# THE UNMOORING OF THE WORLD: A QUALITATIVE INVESTIGATION OF ANOMALOUS WORLD EXPERIENCES IN SCHIZOPHRENIA

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## ABSTRACT

The Examination of Anomalous World Experience (EAWE) is a new, semistructured phenomenological interview, which assesses six domains of experience: space and objects, time, other persons, language, atmosphere, and existential reorientation. It was used to ascertain the experience of the lived world in 13 schizophrenia-spectrum and major-depression subjects, to determine whether and how the experience of the world differs between these two populations. Transcriptions of these interviews were analyzed using a phenomenological qualitative analysis, which found a set of themes that were unique to schizophrenia subjects, namely Distorted appearances, Erosion of self-world boundaries, Shifting relevancies, Precarious reality, and Remoteness of the world. It was determined that these themes were part of a common gestalt that can be termed the Unmooring of the World—a characterization consistent with classic and contemporary research on the gestalt of schizophrenia. Subject responses further suggested that this unmooring may interfere with the ability of some persons with schizophrenia to fully describe their subjective experience in phenomenological interviews, although further research is necessary to confirm this. Implications of these findings for qualitative research and psychotherapy interventions with persons with schizophrenia are considered.

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The Unmooring of the World: A Qualitative Investigation of Anomalous World

Experiences in Schizophrenia

## Introduction

Changes in the way the world is experienced have long been recognized as central to the disturbances in schizophrenia. Two of the five characteristic symptoms listed for schizophrenia in the DSM (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, 2013), for example, are hallucinations and delusions, which involve experiencing the world in ways that are deemed unreal or untrue. Clinicians and researchers have described numerous other disturbances in the experience of the lived world, some of which can be fairly subtle. In classic literature on psychopathology, changes in experience of time, space, atmosphere, and sensory perception have been documented by Jaspers (1946/1963), Minkowski (1933/1970), and Matussek (1987), among others. A number of contemporary writers have again taken up this tradition of investigating pathological world experiences; notably, Fuchs (2007, 2013) has described a kind temporal fragmentation that occurs in schizophrenia, Stanghellini (Stanghellini, 2001, 2004) a shift in values toward independence and uniqueness and a loss of the common sense relationship to the world, and Sass (1992, 1994; Sass & Pienkos, 2013c) the development of a delusional mood, where everything feels strange and uncanny, as well as various forms of alienation, confusion, and subjectivism. Also, in a series of papers, Sass and Pienkos have discussed the similarities and subtle distinctions in anomalous world experience between schizophrenia and severe mood disorders (Sass & Pienkos, 2013b, in press-a, in press-b). In spite of the obvious relevance to schizophrenia,

however, little has been completed in the way of systematized, empirical research on the subjective experience of these kinds of disturbances.

However, a potential way forward has been forged by studies investigating subjective disturbances of ipseity<sup>1</sup>—that is, of core, basic, or minimal self, which involves inhabiting a first-person perspective: having the sense that the experience I am undergoing is indeed *mine* (Sass & Parnas, 2003). The various ways that this disruption is experienced have been operationalized in the "Examination of Anomalous Self Experiences" (EASE), a semi-structured interview that probes patients' subjective experiences of disturbances of the self (Parnas et al., 2005). Numerous studies employing the EASE or similar interview schedules have found that persons with or at risk for schizophrenia experience significantly more disturbances of basic self than patients with remitted bipolar disorder (Parnas, Handest, Saebye, & Jansson, 2003), depression (Schultz-Lutter et al., 2007), various non-schizophrenia diagnoses (Raballo, Saebye, & Parnas, 2011), and borderline personality characteristics (Nelson, Thompson, Chanen, Amminger, & Yung, 2013). Such studies confirm what has long been theorized by seminal writers on schizophrenia, including Bleuler (1911/1950), who coined the term "schizophrenia," and who considered a basic disturbance of personality to be a part of the "complex fundamental symptoms" of the disorder; and Kraepelin (1919/1971), who considered the "loss of inner unity of consciousness" to be the fundamental disorder of schizophrenia, comparing the disorder to an "orchestra without a conductor." The ICD-8 and 9 have also described schizophrenia as a fundamental change in the structure of the

<sup>&</sup>lt;sup>1</sup> "Ipse" is Latin for "self" or "itself."

patient's subjectivity (Parnas, 2011), even though recent editions of the DSM and the ICD have pulled away from understanding schizophrenia as a form of disturbed selfhood.

Writers in the phenomenological tradition have long emphasized the intertwined relationship between self and world, between what Husserl calls the *noesis*, or act of consciousness, and the *noema*, the object or field of awareness. Consciousness is always consciousness of *something*. It is not surprising, then, that schizophrenia should involve transformations of both the experiencing self and the experienced world. In spite of this intimate relationship between self and world, this paper specifically aims to develop a detailed understanding of the way the *world* is experienced in schizophrenia. It is hoped that systematic assessment of disturbances of world experience, similar to work completed with the EASE, might lend strong empirical support to the clinical and theoretical observations about world disturbances described above.

Sass et al. (in preparation) are developing an interview titled the Examination of Anomalous World Experiences, or EAWE, to catalogue the disturbances in the lived world that may occur in schizophrenia. This interview investigates disturbances in six domains of experience: 1) objects and space, 2) time, 3) persons, 4) language, 5) atmosphere, and 6) existential reorientation. Each domain contains a number of distinct items that may be marked as definitely present (score of 2), possibly present (1), or not present (0). Consistent with scoring in studies using the EASE, these scores may be compressed to either 1 (definitely present) or 0 (possibly or not present) (Haug et al., 2012; Møller, Haug, Raballo, Parnas, & Melle, 2011; Nelson, Thompson, & Yung, 2012). Although the EAWE is primarily designed to capture disturbances of world experience that occur within schizophrenia, it contains a number of auxiliary items that

may occur not only in schizophrenia-spectrum patients but in some other conditions as well. For example, disturbances of the apparent vibrancy or intensity of various sensations (especially sound, colors, and light) have been described in both schizophrenia and mood disorders. (For further discussion of such apparent experiential overlaps between schizophrenia and mood disorders, see Sass and Pienkos (2013a, 2013b, in press-a, in press-b).)

