment is rooted in the nature of their anomalous self-experiences (ie, self-disorders) and the related articulation of their psychotic symptoms. We argue that self-disorders destabilize the patients' experiential framework, thereby weakening their basic sense of reality (natural attitude) and enabling another sense of reality (solipsistic attitude) to emerge and coexist. This coexistence of attitudes, which Bleuler termed "double bookkeeping," is, in our view, central to understanding what poor insight in schizophrenia really is. We suggest that our phenomenologically informed account of poor insight may have important implications for early intervention, psychoeducation, and psychotherapy for schizophrenia.

Key words: compliance/phenomenology/double bookkeeping/vulnerability

Introduction

A major problem in the treatment of schizophrenia is the patients' reluctance to accept and adhere to continuous antipsychotic medication. The estimates of noncompliance rates in patients with schizophrenia range from 50%–75% after 1–2 years of treatment,^{1,2} impeding treatment and increasing the risk of relapse, readmission, and suicide 3- to 4-fold.^{3,4}

It is widely assumed that in order to modify the non-compliant attitude, we must attain a better understanding of the causes behind this attitude. Some of the well-known causes are pharmacological side effects, mistrust of the clinician, stigma of diagnosis, and positive attitudes toward positive symptoms.⁵ Yet, the primary cause of medication noncompliance is generally considered to be poor insight into illness.¹ According to Diagnostic and Statistical Manual of Mental Disorder-Fourth Edition-Text Revision, "Evidence suggests that poor insight is a manifestation of the illness itself [schizophrenia] rather than a coping strategy."⁶ Empirical studies have estimated that 50%–80% of patients with schizophrenia have poor insight into illness.^{7,8}

During the last 25 years, there has been a growth of publications on awareness of illness in schizophrenia, which has resulted in multiple psychometric instruments of varying complexity and sophistication.^{9–11} The current medical definition of *insight* into illness is multidimensional, comprising awareness of having a mental disorder, of its symptoms and signs, of the need for treatment, and of the disorder's social consequences.¹² *Poor insight* reflects a decrease or lack of awareness on some or all of these dimensions.

Most studies have found that insight into illness predicts treatment compliance and better clinical and functional outcome.^{1,9,13} Researchers have tried to reach a more profound understanding of poor insight, typically by exploring its correlations with other clinical and sociodemographic variables such as symptomatology, prognosis, age of onset of the disorder, cognitive impairment, global and social functioning, clinical outcome, gender, and educational level—but the studies have yielded conflicting results with little pragmatic utility.¹⁴ Poor insight has also been explored in relation to structural and functional neuroimaging, but the results are inconsistent and no general conclusion

can yet be drawn.¹⁵ One meta-analysis¹⁶ found a small negative correlation between insight and global, positive, and negative symptoms, and a small positive correlation between insight and depressive symptoms; 3%–7% of the variance in insight was accounted for by the severity of symptomatology.

Given the importance of insight in treatment, psychoeducation aiming at increasing patients' awareness of their illness has become a widely adopted intervention for schizophrenia. However, a comprehensive meta-analysis¹⁷ concluded that psychoeducational attempts to increase insight and thereby improve medication compliance had failed. These disappointing results should serve as a wake-up call: we must acknowledge that in spite of decades of research on insight and on psychoeducational interventions, there has been no significant advance in the treatment of patients who are noncompliant due to poor insight. We see this failure as a result of an inadequate understanding of the nature of poor insight in schizophrenia. Moreover, we believe that additional correlations between measures of insight and ever new variables are not likely to break new ground in research or treatment. Rather, we propose to ask anew the fundamental questions: What is poor insight in schizophrenia? Why do many schizophrenia patients despite multiple relapses and readmissions not feel ill in the sense of attributing their abnormal experiences to this mental disorder?

In the following, we will critically discuss the dominant conceptual accounts of poor insight. We will then briefly sketch the notion of disordered self in schizophrenia spectrum disorders. With the help of the notion of self-disorder, we will propose a novel account of poor insight and noncompliance in schizophrenia. This is a phenomenologically oriented account, based on empirical data and in-depth clinical examination of the patients' experiences.

