The loss of nosological validity: why and how should we consider disturbances of subjective world experience?

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Abstract

Contemporary psychiatric nosology has evolved with a primary goal of reducing the presence and influence of subjectivity by valuing objective symptoms and explanations (e.g. neurobiological models of psychopathology). However, improvements in the reliability and validity of these endeavours have fallen short of expectations, and it has been argued that one reason for these failures is the very omission or neglect of subjectivity in understanding and explaining mental illness. This paper supports the need for a paradigm shift, from researching the "what" of mental symptoms to a focus on "how" patients experience themselves and the world when undergoing a mental disorder. We review past contributions to disturbances of subjectivity, particularly in schizophrenia, which have contributed to the creation of a new bio-pheno-social model. We also discuss available tools for the systematic assessment of subjective anomalies. We pay special attention to the *Examination of Anomalous World Experience (EAWE)*, which considers disturbances in world engagement, including the experience of atmosphere, space and objects, lived time and temporality, interpersonal relations, language, and existential concerns. Ultimately, we stress that the exploration of subjective experiences is essential, promising, and achievable in research on mental disorders.

Keywords: psychopathology; subjectivity; world-experiences; nosology.

Introduction

"There is a crisis in academic and clinical psychiatry" – this is a sentence proffered repeatedly throughout the last century (Pichot, 1994). Different arguments have been put forward imputing this crisis to the unscientific nature of the classification of disorders (Maj, 2018), to the lack of clarity or overly subjective nature of psychiatric symbols, or to the frailties of psychiatric research methods (Cuthbert & Insel, 2013; Krystal & State, 2014). Attempts to develop a biological basis for mental symptoms and disorders or treatments akin to those for neurological disorders (White, Rickards, & Zeman, 2012) (Cawley, 1993) arose from more global efforts to portray psychiatry as a natural science – where symptoms were taken as "natural kinds" (Markova & Berrios, 2009), as though reification in the brain (localization) were possible. Such efforts also seemed to justify an unrestricted use of molecular, imaging, and mathematical model diagnostic techniques. Such a mindset valued "objective" symptoms that could be described in sanitized, schematized, and quantifiable linguistic symbols. The history of our classification of disorders is testimony to this trend (Association, 2013; Marková & Berrios, 2012), which is also evident in the choices of the DSM-5 workgroup to emphasize biological markers and a purportedly theory-free epistemology– preferring the sum of individual symptoms, dimensional diagnosis, and subclinical and subliminal presentations (Kupfer & Regier, 2011; Regier, Narrow, Kuhl, & Kupfer, 2009).

However, validating "DSM-5 defined syndromes and discovering common aetiologies" has remained elusive. Indeed, with not one laboratory marker found to be specific in identifying any of the psychiatric syndromes, epidemiological and clinical studies have shown extremely high rates of comorbidities, undermining the hypothesis that the syndromes represent distinct aetiologies. Furthermore, results of twin studies have contradicted the DSM assumption that separate syndromes have a different genetic basis. The present model and research projects that have led psychiatry to become a natural science seem to be failing, and the necessity of a paradigm shift seems evident (Kupfer, Kuhl, & Regier, 2013).

One of the possible reasons for these apparent failures is that we are not measuring what should be measured – and that until we clarify the nature of what is meant by "mental symptom" we cannot guarantee that our classification isn't failing just by failing to represent symptoms. Indeed, it is possible that we are assessing only partial forms of

mental disorders and disregarding symptoms. That we might be viewing only "fragments" of psychopathology and mistaking them for meaningful wholes is not taken into account by our present methods (Hacking, Sperber, & Premack, 1995): translational research looks only at further reductionism. We could therefore be leading psychiatry into a dead end by accepting a positive feedback of reductionism both in clinical and academic fields that will lead us to continually dismiss essential features.