A study with an early version of the EAWE used data collected from interviews with nine outpatient and inpatient subjects diagnosed with schizophrenia-spectrum disorders (SZ), three outpatient subjects diagnosed with major depressive disorder (DEP), and three student controls (Conerty, 2013). It found excellent internal consistency ( $\alpha =$ 0.95 for each rater), excellent interrater agreement ( $\rho = 0.95$ ) and substantial interrater reliability in all six domains (with  $\kappa$  values ranging from 0.73-0.89, and average  $\kappa$  of 0.8). Due to the low total number of subjects, power was insufficient to conduct quantitative analyses of the relationship between diagnosis and EAWE score. However, informal description of the data found that schizophrenia subjects received the highest scores on the EAWE: maximum total score among non-schizophrenia subjects was 10 out of 74 possible points (5 without auxiliary items), while the maximum total score among SZ subjects was 40 points (34 without auxiliary items), although five of the nine SZ subjects scored within the same range as non-schizophrenia subjects. These findings did not change when auxiliary items were excluded from the analysis. (Scores of controls ranged between 2 and 9 points (or 1 and 9 points without auxiliary items).) Future studies with larger sample sizes need to be conducted to determine the significance of these findings as well as the sensitivity and specificity of the EAWE.

Conerty notes several possible reasons for the overlapping of schizophrenia and non-schizophrenia scores on the EAWE. One is that schizophrenia is a heterogeneous disorder, and even the most sensitive predictors of the disorder typically identify no more than half of the schizophrenia population (Heinrichs, 2004). Another factor specific to this study is that the sample, drawing from patients at an intensive outpatient program, may have been biased toward individuals with more chronic forms of schizophrenia, characterized by negative symptoms including cognitive deficits and affective flattening. Such features have been shown to predict difficulties in reflecting on internal states, retrieving autobiographical memory, and recalling details about one's experience of psychiatric symptoms (Corcoran & Frith, 2003; Lysaker, 2010), tasks required of the subjects interviewed in this study. It should be noted, however, that the data trends are not entirely consistent with this explanation—two older, more chronic subjects had higher scores, while one younger subject had one of the lower scores in the study.

In addition to quantitative data about the number of items described by each interview subject, the EAWE may also yield valuable qualitative information about the nature of the anomalous experiences reported by subjects. In particular, the semi-structured format of the EAWE may help persons with schizophrenia begin to articulate the subtle and difficult-to-describe experiences characteristic of this disorder. Patients with schizophrenia often present their symptomatic complaints with non-specific descriptors like depression, fatigue, and lack of concentration or anxiety, which can result in a misdiagnosis of depression (Parnas & Sass, 2001). Parnas and Sass (2001) note that the task of describing one's subjective experience of schizophrenia is difficult for several reasons: the universal difficulty (not specific to schizophrenia) of characterizing the

dimensions of subjectivity, the further interference of self-disturbances on this already limited capacity, and the fluctuating, difficult-to-grasp nature of the forms of consciousness that occur specifically in schizophrenia. However, they also suggest that the experiential nuances of schizophrenia may be revealed through discussion with "an interviewing clinician who is familiar with the potential manifestations of self-disorders" (p. 104); in a similar way, the semi-structured format of the EAWE may help subjects to put into words experiences previously felt to be ineffable.

The current paper thus applies an empirical phenomenological methodology to EAWE interviews with persons with schizophrenia-spectrum and major depressive disorder diagnoses. It endeavors to develop a more rigorous description, by using a semi-structured interview and formal qualitative analysis, of the kinds of distortion in the experience of the world, particularly in schizophrenia, that have long been noted in more clinical, case-based descriptions. The goals of this work are threefold: 1) to determine the common themes among schizophrenia subjects, that is, to describe how persons with schizophrenia experience the lived world; 2) to illuminate some of the differences between schizophrenia subjects, especially differences that may have led to variation in EAWE scores as reported in Conerty (2013); and 3) to compare the experiences of schizophrenia subjects to those of depressed subjects, to determine which world experiences, if any, are unique to schizophrenia.

## Methods

Sample: Subjects were recruited from hospital-based psychiatric day programs and from a psychiatric inpatient unit at a public hospital. All sites were located in New Jersey. Inclusion criteria included a current primary diagnosis of schizophrenia,

schizoaffective disorder, major depressive disorder, or bipolar disorder; exclusion criteria included current substance abuse and primary diagnosis due to substance use or any medical condition. Thirteen subjects participated in this study; twelve were patients at a day-treatment program, and one was a psychiatric inpatient. Ten subjects had a diagnosis of schizophrenia (2) or schizoaffective disorder (8) (SZ), and three had a diagnosis of major depressive disorder (DEP).<sup>2</sup> For SZ subjects, seven were female and three were male; ages ranged from 27 to 61, with a mean of 42.8. For DEP subjects, one was female and two were male; ages ranged from 50 to 59, with a mean of 55. Average length of education for SZ subjects was 12.1 years (12 years = graduation from high school), while average length of education for DEP subjects was 11.67. Table 1 provides detailed demographic data. All subjects had been receiving psychiatric treatment for at least one year; all except one had undergone at least one hospitalization during that time. Subjects were all provided written informed consent, and the study was approved by Rutgers University and the University of Medicine and Dentistry of New Jersey.

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<sup>&</sup>lt;sup>2</sup> Schizophrenia and schizoaffective subjects were included in the same group (SZ) in accordance with previous EASE research (Haug et al., 2012; Møller et al., 2011; Nelson, Thompson, & Yung, 2013). There is debate about whether schizoaffective disorder constitutes a distinct diagnostic category, or whether it is better grouped with either schizophrenia or affective disorders (c.f. Tsuang & Simpson, 1984). However, studies that considered the types of experiences discussed here and in other EASE research found little difference between schizophrenia and schizoaffective disorder in quality of thought disorder (Holzman, Shenton, & Solovay, 1986), and between disorganized schizophrenia and schizoaffective disorder in number and type of basic symptoms (Fabisch et al., 2001). (These studies did not use the EASE, however.)