Conceptual Accounts of Poor Insight

Two accounts of poor insight monopolize the debate. The classical account, with psychoanalytic roots, associates poor insight with a defense mechanism, ie, a denial of being ill with the purpose shielding the person from a situation with which she cannot yet cope. On this account, poor insight (sometimes referred to, in other conceptualizations, as “sealing over,” “evasion,” “indifference reaction,” or “external attributions”) is a coping strategy that protects the person and possibly wards off depressive symptoms arising from awareness of having a chronic mental illness.¹⁶ The account from cognitive neuroscience suggests that poor insight is a “failure of metacognition” that is caused by deficits in the dorsomedial frontal cortex: the patients lack an ability to accurately reflect on their mental contents (“a failure of strategic metacognition”) or are victims of a systematic bias in the appraisal of the mental content (“a failure of attributive metacognition”).¹⁵ However, there is no conclusive evidence about the specificity of the

postulated impaired metacognitions nor about their link to poor insight.¹⁵ On this account, poor insight is sometimes compared with specific neurological conditions with similarities or even equivalence to anosognosia.

These accounts of poor insight are, in our view, quite problematic. The first problem facing both accounts is that they conceptualize the issue of poor insight in schizophrenia as a simple and straightforward *problem of self-reflection*. Insight is just an act of critical reflection on one's own psychological life. The *reflecting* self somehow notices an error in the *reflected*, on-going subjective life, which then may become rationally corrected. In schizophrenia, it is claimed, this self-reflection fails, either due to interfering subconscious psychological defenses or because of metacognitive deficits. Second, and even more importantly, both accounts implicitly assume that insofar as these “problems” (defense or failures of metacognition) were remedied, the patients would acquire insight into their medical condition—ie, they assume that, following the standard medical model, the ways in which the patients experience themselves, others, and the world essentially remain unaffected by the illness and that the problem of insight, in the vocabulary from cognitive psychology, results from specific errors in the information processing of their experiences. In other words, the medical model and the conceptual accounts presuppose a neat distinction between the symptoms of the illness and the unaffected self. However, this presupposition is highly questionable, if we take seriously the claim that schizophrenia is a specific disorder of the self, which involves a variety of *alterations of the structures of experiencing*, affecting the very *conditions* of self-reflection.^{18–23}

The Disordered Self in Schizophrenia

The notion of disordered self as the core disturbance of schizophrenia appears in all foundational texts on schizophrenia (eg, Kraepelin, Bleuler, Minkowski, Jaspers, and Schneider) but was only recently revived in contemporary psychiatry.^{18–24} The *experience of being a self*, which is what here is at stake, signifies that we live our (conscious) life in the first-person perspective, as a self-present, single, temporally persistent, bodily, and bounded subject of experience. Phenomenology²⁵ and neuroscience²⁶ operate with the notion of “minimal” or “core” self to define a formal structure of experience that necessarily must be in place in order for us to have any experiences at all. The minimal self refers to the first-personal articulation of experience, typically called “mineness,” “myness,” “for-me-ness” or *ipseity*.²⁷ It is a sense of “I-me-myself” that implicitly (pre-reflectively) permeates our experiences across the flux of time and changing modalities of conscious life. *Ipseity* is a condition of the so-called radical self-identification, which means that I am *always already* aware of “I-me-myself” and have no need for self-observation or self-reflection to assure myself of being myself. *Ipseity* thus conveys the

very basic, persisting identity core, upon which more rich and complex feelings of identity and of being a *person* emerge and are created throughout our life.

The basic sense of minimal selfhood goes together with an automatic, unreflected immersion in the shared-social world (variously called, eg, “common sense” [Blankenburg], “sense of reality” [Jaspers] or “fonction du réel” [Janet]). The world is always pre-given, ie, tacitly grasped as a self-evident background of all experiencing and meaning. One is not only self-present but also present in the midst of the world of which one is partaking. This tacit and foundational self-world *structure* manifests itself as our ordinary “natural ontological attitude”: the world is pre-given as *real*, mind-independent, and constrained by the principles of space, time, causality, and noncontradiction, essentially making it reliable, predictable, and ontologically secure.