Other risks of this reckless oversimplification of complexity include the emergence of some paradoxical conclusions and the undermining of psychiatry training, dismissing core knowledge and skills. One clear paradox is the recognition in the DSM-5 that bipolar disorder is the "bridge between depression and schizophrenia regarding symptomatology, family history, and genetic basis" (Association, 2013). This statement, only possible through simplification, seems incongruent both with seminal psychiatric statements (see Kraepelinian barrier (Kraepelin & Lange, 1927) and with overall clinical feeling (Ungvari, Xiang, Hong, Leung, & Chiu, 2010). Second, as Andreasen has forewarned, there is an entire generation of psychiatrists whose practice is merely criteria-based and who appear to have little expertise in the field of psychopathology (Andreasen, 2006), with the consequence that clinical practice and research may become completely split off from everyday human experience (Blakemore, 2000; Carpenter, 2016; Kupfer, 2013). As subjective experiences have been either removed from classifications, objectified, or deemed relevant only for relational depth and adhesion to a treatment plan, we are already suffering the impacts of diagnosis by structured interviews and training that ignores knowledge of psychopathology (Nordgaard, Sass, & Parnas, 2013).

In this paper, we explore the advantages of a more nuanced and dialogical measure of symptoms in mental disorders (Markov aacute & Berrios, 2009; Marková & Berrios, 2012; Parnas, Sass, & Zahavi, 2013), a system that goes beyond a rigid portrait of mental phenomena. Subjective experience is treated here as a relevant and foundational element not only because psychiatry is relational in a larger sense (Messas, Fulford, & Stanghellini, 2017) but because disturbances of subjectivity themselves carry diagnostic value (Stanghellini, 2016; Stanghellini & Broome, 2014). Such an idea is not new, and has been put forward by Jaspers (Jaspers, 1963) and by many other significant contributors who suggest that the core of several mental disorders can only be understood (studied and treated) from an ecological perspective (Fuchs, 2017). This means considering not only "*what*" happens to patients, but also "*how*" they experience these

events and the settings in which they occur. It includes the description of self and world experiences as they appear; but rather than a simplistic detached "description," it also entails the exploration of those phenomena and their meaning from within a personal frame of reference, what has been termed the "genetic-structural" organization (Lanteri-Laura, 1985; Stanghellini & Aragona, 2016). This empathic retrieval of subjective phenomena therefore requires attending to comprehensive details of what it is like to undergo various experiences. Ultimately, the systematic reintroduction of such subjective features might provide a new, subjectively-informed classification that is closer to portraying the "trouble générateur" of mental disorders (Minkowski, 1927; Sass, 2001) and that allows us to clarify distinct syndromes that could be the target of translational studies.

Subjective phenomena, narrated from the first person perspective, were explored only in a kind of ancillary position throughout the 20th century (shadowed by neuroscience). In the 90's, the phenomenological method re-emerged, compiling previous research and further exploring mental phenomena, aiming toward a subjectivity-oriented psychopathology (Parnas et al., 2013; Ratcliffe, 2008; Sass, 1992) (Fuchs & Van Duppen, 2017; Musalek et al., 2010; Sass, Parnas, & Zahavi, 2011).

Alongside this trend, a new body of empirical evidence has emerged in contrast to the "objective" third person assessment of psychopathological phenomena (Nordgaard et al., 2013; Nordgaard, Revsbech, Sæbye, & Parnas, 2012). This research has allowed the identification of relevant clusters of disturbed subjective experience as specific sets of disturbed phenomena: self (Parnas, Handest, Sæbye, & Jansson, 2003; Sass et al., 2011), embodiment (Fuchs, 2009; Fuchs & Koch, 2014; Fuchs & Schlimme, 2009), agency (Herrera, Jordan, & Vera, 2006; Tsakiris, Schütz-Bosbach, & Gallagher, 2007), ipseity (Nelson, Parnas, & Sass, 2014), temporality (Fuchs, 2010b; Fuchs & Van Duppen, 2017), intentionality (Thompson, Lutz, & Cosmelli, 2009) and intersubjectivity (Fuchs, 2010a; Sass & Pienkos, 2015). In addition, there has been an extensive exploration of anomalous subjective experience in some mental disorders, particularly in schizophrenia spectrum disorders, first psychotic episodes, and ultra-high-risk and prodromal syndromes (see Nelson, Sass, & Skodlar, 2009; Parnas, 2005; Parnas & Handest, 2003; Sass et al., 2011).