Table 1: Subject demographics

	Total sample (n=13)	Schizophrenia spectrum (SZ) (n=10)	Major depressive disorder (DEP) (n=3)
Gender, n (%)			
Female	8 (61.5)	7 (70.0)	1 (33.3)
Male	5 (38.5)	3 (30.0)	2 (66.7)
Age (sd)	45.6 (+/- 3.52)	42.8 (+/- 4.15)	55 (+/- 2.65)
Years education (sd)	12 (+/-0.22)	12.1 (+/- 0.28)	11.67 (+/- 0.33)
Years since onset (sd)	23.38 (+/-12.05)	21.3 (+/-10.79)	30.33 (+/-15.89)

Interview: Subjects were interviewed using an early version of the Examination of Anomalous World Experience (see Appendix 1 for list of items) by two investigators with familiarity with this interview and who had received training in the EASE, an interview with a similar structure. Interviewers conducted the interview session with a semi-structured format, which provides subjects with the maximum opportunity to describe experiences that are unique or important to them, while also ensuring that all items are covered during the session. Specific instructions about how to conduct the interview can be found in the EAWE (Sass et al., in preparation), with similar instructions in the EASE (Parnas et al., 2005). Interviews typically lasted between one and two hours, though occasionally were as long as two and a half hours. Subjects had the opportunity to take breaks as needed during the interview.

Analysis: Data were analyzed using empirical phenomenological methodology, as developed by van Kaam (1966), Giorgi (1975), and Colaizzi (1978), and summarized by Hein and Austin (2001). The basic steps involve immersion in the data by reading a transcript several times to get an overall sense of meaning, identifying statements relevant to the phenomena in question, thematizing these statements to capture their meanings, and using these statements and themes to develop a description of the

experience. When multiple subjects are involved, as with the current study, this procedure is completed with an initial subject and then repeated with other subjects, comparing analyses to identify common themes, using these to develop a "general structural description (or synthetic description)" (Hein & Austin, 2001, p. 8) that describes the features and themes common to all subjects. In this study, this procedure was adapted to help explain differences within and between groups, (i.e., within SZ subjects, and between SZ and DEP subjects).

Credibility was established through the use of external auditors (two members of the author's dissertation committee) representing different theoretical frameworks (phenomenology and mainstream empirical psychopathology), who reviewed the author's development of specific themes and their match with selected statements from individual subjects, to provide outside evaluation of the degree to which statements exemplified a given theme, and to help to uphold theoretical neutrality and avoid the intrusion of individual biases; and through the author's use of an iterative process of going back and forth among the specific examples, basic themes, and overall description to ensure faithfulness to original narratives and match within the developing thematic structure.

#### Results

This section begins with a summary of one schizophrenia subject's interview, chosen because it represents a large number and wide variety of anomalous experiences; after an initial overview, her experiences are described in accordance with the six domains of the EAWE. A similar procedure is followed with a depression subject's interview, intended as a contrast case. Subsequently, common themes found among SZ subjects are reported using the phenomenological methodology described above,

followed by apparent differences between SZ subjects. Finally, similarities with and distinctions from DEP subjects are presented.

Case example-SZ (Total EAWE score: 40, without auxiliary items: 34)

General background: A 27-year-old female subject stated that she had struggled with anxiety and depression throughout her teenage years, and that she began to experience psychotic symptoms (auditory and visual hallucinations) in her late teens and early twenties. These symptoms interfered with her ability to work and attend school. When initially asked to describe what she noticed about her psychosis, she described seeing fleeting images out of the corner of her eye and hearing voices, which would interfere with her ability to hold conversations with others. She also described a variety of "delusions" (subject's term), which included believing she was possessed by the devil, feeling as though there were hidden cameras on her, and thinking that people were trying to communicate something special to her. She further described the feeling that insects were crawling on her. Although she said that these overt symptoms had generally abated at the time of the interview, she still felt "a constant odd feeling...it's kind of like an awareness that I don't think like other people...it's just a like a different way of thinking or experiencing things." When her symptoms worsened, she might feel "almost like I'm viewing [the world] through one of those kaleidoscope things," which would warn her that she was starting to decompensate and was in danger of having another psychotic episode.

Objects and space: In describing her perceptual anomalies, the subject stated, "It's almost as if like your eyes are just darting around, but it's kind of deeper than that, in your brain. It just seems as if I'm kind of, maybe I'm telling myself that it's my eyes, that

it's the world around me that's doing that, instead of my brain or my mind... It feels like everything is amplified. Like, if I was in a really significant point in an episode, that would just be sticking out, like the rug behind you, or in addition to the ticking of the clock or in addition to the blue of the wall." When these details popped out, she might find herself looking for a kind of meaning behind them: "For example, a yellow purse, that color might follow me throughout the day or for certain periods of time, and it will bring me back, so I'll see someone wearing a shirt that color, and I'll think that there's kind of a connection there." She described difficulties seeing a whole object: "It's too much up close, I don't know. The whole thing is there... but [I'm] hyperfocused on, just like tunnel vision." Other anomalies included seeing objects in a distorted way, "kind of a warped fun house mirror version of them," or of hearing sounds repeated, with an almost auditory quality, over the course of the day. The subject also noticed that the more she focused on things, the more distorted they got; for example, a line of music might start to break up, and "the more I focus on my breath, I feel like I'm either not breathing or I'm hyperventilating."

Events and time: Experiences of time could tend to take on a dissociated quality, such that if events were not taking place in that exact moment, the subject had difficulty feeling connected to them. For example, "[the future feels like] not really something that is going to happen... It's just feeling a distance or not connected to that"; and "any particular day... I know I went for a walk, I know I watched this television show, and I know I ate dinner, but I couldn't place them in the right order... and I couldn't tell you how long each one lasted, like I do lose track of time."