This basic self-world structure is disturbed in schizophrenia spectrum disorders, ie, it is constantly *challenged*, *unstable*, and *oscillating*, resulting in alarming and alienating anomalous self-experiences (also termed “self-disorders”), typically occurring already in childhood or early adolescence.²⁴ The patients feel ephemeral, lacking core identity, profoundly, yet often ineffably different from others (Anderssein) and alienated from the social world. There is a diminished sense of existing as a bodily subject, distortions of the first-person perspective with a failing sense of “mineness” of the field of awareness (eg, “it feels as if the thoughts aren’t really mine”), and a deficient sense of privacy of the inner world. There is a significant lack of attunement and immersion in the world, inadequate pre-reflective grasp of self-evident meanings (perplexity), and hyper-reflectivity (eg, “I only live in my head” and “I always observe myself”). Although patients often suffer from self-disorders, the latter are usually lived in an ego-syntonic way, as *modes* rather than as *objects*, of the patients’ experience, ie, often affecting more the “how” than the “what” of experience. What is important to emphasize at this point is that the self-disorders, reflecting the unstable basic self-world structure, destabilize the natural ontological attitude and may throw the patient into a new ontological-existential perspective, an often solipsistic framework, no longer ruled by the “natural” certitudes concerning space, time, causality, and noncontradiction. Unconstrained by these certitudes, the world may appear as only apparent or staged, ontologically mind-dependent, prone to noncausal relations, and the patient may experience a unique access to deeper layers of reality, which are inaccessible to others. Often, these experiences evoke a specific sense of grandiosity, leaving others to be seen as oblivious to the true nature of reality and only concerned with everyday trivialities.

World Orientation in Schizophrenia

As described above, self-disorders entail a weakening of the natural attitude associated with the emergence of a

solipsistic perspective, which usually culminates in psychosis as a profound and rigid alteration of the *sense of reality* and existence: “[the] patients cannot *take things to be the case* in the usual way, as the [very] sense of ‘is’ and ‘is not’ has changed.”²⁸ In our view, many psychotic patients adopt, what might be called, a *double ontological orientation*, designated by Bleuler²⁹ as “double book-keeping,” which refers to the predicament (and ability) of simultaneously living in two different worlds, namely the shared-social world (ie, the natural ontological attitude) and a private, psychotic world (ie, a solipsistic ontological attitude). The patients experience both worlds as relevant and in that sense real. They also generally seem to experience them as two different, incommensurable, and thus not conflicting realities, thereby typically allowing them to coexist in an idiosyncratic-personal amalgam and, in the advanced/consolidated stages of the illness, only occasionally to collide (the beginning or exacerbation of psychosis may be, however, associated with a sense of perplexity). Daniel Paul Schreber³⁰ describes in his memoirs a remarkable world of “nerves,” “rays,” and deities, providing us with an unusually lucid, first-person account of double bookkeeping. He claims that God has “entered into exclusive nerve-contact” with him by which he has “gained deeper insight than all other humans beings.” Schreber explains that this “nerve-contact” has made him the centre and constitutor of the world, whose existence now seems to depend entirely on him. Rather than confusing his psychotic experiences with those of real objects, Schreber seems for the most part to have been able to differentiate the two “worlds”: “I could even say with Jesus Christ: ‘My Kingdom is not of this world’; my so-called delusions are concerned solely with God and the beyond... The certainty of my knowledge of God and divine matters is so great and unshakeable that it is completely immaterial to me what other people think of the truth or probability of my ideas.”³⁰ More recently, Professor Elyn Saks, the author of the book, *The Center Cannot Hold: My Journey Through Madness*, sketched the rationale behind her long-lasting denial of suffering from schizophrenia: “I completely recognized that the things I was saying and doing and feeling would be thought to amount to a diagnosis of schizophrenia; but I thought that it was not true—I didn’t really have the illness... I looked like I had schizophrenia... but *if we knew enough*, we would see that I really did not... All of my so-called symptoms were things I simply chose to think or do. I was choosing, eg, to hold certain beliefs even though the evidence was not what would classically constitute ‘good’ evidence—I *had a special premium on the truth* [italics added].”³¹ Saks seems here to say that she too experienced having a special access to or insight into the real nature of things, a deeper level of reality, which is not readily accessible to others. As Schneider concluded on the issue of delusional conviction: “the significance [of experience] is of a special kind; it always carries a