This investigation is aided by newly developed assessment instruments that allow for a methodical, systematic and controlled analysis of subjective phenomena. Two

examples of these instruments are the *EASE: Examination of Anomalous Self Experience* (Parnas et al., 2005), which is currently being extensively used, and the recently published *EAWE: Examination of Anomalous World Experience* (Sass et al., 2017). The data retrieved by the EASE are now informing clinical practice and research but, up until now, disturbances of the experience of the world have not been systematically explored and remain uncharted territory for psychopathology.

Anomalous world experiences encompass modes of experiencing surrounding space and objects, time and events, interpersonal features of other persons, properties of language, atmosphere or the whole "sense" of immersion in a setting, and attitudes or viewpoints towards existence or reality as a whole (existential orientation). The EAWE is semi-structured phenomenological interview developed to measure anomalous world experiences in (though not limited to) schizophrenia spectrum disorders; it condenses both classic and contemporary clinical and psychopathological descriptions (particularly autobiographical accounts of patients). This psychometric instrument is a comprehensive and richly detailed interview exploring these qualitative abnormalities of the "lived world." These experiences are, at present, commonly oversimplified in psychopathological examination in, for example, the overinclusive (Simeon et al., 2008) concepts of "depersonalization" and "derealization". They carry no diagnostic value per se (Reed & Sedman, 1964) as they occur both in severe conditions (psychosis) and in everyday life (sleep deprivation). Further study of these subtle changes could provide deep insight into the texture and structure of subjectivity in mental disorders and allow the identification and differentiation of new phenomena under these umbrella terms. The inclusion of anomalous world experiences in our assessment and understanding of mental disorder points to possibilities for a more comprehensive view of psychiatric categories and an increase in the validity and reliability of their assessment. Below we discuss each of the six domains of world experience explored in the EAWE {Sass:2017dd}.

The atmospheric sense of the world is one dimension of world-experience that involves a holistic appreciation of the sense of reality, an all-encompassing feeling that does not refer to any object in particular but that occurs as a "horizon" of all experiences. Disturbances of this intuitive, implicit and immersive (mood-like) feeling of being-in-the-world may lead the subject to experience his engagement (sense of reality), enactment (changes of meaning) and attunement (synchronization) with reality as changed (Sass & Ratcliffe, 2017). As described above, anomalous world experiences can occur in

numerous situations, including non-pathological (Aderibigbe, Bloch, & Walker, 2001) ones but also in psychosis (e.g. see the phenomenon of the "trema" (Conrad, 2013) in Conrad) and the delusional atmosphere (see Jaspers, 1963). The feeling of uncanniness, for example, is frequently encountered at the beginning of psychosis when the individual undergoes certain subtle but sudden changes in world-experience, which may be described as feelings of "unhomelikeness", "homelessness" "defamiliarization/strange familiarity" and "revelation." Various forms of derealization are deeply interwoven with depersonalization, including either changes in the experience of the self (disembodied self, Stanghellini, 2004) or of the body (unhomely body) (Stanghellini, Ballerini, Fusar-Poli, & Cutting, 2012). These changes of world-experience are also intertwined with disturbances of time and space evaluated by the EAWE.

Lived time (Stanghellini et al., 2015) and temporality (its key role as the foundation underpinning all experiencing (Fuchs, 2005) have been extensively studied in phenomenological psychopathology (Binswanger, 1960; Blankenburg, 1971; Kimura, 2003; Minkowski, 2005). Disturbances of time have been described in major mental disorders, particularly in depression and schizophrenia, suggesting that they might lie at the core of a trouble générateur (Fuchs, 2010b). Nonetheless, in most routine existence, time is not phenomenic: we are typically immediately synchronized with the world and unaware of time. Hence, awareness of time already implies some disturbance and loosening of an original implicit relation (e.g. the acute awareness of time in boredom). The case of depression is particularly clear in displaying both explicit time (phenomenic and felt forms of lived time) and disturbed temporality, where the subject may experience the present as fixed to the past and no longer leading to a future (Fuchs, 2005). In schizophrenia severe disturbances in the vital contact with reality, the intentional, and the past- and future-orientation of the present (protention and retention) occur (Stanghellini et al., 2015). Therefore, the experience of time is a crucial element in normal and abnormal world experience (Fuchs & Van Duppen, 2017) and the EAWE is a powerful tool for an in-depth exploration of its disturbances.