Persons: The subject described difficulty acting naturally in social situations: "Through my life I have to make a conscious effort to appear to look a certain way or be in a certain activity, like, my cousin just had a baby, and I feel really happy, but I have to think about how I'm showing it, like if I'm smiling, and if I don't have that, this kind of automatic reaction to things like other people do, not just reaction, but just daily living, like I really have to focus on what I'm doing and there's not so much, everything's a conscious effort." She even felt at times that she had to make an effort to keep breathing or keep her blood pumping: "I feel like I'm constantly working on just being, you know, I have to think about doing everything." This sense of hyper-awareness or scrutiny extended to communicating with other people, as the subject tried to determine whether there might be hidden messages in others' communications. She also described a feeling that other people could access her thoughts, so it could seem necessary to constantly monitor her thoughts in order to hide them from others. In addition, she experienced a sense of confusion about whether her *own* thoughts might actually belong to other people.

Language: The subject noted that she often had difficulty finding words to express herself, wondering "if it's just because I'm thinking too hard about it, or I'm afraid I'm going to say the wrong thing, something along that line." "I feel like it's either, I'm going off or not really thinking about what I'm saying, or I'm thinking way too hard trying to describe something, whether it's the meaning of the universe, or trying to describe the color of the shirt I wanted to buy. It could be anything as simple as that or as extreme as that." She could also at times get distracted by individual words and their possible meanings, which could interfere with her general comprehension of language.

Atmosphere: The subject's relationship to reality could be tenuous, as she often asked herself whether she said something or imagined it, or whether her daily experience was possibly a dream, wondering at times "Is this actually the universe, or just some kind of an amoeba in a Petri dish in some kind of larger universe?" As a result, she said, "it is kind of as if I'm not 100 percent into it, because I don't know if it's 100 percent real." At times, there could be a general feeling of disorientation in the world: "just feeling like things are disorderly in a way, and I don't know how to put it back together." She sometimes experienced a persistent need to analyze everything: "I have to think about, well, figure out the basics of what's going on, and think about, like, add the layers, to figure out exactly what is going on."

Existential reorientation: The subject described at times feeling as if she needed to "play the part" of being odd or different from others: "I feel this way inside, so I have to definitely exaggerate on the outside." She also felt that she had a better understanding of the meaning of the universe than most people, perhaps because she was "regularly more focused on the deep universal kinds of things."

Case example-DEP (Total EAWE score: 10, without auxiliary: 5)

Note: Although this subject endorsed more EAWE items than other DEP subjects, and than the low-scoring SZ subjects, her case was chosen because it provides a good example of the differences in overall quality between SZ and DEP subjects.

General background: This subject was a 50-year-old woman with a history of depression and alcohol dependence, as well as childhood physical and sexual abuse. She had been admitted to a partial hospital program for attempted suicide following an argument with her husband, and she had attempted suicide once prior to this. She

described having difficulty dealing with strong emotions, especially anger, and with maintaining relationships with others.

Objects and space: The subject described feeling especially sensitive to loud noises, finding herself easily irritated by them and unable to concentrate. She also noticed that certain sounds could remind her of traumatic or sad events from her past, which she tried to ignore or forget. She noted something that might be a mild form of synaesthesia, or perhaps a mere metaphor for her sensitivity to noise: "any loud sound to me, like even if someone dropped a book on a desk, it almost seems a visual; I'll see like a spark going off."

Events and time: The subject described feeling stuck in the past ("it feels like I can't get rid of the past") and feeling unable to imagine a future because of being mired in the concerns of the present. She further noted an experience where time appeared to stand still or stretch out, which occurred when her mother was removed from life support: "there was something about that block of time that everything stayed still. I needed it to stay still because I didn't want her to flatline."

<u>Persons</u>: The subject stated that she often felt like an "oddball...not blending or fitting in with the other children," which she related to her family situation as a child (low income, single-parent household). She further described having difficulty getting close to others because of fear of them betraying her trust, based on various past experiences of being betrayed.

<u>Language</u>: Sometimes the subject felt that she had difficulty expressing herself in a way that others could understand, but she attributed this to feeling anxious in some social situations and being afraid of being criticized. In particular, she experienced

problems expressing her emotions, which she said originated in her upbringing in a family that didn't discuss emotions much.

Atmosphere: The subject felt sometimes that she was disconnected from the world: "The world doesn't seem as real to me anymore since I lost my job in 2002. I've been a couple of steps removed from what I consider the world now." Her associations to common objects seemed to have shifted to reflect her preoccupations and mood state; for example, after her mother passed away, flowers represented death rather than beauty. There was also a sense of being watched: "even when I'm home I still feel somebody's watching. I've always felt like that no matter where I lived." She further described feeling somewhat predestined to live an unhappy life, noting that she didn't feel nearly as in control of her life as others appeared to be.

Existential reorientation: None described.

SZ Results

The basic themes that arose in SZ transcripts were: Distorted appearances, Erosion of self-world boundaries, Shifting relevancies, Precarious reality, and Remoteness of the world. These themes do not reflect the organization of the EAWE itself, but are rather found across the domains of the EAWE. In the following, the number of subjects who described the themes is reported, along with illustrative quotations from various subjects (the subject number who reported each statement is included in parentheses). These descriptions are then followed by a discussion of differences between subjects.

Common Themes

Distorted appearances: Four subjects described a variety of distortions of the basic perceptual qualities of objects, persons, or events. One subject stated, for example, "I'll feel like the world is kind of, almost like I'm viewing it through one of those kaleidoscope things, you know where it just feels like, almost like I'm on drugs or something" (05). Another described this distortion occurring in his awareness of the passage of time: "For instance, I dropped a coin, I think it was like a dime or a nickel or something, I looked all around, and I picked up a different coin. Let's say I dropped a dime, then I would pick up a nickel. And that would set me off, because I was like, did I pass out? Did they drug me? ...I felt like time was bending" (08). There is a sense in these descriptions that the basic medium of which the world is constructed had lost its integrity: that it was no longer solid and could not be taken for granted. Distorted appearances corresponded to items scored in Domains 1, Objects and space, 2, Events and time, and 3, Persons.