great import, is urgent and personal, *a sign or message from another world.*"³²

Bleuler²⁹ offers a vivid example of double bookkeeping: "A catatonic patient was in great fear of a hallucinated Judas Iscariot who was threatening her with a sword. She cried out that the Judas be driven away, but in between she begged for a piece of chocolate. Next day she complained about these hallucinations, apologized for her acts of violence; but in the middle of her complaints she expressed pleasure in a pretty belt. She managed to weave this belt into her delusions sufficiently to need reassurance that it was not a 'Judas kiss'." What is enigmatic in Bleuler's vignette is that the patient's behavior is strikingly at odds with her delusional beliefs. Normally, we would expect someone, who firmly believes that she is about to be slain, to defend herself or seek cover; we would not expect her to ask for a piece of chocolate. For other illuminating examples of and reflections on double bookkeeping, see Sass.^{33,34} From a clinical perspective, double bookkeeping, although not always as spectacular as in Bleuler's vignettes or Schreber's memoirs, is a quite prevalent phenomenon, perhaps characterizing the majority of psychotic patients with schizophrenia.

It is important to reemphasize the difference between ordinarily held beliefs such as "there is an Italian restaurant around the corner" and delusional beliefs such as "I am the creator of the universe" or "others are automats." The ordinarily held beliefs reflect the natural ontological attitude, which is an aspect of our automatic immersion in a shared-social world. These beliefs concern matters of affairs in the public world, and if confronted with new or contrary information (eg, "I believe that it is in fact a Greek restaurant"), these beliefs are for the most part readily correctable. In contrast, delusional beliefs in schizophrenia do typically not belong to the public sphere but rather to a solipsistic ontological attitude, facilitated and antedated by self-disorders, and these beliefs are rarely modifiable by counterarguments.³⁵

Articulation of Psychosis

Most importantly, the formation of a schizophrenic delusion, ie, what Jaspers and Schneider called a "primary" delusion, happens as a *felt experience* (Jaspers, Schneider, Conrad, and Blankenburg), and it is frequently announced by inkling irruptions of subthreshold psychotic experiences, variously designated as pre-delusional, prodromal, or micropsychotic (eg, "delusional atmosphere" or "abnormal awareness of significance"). A crystallization of a primary delusion is not based on an *inferential error* about empirical matters in the public world but on the *affection of and within* the subjectivity itself by a revelation of delusional meaning, often carrying with it a sense of "absolute," "apodictic" certainty, not completely unlike the certainty of experiencing a sensation (a so-called "egological conviction," like the certitude of having a toothache).

A delusional (revelatory) experience has a partial, structural (formal) phenomenological analogy to certain aesthetic and mystic experiences. It may be described as an "epiphany," a passive givenness or affection of *another presence* within the very intimacy of one's own subjectivity or inner world. In their self-reports, mystics have described certain attitudes that facilitate the emergence of an epiphanic experience: a detachment from and disinterest toward reality and practical life, a suspension of ordinary ontological assumptions, a spiritual solitude, and the attempts to efface or weaken one's sense of self (*dés-istement de soi-même*).^{36,37} Adopting these attitudes helps bringing forth a subjective state of receptive passivity in which the mystical experience may articulate itself. There is here a striking similarity (but certainly not identity) between the nature of these attitudes, deliberately adopted by a mystic, and the nature of the self-disorders that affect a person vulnerable to schizophrenia. However, whereas the mystic willfully adopts (and, at least, partly controls) such attitudes to achieve his desired union with a deity, the person vulnerable to schizophrenia is exposed to and involuntarily suffers from structurally similar phenomena, which we articulate as self-disorders.