The experience of space and world-embedded spatiality is intimately interconnected with time and the above considerations. Phenomenological psychopathology has provided several conceptual tools to identify changes in personal experience of space (e.g. oriented and attuned space), disturbances of perceived properties of the world (intensity and contrast) or perceptions without object (hallucinations), and

disturbances of spatiality (e.g. morbid geometrism (Minkowski, 1927). Moreover, it has been suggested that the apprehension of reality relies mostly on a pre-reflexive immersion and tacit, non-cognitive understanding of the world (Gipps & Fulford, 2004; Stanghellini, Bolton, & Fulford, 2013; Zahavi, 1999). Schizophrenia is a particular case not only because many positive symptoms in psychosis are manifestations of changes in the pre-reflective validity of spatial/perceptual experience (e.g. illusions, hallucinations) but also because particular forms of perceptual disorganization seem to be nuclear to several phenomena in this disorder (see Matussek, 1987). Empirical research (Birch & Walker, 1966; Postmes et al., 2014; Silverstein & Keane, 2011; Uhlhaas & Mishara, 2007; Uhlhaas & Silverstein, 2005) has corroborated the presence of disturbances in (multimodal) perceptual organization/integration and the possibility of it being a core feature of this disorder (Sass, Borda, Madeira, Pienkos, & Nelson, 2018). Yet, only now it is possible to rigorously assess space and perceptual experience through the EAWE (Silverstein, Demmin, & Skodlar, 2017) and further explore its disturbances in mental disorders.

Interpersonal relationships are also a basic feature of world-embeddedness, reflecting the capacity to engage in relationships and to understand others, their actions, and their expressions, all of which involves an intuitive synchronization with the social world. The latter aspect allows for an immediate attunement to others: a fluidly embodied and enacted intersubjectivity (Di Paolo & De Jaegher, 2015; Fuchs, 2010a; Sass & Pienkos, 2015). This immediate inter-corporeality is vital to the general sense of being in the world (natural attitude) and to the development of implicit "common sense" knowledge, which provides a background to linguistic narrative and certain, more reflective domains of self-experience (including personal ideological viewpoints and autobiographical accounts that each person holds as imbuing his own self-concept). Changes in this embeddedness and enactment can lead to feelings of detachment from reality, a sense of invasiveness, or a loss of affordances regarding everyday meanings or social common sense. These features have gained prominence since the publication of seminal contributions explaining a form of autism and dissociality in schizophrenia (Broome, Harland, Owen, & Stringaris, 2013), which has been recently reconsidered as a key aspect of the disorder (Stanghellini & Ballerini, 2011). The EAWE allows for a systematic investigation of anomalous experiences in the interpersonal world – a comprehensive assessment of disturbed embodied and enacted experiences of others

(Stanghellini, Ballerini, & Mancini, 2017). In addition, its widespread investigation of other mental disorders might provide us with new (and relevant) disturbances of the ways we share the world with others.

The EAWE also addresses changes in language and narrative: the practical use and experience of language. The evaluation of speech is challenging, for it includes many kinds of disturbances, from thought process to communicative faculties. Bleuler was aware of the framework of processes involved in the ontology of language (e.g. cognitive abilities, emotional state, and arousal) and stated that "the form of linguistic expression may show every imaginable abnormality or be absolutely correct." (Bleuler, 1911). The debate/discussion over disturbances of language in schizophrenia has led to the coining of concepts such as akataphasia (Kraepelin's word for a change in thought that disturbed dialogue), loosening of associations (Bleuler's concept for the inability to organize ideas), asyndesis (Cameron's consideration of the loss of conceptual barriers), concrete thought (Goldstein's suggestion of a disturbance of abstract concepts where the subject would only identify the explicit sense of thoughts and ideas), and many others. In fact, changes of thought process and language are presently a standard symptom of schizophrenia in the DSM-5 ("disorganized speech", Diagnostic and Statistical Manual of Mental Disorders, ed 5. Arlington, American Psychiatric Association, 2013) and regarded as a possible core symptom of the disorder. Yet, merely viewing such disturbances from a third person perspective leave unanswered the question of whether language disturbance itself is core to schizophrenia (or is just an epiphenomenon of other disturbances).