Erosion of self-world boundaries: A second theme, found in seven SZ interviews, was the sense that the normal boundaries around the world had broken down. This might be described as a feeling of being infiltrated by others, as with one subject who described a time when "I turned to my roommate and yelled....get out of my fucking head...this was an instance where I didn't feel in control of my thoughts" (08). Some subjects described feeling as though the world could see through or know all about them: "I feel like with all this change, with the hospitalization...it was like broadcasted...out in public... I mean like wherever I go or something like that...they'll know" (07). This particular subject, at the time of the interview, also described her feeling that people were reading about her life in the tabloids, and that even if they didn't hear about her through

public media, they would be aware of her illness and her history. Such experiences could include a feeling of constantly being watched: "sometimes I feel like there's hidden cameras on me" (05), or of impersonal messages being personally directed at oneself: "I always feel like I'm getting messages from the TV at certain points, I feel like the TV is directed at me" (08). For many, this experience could have a threatening or ominous feel to it, though most could not say who it was that might intend them harm. For example, one subject stated, "I think...there's somebody else that's turning against me...It seems like someone doesn't want me to be happy all the time" (13). Other subjects felt that their own thoughts and experiences had a direct influence on the physical world, even to the point of causing horrible destruction: "the first psychiatrist that I went to, I told him that I felt responsible for the Gulf War, and I blamed myself for things that I had nothing to do with" (06). Erosion of self-world boundaries corresponded to items scored in Domains 3, Persons, 5, Atmosphere, and 6, Existential reorientation.

Shifting relevancies: The way that subjects encountered people, objects, and events also shifted, such that the commonplace and irrelevant jumped into focus, often accompanied by idiosyncratic interpretations as subjects struggled to make meaning out of what had suddenly come to seem important. Thus, the irrelevant could suddenly become meaningful, even though subjects couldn't always say what the meaning was. In a related way, normal links between signifier and signified broke down, so that typically common meanings and understandings came to seem inaccessible. This experience of shifting relevancies was described by five individuals. One subject described it as "If I was in a really significant point in a [psychotic] episode, that would just be sticking out, like the rug behind you, or in addition to the ticking of the clock or in addition to the blue

of the wall.... Specific things but also ...everything. Like if you are looking at a TV or a picture or something that's just two dimensional, and then you just put the glasses on and all of a sudden everything's right at you" (05). Many people described noticing particular details about the ways that others interacted, and began to interpret these as invested with hidden and subtle meanings: "when I'm listening to somebody, and I'm thinking about things too, there has to be a code word, like, it has to do with this" (08); or "So let's say I would pay too much attention to body language. If a person was standing a certain way... [does that mean I am] allowed to stand up?" (11). Shifting relevancies corresponded to items scored in Domains 1, Objects and space, 3, Persons, 4, Language, 5, Atmosphere, and 6, Existential reorientation.

Precarious reality: Three subjects described having difficulties determining what was real and what was not real, that is, distinguishing between intersubjective reality and reality as perceived or believed by the subject alone. For example, one subject (05) stated that she would often ask herself, "Is this really happening?" or "Is this actually the universe, or just some kind of an amoeba in a Petri dish in some kind of larger universe?" and found that such doubts could interrupt her normal experiencing and interfere with her ability to have normal conversations with others. Another subject (08) stated, "There was actually a time when I thought I was plugged in" ("plugged in" refers to a term used in the movie *The Matrix*), suggesting that he felt that intersubjective reality was only an illusion. A third subject (10) stated that she began to believe that things she viewed on television were actually occurring to her in the immediate moment. This suggests a twist or variation on the experience of the previous subject: while he felt that reality was only an illusion, this individual appeared to experience the illusion or fiction of the television

as her reality. Precarious reality corresponded to items scored in Domains 1, Objects and space, and 5, Atmosphere.

Remoteness of the world: Four subjects described a process of occasionally disconnecting or drifting somehow away from present reality. One subject described it as "It is as if I'm not 100 percent into it, because I don't know if it's 100 percent real...Almost like not trusting it...You know when you're aware that you're dreaming when you're sleeping, you're like, oh, this is just a dream. Sometimes I feel that way when I'm not sleeping" (05). She stated that this could interfere with her ability to pay attention in her interactions with others. Others described feeling unable to connect with the present moment, as with one subject who described a period of time where it felt like "everything was not on time, it was delayed" (07). Remoteness of the world corresponded to items scored in Domain 1, Objects and space, 2, Events and time, 4, Language, and 5, Atmosphere.

Differences Among SZ Subjects

Although two SZ subjects (05 and 08) described experiences consistent with all five themes, most did not. Thus, two subjects (06 and 07) provided descriptions that fit with four themes, one with three themes (02), and the others with two or fewer. The number of themes that corresponded with individual's experience was roughly consistent with their EAWE score, so that subjects who had the highest EAWE scores described the greatest number of themes, with more examples and in more detail. As noted above, the greater chronicity of many subjects in this study may have interfered with the ability to provide detailed descriptions of their subjective experiences; however, although the low-scoring subjects were generally older with a longer duration of illness, this was not

always the case (two of the older and more chronic subjects had high scores, while one of the younger, less chronic subjects had one of the lower scores). Some may also argue that the high proportion of schizoaffective disorder subjects, as compared to those with pure schizophrenia, may explain some of the lower scores, but again, there does not seem to be a relationship between schizoaffective vs. schizophrenia diagnosis and number or quality of anomalous experiences reported. (Of course, it is unknown whether a larger *n* would show statistically significant trends.) There may be other or additional explanations for these low scores, so it is worth examining the reports of low-scoring SZ subjects for any distinctive factors. Indeed, the transcripts of these subjects demonstrated two unique qualities: *Hasty denial*, and *Misunderstanding*.

<u>Hasty denial</u>: Subjects with lower EAWE scores tended to say "no" to interviewer questions about particular experiences quickly and definitively, often before hearing the entire question (this occurred in three of the five lowest-scoring subjects). This was in contrast to subjects with higher scores, who generally listened to the entire question and tried to find some experience that seemed to partially fit, even it didn't seem entirely related to the interviewer question.