Phenomenology of "Poor Insight"

In our view, patients with schizophrenia have poor insight into their illness and fail to comply with their treatment because of 3 interrelated aspects of the emergence of psychosis. First, the original delusional (or hallucinatory) experience is an essentially lived, pathic (felt) event within the patient's own subjectivity, thus presenting a quality of an irrefutable subjective (egological) reality. One of our patients with residual schizophrenia and on continuous antipsychotic depot medication participated in a psychiatric training interview, years after her psychosis had remitted. When asked, after the completed interview, why, at the very illness onset, her telephone was bugged, she answered: "This question I continue to ask my self to this day!" Here, the original feeling of having been tapped retained, in the patient's memory, a status of the experience's irrefutable subjective reality. In other words, she could doubt the objective reality of her fully formed delusions but not her original feeling of "being listened to" (which is most likely the primary delusional experience that she thematized as being "bugged"). Second, the full articulation of psychosis amplifies and congeals the solipsistic ontological attitude at the expense of the natural ontological attitude. Third, this transformation does not happen abruptly or *ex nihilo*: The patients often do not experience their initial self-disorders, from which psychosis emerges, as "symptoms" of an illness (similar to how an intense abdominal pain might be a symptom of appendicitis) but rather as intrinsic and habitual aspects of their existence and identity. For example, first-admitted schizophrenia patients, who report hearing their own

thoughts spoken aloud “internally” (*Gedankenlautwerden*), may get surprised and even suspicious, when the clinician explains that most people only have “silent” thoughts. In our experience, this is characteristic of many self-disorders. When interviewing patients about their self-disorders, one quickly realizes that many of their anomalous self-experiences have been present for as long as the patients can remember or at least for so long that they have become inconspicuously interwoven into the patients’ mode of experiencing. Self-disorders are mainly trait-like features, preceding the onset of psychosis and persisting after remission. It is, therefore, a radically different situation than, say, in the case of a single depressive episode where the patient has a distinct sense of whom she was and how her life used to be before the depression set in and after. In schizophrenia, this is not the case to the same extent, given that the altered experiential framework and the solipsistic ontological attitude, inherent in self-disorders, for years have been the rule (or “norm”) rather than the exception, making the “onset dating” not only a technical but also a conceptual issue.³⁸ We may therefore also speak of a *prepsychotic double bookkeeping*. One of our patients, during his prepsychotic high school years, felt a pervasively diminished sense of presence, quasi-solipsistic experiences, and a related, nonpsychotic grandiosity, while remaining inconspicuously adapted to the shared-social world. He thought of others as “souls” that had fallen on earth from an encompassing “world soul” (to which we all return after death), like raindrops from a cloud. He accounted for his own unique abilities and feelings of “Anderssein” by thinking that he perhaps retained a sort of “capillary” continuity with the “world soul” and thereby had access to the far deeper reality levels than his fellow humans were able to achieve. An articulation of such an explicit, quasi-religious, metaphysical position is, of course, not a common clinical event, but this example illustrates well the solipsistic transformation of the patient’s experiential-ontological framework. Many young, preonset patients try to account for their sense of “Anderssein” by fantasies of being time-travelers, extraterrestrials, etc. From the perspective of prepsychotic double bookkeeping, we can understand that patients may find the distinction fuzzy between, on the one side, their “normal” (ie, anomalous) experiences (eg, anonymity of thoughts and nonpsychotic demarcation and identity problems) and, on the other side, the occasional believing that others can access their thoughts or that certain thoughts have been planted into their mind. In other words, the line between what a patient habitually experiences and what he sometimes experiences (eg, delusions) may seem slim and perhaps irrelevant to the patient. From this perspective, it makes sense that many schizophrenia patients do not feel ill or do not attribute their abnormal experiences to a mental disorder. In short, we propose that the reason why patients with schizophrenia have no or only partial insight and consequently do not comply with treatment is rooted in the nature of their

self-disorders and their related schizophrenic psychosis. In contrast to the predominant accounts, we suggest that poor insight in schizophrenia is not primarily an “erroneous” appropriation of certain *experiential contents* (eg, “my belief that I’m the creator of the universe is true and thus not a delusion”) but intimately connected to specific *alterations of the structures of experiencing* (ie, self-disorders), prefiguring the emergence and nature of the schizophrenic psychosis.