The investigation of the first person perspective on the use of language might help to address this question (see discussion in the case of schizophrenia by Sass, 2017); both the EASE and the EAWE consider "what it is like" for persons to use language to communicate. For instance, a patient could lack the will to be effective in the use of language, either seeing no purpose in communicating, or disregarding the role of the listener; in this case the use of a private speech or cryptic or indecipherable symbols and grammar would not be due to a disturbance of thought. The EAWE is similarly interested in questions including: how does the patient relate to his attempt to make linguistic sense of his experiences – for instance, does he share with the listener that he is ineffective in communicating his intended sense (a sort of insight)? Does he become frustrated when trying to make sense? Does he lack the words? Do words appear to him as empty or new, devoid of associated meanings? While focusing on these changes the EAWE also tackles

unusual attitudes toward language as well as interactions between changes in language and other internal (e.g. unusual attention to particular self-experiences) and external (context-dependent) inputs.

A final facet of the analysis of the assorted manifestations of schizophrenia refers to different autobiographical portrayals and worldviews. Multiple perspectives have been put forward to account for the reconsiderations of patients' attitudes and values. While Kretschmer spoke of the "schizoid character" (Kretschmer, 2007), Minkowski was in favour of a "morbid rationalism" (Sass, 2001), Binswanger conceptualised this as "extravagance" (Binswanger, 1987), Blankenburg identified a "loss of common-sense" (Blankenburg & Mishara, 2001) and Laing considered a "divided self" (Laing, 1990). Conceptual and empirical research has supported the relevance of characterological and intentional features, reiterating that there is an "axiological dimension" of this illness, which can include a sense of radical uniqueness, metaphysical and charismatic concerns, and the refusal of interpersonal bonds and common-sense, and which has been captured by such concepts as idionomia and antagonomia (Stanghellini & Ballerini, 2007). An entire domain of both the EASE and EAWE evaluates disturbances of existential orientation, considering the uniqueness of the character of patients with schizophrenia – including possible distinctive, idiosyncratic and solipsistic ways of being in the world. Further investigation is needed to allow for the identification and characterisation of their variety and to clarify whether they are an epiphenomenon of the illness (e.g. defensive reactions to the disorder and its various consequences), or are primarily motivated (e.g. intentional), or whether they result, as is most likely the case, from multi-layered frameworks of both primary and secondary elements.

Conclusions

Even a quick review of contemporary classification systems shows that psychiatry considers objective symptoms to be its primordial object of study, relying on an epistemology devoid of theoretical inputs and attempting to remain in the "comfort zone" of identification with the natural sciences. Psychiatric research, following this paradigm, has appeared to be scientifically verifiable. Yet this neopositivist perspective has fallen short of accomplishing its aims, creating numerous problems, such as diagnostic false positives and mixed or comorbid diagnoses. The reintroduction of a phenomenological

approach to the study of symptoms, with its full consideration of disturbances of subjective experience, can retrieve old and identify new elements of psychopathology, which may be a key to increasing the validity and reliability of psychiatric diagnostic classifications. The use of the EASE interview has already identified key disturbances in schizophrenia and a new interview – the EAWE – addresses the subjective experience of the world. This interview integrates information from multiple domains of experience and allows for a methodical study of subjective world experience, facilitating a meticulous exploration of anomalous world experiences. These experiences reflect a first person perspective on changes in atmosphere, immediate space and spatiality, lived time and temporality, interpersonal relations, the use of language, and personal existential narratives. A full consideration of how patients encounter and manifest the world may prove essential to identifying core features of mental disorders. Ultimately, such subjective and intersubjective phenomena could allow us to replace a faulty diagnostic system based on objective criteria with a far more inclusive, comprehensive, and therefore valid and reliable one.

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