Misunderstanding: While subjects with lower scores did at times attempt to understand the interview questions and respond to them, it often seemed that these subjects had either not really listened to the question or had completely misunderstood it, sometimes in unusual and unexpected ways (all of the five lowest-scoring). For example, when asked, "Have you ever looked at an object and just seen a part of it?" the subject responded, "What, through my eyes?" (13). This response suggests a disconnection from the common sense standpoint of the question, in which the fact of using one's eyes to

look at an object would ordinarily be taken for granted. Another exchange further illustrates a disconnection from common sense, in that the subject's response reflects an overly abstract and unusual way of responding to the interviewers' question:

Interviewer: Has it ever felt like time has just stopped, like it just didn't exist any more?

Subject: Maybe in the 1930s?

. . .

I: Can you explain what you mean by that?

P: Well, I watch research on it, old documentaries. (09)

A third form of this disconnection occurred when a subject provided descriptions of normal, common-sense experiences when the interviewer's question specifically asked about unusual or anomalous experiences. For example, when asked whether things ever sound louder than normal, a subject responded, "No I never heard that, not unless they're upset like that, like why are you late, you're coming in late, and then they might say, or something like that" (13), explaining that, common-sensically, voices were louder when people were yelling, even though the interviewee was prompted at the start and several times throughout the interview to discuss particularly unusual or strange experiences.<sup>3</sup> Some instances of misunderstanding involved responses that were completely unrelated. For example, replying to a question about the sizes or shapes of objects shifting, a subject stated, "Well I went to Minnesota, to visit a sick sister, she's a survivor of cancer. She's got a daughter in college, and a daughter in junior high. And eventually I was just out there on my birthday in November for a whole month. I enjoyed it. We were in the Jacuzzi. I enjoyed it" (09). Sometimes, while not completely irrelevant, the subject might particularly emphasize his or her recovery process as part of the response. For example, when one subject was asked about auditory hallucinations, she responded "No,

<sup>3</sup> Responses of this type are *not* scored on the EAWE.

I think I'm more sane now than I ever was, it's obvious I'm getting better every day because the medication helps you, and if you say you're gonna get better then you will get better" (02).

Some of the higher-scoring SZ subjects did at times get off topic, as did one subject (08), who, when asked about visual perseveration, began to talk about seeing things in his mind's eye, then about over-thinking in general, then about how it would be problematic to think about dying children or animal abuse all of the time, before forgetting the question he was initially answering. In addition, one high-scoring subject (10) gave a couple of apparently common-sense responses to EAWE questions; for example, when asked whether people ever looked unreal, dead, or like robots, she stated "In movies, which is fictitious."

## Comparison of SZ and DEP Subjects

Similarities: Each of the three DEP subjects did, on occasion, describe experiences that could be scored on the EAWE. Two subjects, for example, described forms of paranoia, stating that, "even when I'm home I still feel somebody's watching. I've always felt like that no matter where I lived" (01) and "When I see a person laughing I want to know why. I get paranoid, I see people whispering, I think they're talking about me" (03). Two subjects noted heightened sensitivity to loud noises and bright lights, for example, "if I'm in the library and someone drops something or makes even the slightest noise, I lose total concentration and anything around me—it's just the heightened sense

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<sup>&</sup>lt;sup>4</sup> It has been noted previously that experiences of paranoia can be common in both schizophrenia and mood disorders (Lake, 2008; Sass & Pienkos, in press-b). Subtle differences may however distinguish the nature of mood-related paranoia from some experiences of paranoia found in schizophrenia, where the paranoia may have a more all-encompassing or "ontological" quality (Sass & Pienkos, in press-b).

of anybody being around me" (01). One subject indicated a tendency to withdraw in times of stress, showing perhaps some similarity to the remoteness experience in SZ subjects: "The world doesn't seem as real to me anymore since I lost my job in 2002. I've been a couple of steps removed from what I consider the world now" (01). Another individual described experiencing synaesthesia, saying that when he sees the colors brown and silver, respectively, in response to hearing low and high pitches in music (03). Similarities of these types are not unexpected however; indeed, such expressions of paranoia, derealization, and synaesthesia are not uncommon among a variety of diagnoses and even (in the case of synaesthesia) non-psychiatric populations.

Differences: DEP subjects did not describe Precarious reality or Distorted appearances. (One subject (12) did describe a kind of visual illusion, thinking for a moment that a black coat on his floor was his deceased dog, but in the next instant was aware that this couldn't be so, breaking the illusion—a common enough experience that is not, nor was it expected to be, limited to psychiatric populations.) They also did not describe Shifting relevancies; although one subject (01) did indicate that the normal affective meanings of objects changed when she was feeling depressed ("the smell [of flowers] used to bring happiness when now it just brings death. It's almost like I don't see the flowers- they're live flowers not fake, but it's like I'll visualize them dead and in rotten water and not sense the beauty anymore, nothing"). No one endorsed any item indicating difficulty knowing how to act in everyday social situations, or feeling that they attended to irrelevant things, or that they developed unusual meanings attached to everyday objects or events. Furthermore, subjects generally did not describe Erosion of self-world boundaries, that is, feeling as though they were not the source of control for

their thoughts or behaviors, or feeling that others had unusual access to their internal experiences. Although, as noted above, two subjects described some feelings of paranoia, there were no major disturbances of boundaries between self and others or self and world.

There was a noteworthy difference between low-scoring DEP subjects and low-scoring SZ subjects, namely, that DEP subjects did not manifest *Hasty denial* (0 out of 3 subjects), and only 1 out of 3 subjects manifested *Misunderstanding*. In this case, one subject (03) gave some responses that were overly common (when asked if it seemed like people's faces changed, he responded that physical appearances do indeed change over a long period of time), or somewhat unusual and rambling (when asked about whether words and language seemed arbitrary, he said, "Sometimes abstract poetry, what does that mean? It's a heart attack to understand...[but] it sounds beautiful when it comes together, when words unite." In general, though, DEP subjects seemed to understand the questions and attempted to answer them appropriately without going off topic.