Conclusion

The notion of disordered self as the core disturbance in schizophrenia is as old as the schizophrenia concept itself²⁴ and is consistent with recent empirical studies.^{18–23} Our account of poor insight derives from these studies, clinical experience, and considerations framed by a phenomenological approach to psychiatry.³⁹ Our account needs, of course, a more systematic support from empirical research. Potentially, however, it may have important implications for early intervention and treatment: psychoeducational attempts to increase insight and optimize compliance may prove more successful if they strive to raise an awareness of the underlying, disposing vulnerability features (ie, self-disorders). Psychotherapeutic approaches may adopt a similar strategy and, instead of trying to correct the patients’ “errors of judgment” (delusions and hallucination), explore the patients’ inherent vulnerability and their psychotic experiences as potentially relevant sources of meaning for the patients.

An important aspect of the altered experiential framework and the implied weakening of the natural ontological attitude is the emergence of a solipsistic ontological attitude, which may manifest itself in feelings of having extraordinary insight into dimensions of reality that usually remain hidden from others. This loosening of “common sense” constraints may constitute a phenomenological dimension of the epidemiological association between vulnerability to schizophrenia and creativity.⁴⁰

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References

1. Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalence of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. *J Clin Psychiatry*. 2002;63:892–909.

2. Lieberman JA, Stroup TS, McEvoy JP, et al. Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Investigators. Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med*. 2005;353:1209–1223.
3. Weiden PJ, Kozma C, Grogg A, Locklear J. Partial compliance and risk of rehospitalization among California Medicaid patients with schizophrenia. *Psychiatr Serv*. 2004;55:886–891.
4. Hawton K, Sutton L, Haw C, Sinclair J, Deeks JJ. Schizophrenia and suicide: systematic review of risk factors. *Br J Psychiatry*. 2005;187:9–20.
5. Moritz S, Favrod J, Andreou C, et al. Beyond the usual suspects: positive attitudes towards positive symptoms is associated with medication noncompliance in psychosis. *Schizophr Bull*. 2012. doi:10.1093/schbul/sbs005.
6. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV, Text Revision*. Arlington, VA: APA; 2000.
7. Keshavan MS, Rabinowitz J, DeSmedt G, Harvey PD, Schooler N. Correlates of insight in first episode psychosis. *Schizophr Res*. 2004;70:187–194.
8. Dickerson FB, Boronow JJ, Ringel N, Parente F. Lack of insight among outpatients with schizophrenia. *Psychiatr Serv*. 1997;48:195–199.
9. Amador XF, Flaum M, Andreasen NC, et al. Awareness of illness in schizophrenia and schizoaffective and mood disorders. *Arch Gen Psychiatry*. 1994;51:826–836.
10. Marks KA, Fastenau PS, Lysaker PH, Bond GR. Self-Appraisal of Illness Questionnaire (SAIQ): relationship to researcher-rated insight and neuropsychological function in schizophrenia. *Schizophr Res*. 2000;45:203–211.
11. Beck AT, Baruch E, Balter JM, Steer RA, Warman DM. A new instrument for measuring insight: the Beck Cognitive Insight Scale. *Schizophr Res*. 2004;68:319–329.
12. Amador XF, David AS. *Insight and Psychosis*. New York, NY: Oxford University Press; 1998.
13. Lincoln TM, Lüllmann E, Rief W. Correlates and long-term consequences of poor insight in patients with schizophrenia. A systematic review. *Schizophr Bull*. 2007;33:1324–1342.
14. Mingrone C, Rocca P, Castagna F, et al. Insight in stable schizophrenia: relations with psychopathology and cognition. *Compr Psychiatry*. 2013. doi:10.1016/j.comppsy.2012.12.014.