## **Discussion**

Unmooring of the World: These results demonstrate that persons with schizophrenia tend to experience certain changes in the lived world that do not occur in persons with major depression. This study identified five unique themes in the transcripts of persons with schizophrenia (Distorted appearances, Erosion of self-world boundaries, Shifting relevancies, Precarious reality, and Remoteness of the world), which, taken together, suggest a shift in the basic way of relating to the world, so that persons with schizophrenia no longer seem to take for granted some fundamental features of world

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<sup>&</sup>lt;sup>5</sup> This example may in fact demonstrate some disturbance or unusual use of language, corresponding in particular to the item *Anomalous style of speech*.

experience. Thus, the reports of persons with schizophrenia spectrum disorders in this study suggest the presence of an underlying gestalt (that is, basic form or essence), which can be termed the "Unmooring of the World." *Unmooring* suggests the way that the world comes to lose its common-sense anchoring, so that the typical manifestations of the world, its physical attributes, meanings, relationships, and general reality-sense, are disorganized and dismantled. As one subject (05) stated, "I have felt very disoriented, not just spatially…but just feeling like things are disorderly in a way, and I don't know how to put it back together, make things straight."

The experience of unmooring partially maps onto a quality that elsewhere has been suggested to be a, if not the, core feature of schizophrenia, termed variously autism (Bleuler, 1911/1950; Kraepelin, 1899/1913), loss of vital contact (Minkowski, 1927/2012), loss of natural self-evidence or common sense (Blankenburg, 1971/1991), and perplexity (Störring, 1987). (For fuller description of these terms and their place in the evolution of phenomenological psychopathology, see Henriksen et al. (2010) and Parnas and Bovet (1991).) Although each of these concepts emphasizes slightly different aspects of schizophrenic disturbance, they all point to a disruption of the natural, takenfor-granted mode of being in the world. As Stanghellini (2001) puts it, "for [persons with schizophrenia, the rootedness and at-homeness that accompanies us in our everyday life are absent" (p. 204). However, whereas these concepts emphasize changes in the subject's role in manifesting the world, unmooring reflects more the strangeness that permeates the world itself during the experiential transformation that occurs in schizophrenia. Of course, the subject plays an inextricable role in the constitution of world experience, and so it is likely that disturbance of basic selfhood plays a key role in

permitting this unmooring to occur—that is, it is the self that anchors the everyday experience of the world, and disruptions of basic self-experience must also be felt in the experience of the world.

This concept of unmooring resonates with the conclusions drawn in Sass and Pienkos's (2013b, in press-b) theoretical analyses of changes in world experience in schizophrenia. They found that, in contrast to severe mood disorders, accounts of schizophrenia reflect pervasive and even frightening feelings of strangeness in the world, which can be seen in a loss of common-sense meanings of objects and fragmentations of time and space, and which can result in a feeling of unbridgeable distance from the world and persistent doubt in its reality. They also note disturbances in the normal limits between self and other, and self and world, stating that in schizophrenia in particular there is a paradoxical sense of both being invaded by other people and of having unusual insight into and influence over others' minds and the world in general. Such findings are brought into meaningful relationship by the notion of unmooring, which views each of these disturbances as manifestations of a world that is breaking down and drifting out of reach, without the contextualizing anchor of the self to hold it in place.

<u>Unmooring and domains of world experience</u> Each of the themes described here was apparent in more than one domain of world experience, and the overall gestalt of unmooring was found in every domain. It is not surprising that this disturbance should touch so many facets of world experience, given the overall or holistic nature of these world-alterations; indeed, these facets, like the facets of self experience, are "intimately interrelated" (Parnas & Sass, 2001, p. 104), and to some extent, any partitioning of experiences into separate domains is necessarily artificial. For example, auditory or

visual hallucinations may reflect some disturbance of the faculties of perception (Domain 1), but may also suggest difficulty distinguishing between real and imagined (Domain 5) and loss of ipseity (that is, a loss of the sense of being the origin of one's own experience, related to the EASE). A subject's description may include reference to any or all of these characteristics. Problems in one domain may also result in disturbances in another domain: difficulty seeing details as part of a whole (Domain 1) may cause people's faces to look strange or different (Domain 3), or a disjointed experience of time (Domain 2) may result in auditory fragmentation (Domain 1) or difficulties communicating logically and smoothly (Domain 4).

The reports of subjects in this study show that experiences of unmooring may emerge across the various domains of world experience in the following ways. Objects and space: Disturbance of the ability to attend to relevant (or stop attending to irrelevant) sensorial features of the environment, to integrate details into a meaningful whole, to perceive the features of objects as continuous, steady, and real, and to filter out unreal sensations. Events and time: Disturbance of time as continuous, as passing away in the past or extending naturally into the future, as being relevant and immediate in the present. Persons: Disturbance of the ability to interact naturally with others (difficulty knowing how to behave or what is expected), the sense that others are communicating something beyond their immediate, common sense message, a feeling of being overly open to or affected by other people, the sense of being watched and ostracized by others. Language: Distraction by non-essential aspects of language, difficulty communicating naturally with others (either in understanding what someone else is communicating, or in expressing oneself). Atmosphere: Feeling that the world is not real or not what it appears to be,

confusion between real and imagined, disturbance of common-sense functions of objects, feeling distant from or otherwise not engaged with the world. Existential reorientation: Feeling of responsibility for events outside one's control (manifested in either grandiosity or guilt), feeling that the world is somehow directed at oneself (e.g., the television is talking to me).

Again, many of these experiences may easily intersect with others, crossing into multiple domains. A semi-structured interview like the EAWE thus provides a rough framework for beginning to catalogue the variety of experiences that may occur in schizophrenia, both by asking explicitly about them and by training interviewers to listen for relevant examples. On the other hand, a simple list cannot reflect the complexity and richness of subjects' descriptions. Therefore, qualitative analyses like the one completed here are useful to relate diverse experiences in a meaningful way to a fuller picture of subjectivity.