15. David AS, Bedford N, Wiffen B, Gillean J. Failures of metacognition and lack of insight in neuropsychiatric disorders. *Philos Trans R Soc Lond B Biol Sci*. 2012;367:1379–1390.
16. Mintz AR, Dobson KS, Romney DM. Insight in schizophrenia: a meta-analysis. *Schizophr Res*. 2003;61:75–88.
17. Lincoln TM, Wilhelm K, Nestoriuc Y. Effectiveness of psychoeducation for relapse, symptoms, knowledge, adherence and functioning in psychotic disorders: a meta-analysis. *Schizophr Res*. 2007;96:232–245.
18. Haug E, Lien L, Raballo A, et al. Selective aggregation of self-disorders in first-treatment DSM-IV schizophrenia spectrum disorders. *J Nerv Ment Dis*. 2012;200:632–636.
19. Nelson B, Thompson A, Yung AR. Basic self-disturbance predicts psychosis onset in the ultra high risk for psychosis “prodromal” population. *Schizophr Bull*. 2012;38:1277–1287.
20. Parnas J, Handest P, Jansson L, Saebye D. Anomalous subjective experience among first-admitted schizophrenia spectrum patients: empirical investigation. *Psychopathology*. 2005;38:259–267.
21. Parnas J, Raballo A, Handest P, Jansson L, Vollmer-Larsen A, Saebye D. Self-experience in the early phases of schizophrenia: 5-year follow-up of the Copenhagen Prodromal Study. *World Psychiatry*. 2011;10:200–204.
22. Raballo A, Parnas J. The silent side of the spectrum: schizotypy and the schizotaxic self. *Schizophr Bull*. 2011;37:1017–1026.
23. Raballo A, Sæbye D, Parnas J. Looking at the schizophrenia spectrum through the prism of self-disorders: an empirical study. *Schizophr Bull*. 2011;37:344–351.
24. Parnas J. A disappearing heritage: the clinical core of schizophrenia. *Schizophr Bull*. 2011;37:1121–1130.
25. Zahavi D. *Subjectivity and Selfhood. Investigating the First-Person Perspective*. Cambridge, MA: MIT Press; 2005.
26. Damasio AR. *Self Comes to Mind: Constructing the Conscious Brain*. New York, NY: Pantheon Books; 2010.
27. Sass LA, Parnas J. Schizophrenia, consciousness, and the self. *Schizophr Bull*. 2003;29:427–444.
28. Ratcliffe M. *Feelings of Being. Phenomenology, Psychiatry and the Sense of Reality*. New York, NY: Oxford University Press; 2008.
29. Bleuler E. *Dementia Praecox or the Group of Schizophrenias*. Translated by Zinkin J, Lewis NDC. New York, NY: International University Press; 1950.
30. Schreber DP. *Memoirs of My Nervous Illness*. Translated by Malcapine I, Hunter R. Cambridge, MA: Harvard University Press; 1988.
31. Saks ER. Some thoughts on denial of mental illness. *Am J Psychiatry*. 2009;166:972–973.
32. Schneider K. *Clinical Psychopathology*. New York, NY: Grune & Stratton; 1959.
33. Sass LA. *Paradoxes of Delusion: Wittgenstein, Schreber, and the Schizophrenic Mind*. Ithaca, NY: Cornell; 1994.
34. Sass LA. Delusions and double bookkeeping. In Stanghellini G, Fuchs T (eds.), *One Century of Karl Jaspers' General Psychopathology*. Oxford, UK: Oxford University Press. In press.
35. Škodlar B, Henriksen MG, Sass LA, Nelson B, Parnas J. Cognitive-behavioral therapy for schizophrenia: a critical evaluation of its theoretical framework from a clinical-phenomenological perspective. *Psychopathology*. 2013;46:249–265.
36. Depraz N. En quête d’une métaphysique phénoménologique: la référence henryenne à Maître Eckhart. In David A, Greisch J (eds.), *Michel Henry, L’Épreuve de la Vie*. Paris, France: Les Éditions Cerf; 2001:255–280.
37. Steinbock AJ. *Phenomenology and Mysticism*. Bloomington, IN: Indiana University Press; 2007.
38. Parnas J. Clinical detection of schizophrenia-prone individuals. Critical appraisal. *Br J Psychiatry*. 2005;187:111–112.
39. Parnas J, Sass LA, Zahavi D. Rediscovering psychopathology: the epistemology and phenomenology of the psychiatric object. *Schizophr Bull*. 2013;39:270–277.
40. Kyaga S, Lichtenstein P, Boman M, Hultman C, Långström N, Landén M. Creativity and mental disorder: family study of 300,000 people with severe mental disorder. *Br J Psychiatry*. 2011;199:373–379.