Sample heterogeneity As noted above, not all SZ subjects described all themes presented here; indeed one SZ subject (09) did not describe experiences that fit in any of these themes. In the descriptions of the themes presented above, it is apparent that variations may occur in the forms of each subject's experience. Cataloguing these variations can help to delineate the limits of each theme more clearly, and to depict the ways it may manifest within those limits, providing a more comprehensive guide to future efforts to understand anomalous world experiences.

Erosion of self-world boundaries was the most common theme, apparent in seven subjects. Some reported feeling as though their actions influenced the world in unusual ways, some as though others could read their thoughts, some that others had put thoughts

in their mind, some that they could read and/or influence others' thoughts, some that others were watching or talking about them, some that they were being watched by an unspecified and potentially omniscient other. The variety of the experiences subsumed under this theme may alone account for the frequency with which it was found in this report. This heterogeneity poses the question of whether all of these experiences are evidence of an unmooring process, whether some suggest a fuller unmooring than others, or whether it might be necessary for erosion experiences to be coupled with experiences found in other themes to show true demonstration of unmooring. Indeed, two DEP subjects described experiences that could fit among those listed here, including being watched by an unidentified other, and feeling that others were talking about oneself. It does not appear that all of these types of experiences would indicate unmooring: some seem to be describing a paranoid processes much more akin to forms of social anxiety and pervasive shame found in depressive or anxiety disorders.

Sass and Pienkos (in press-b) distinguish between "the paranoid sense of being watched or otherwise targeted [that] seems to derive from a general sense of threat that is grounded either in feelings of guilt, shame, or general social disapprobation (common in depression), or in irritability and a sense of being envied (mania)" (p. 29) and "feelings of centrality [that] seem to involve a shift of a more fundamental kind—not a merely *contingent* centrality but something more ontological or metaphysical in nature: a sort of reverse Copernican Revolution whereby one finds oneself at the very center of the universe itself" (p. 30). This would seem to suggest that *true* unmooring would involve a fundamental shift of the sense of one's role in the world, such that one comes to feel like either the *creating* or the *persecuted* center of the universe. Of course, individuals may

(and do) describe both of these forms of boundary disruption, but the results of this study suggest that persons with schizophrenia-spectrum disorders, but not those with mood disorders, will experience the more fundamental form of disturbed relationship to the world. Further work may be necessary to provide empirical support for this distinction and to determine how it might relate to unmooring.

Other variations within themes included the following: Shifting relevancies might involve attaching importance and meaning to irrelevant stimuli, or it could involve attaching idiosyncratic meanings to events or statements whose intersubjectivelydetermined meanings were completely different. Precarious reality might involve doubt in the reality of the world, but it could also involve experiencing unreal or fictional things as real. Remoteness of the world might be described as a general feeling of distance from the world, or could involve a description of more circumscribed changes, for example of time seeming delayed. Such differences among, and even within, subjects' reports could demonstrate individual variation in categorizing and expressing similar experiences. As with Erosion of self-world boundaries, it is possible that they may represent distinct varieties of experience, and that some represent unmooring while others suggest a different process. In spite of this variety, however, subjects' accounts point to a common, overarching quality: the pervasive and far-reaching distortion of the world that makes both specific details and the general atmosphere seem uncertain, fluctuating, and malleable in ways that are not generally not felt by the general population.

As for those subjects who described few or no experiences of unmooring, it is possible that they did in fact demonstrate, at least in the *form* of their responses, some common features that may be relevant to this gestalt. It is thus noteworthy that the low-

scoring group seemed to have difficulty understanding the common-sense meanings of questions, knowing the difference between everyday experiences and unusual ones, providing responses that were relevant to the interview questions, and talking about situations in a way that was understandable to the interviewer. Such responses suggest that these subjects may in fact have been *demonstrating* unmooring in the form of their responses, even if they did not *describe* it in the content of those responses. Without an implicit, common-sense awareness of what counts as typical experience and what might be unusual or strange, a research subject may be unable to catalogue or speak about particularly unusual experiences. Or, if all experience feels overwhelming or strange, it may be in some sense preferable to attempt to ignore one's subjective experience than to pay attention to it, resulting in relatively impoverished descriptions of experience.

Of course, this may not be the only or the best explanation for low scores among some SZ subjects. As suggested above, the fact that all subjects were patients at an intensive outpatient clinic or (in the case of one subject) an acute psychiatric unit may have biased the findings toward individuals with more chronic forms of schizophrenia dominated by negative symptoms. Gross et al. (2008) note that while some individuals with psychotic disorders "are able to critically place themselves at a distance to and grapple with" their symptoms, others may undergo a more pervasive change "in which the deficiencies are no longer experienced and verbalized as such" (p. 99). Whether this "pervasive change" involves the influence of negative symptoms or of an unmooring process, or indeed, whether unmooring might be related to the development of negative symptoms, is a question for future research trials. In addition, the rapid "no" response among such subjects may suggest a defensive or "faking-good" quality; possible reasons

for this may be negative past experiences with psychiatric authorities, paranoia (potentially borne out of self-other confusion), or a defensive character type. Further research is necessary to shed more definitive light on this issue.

Relationship to diagnostic criteria One might ask how might the model described here corresponds to the frank psychotic features that constitute the diagnostic criteria for schizophrenia in the DSM, namely, delusions, hallucinations, disorganized speech, disorganized behavior, and negative symptoms (alogia, affective flattening, avolition, anhedonia, anergia, inattentiveness). It should be remembered, first, that while that the experiences described in this study certainly include these frank psychotic symptoms, they also include subtler experiences that might be considered prodromal or that might occur between episodes of psychosis. Based on the ideas supported in this paper, and on previous theoretical and empirical work, some hypotheses might be offered about the relationship between unmooring and the symptoms of schizophrenia.

Positive symptoms (hallucinations and delusions) might be seen as experiences of a world where what is typically taken for granted as meaningful and real has become disorganized or disrupted. Parnas and Sass (2001) have suggested, for example, that delusions result from a disruption of the intersubjectively-constrained context of the world, resulting in the emergence of solipsistic and idiosyncratic interpretations of experience (p. 114). Delusions of reference, then, might be seen as attaching unusually personal significance to impersonal events, while belief that one is the creator or originator of the world may be related to an experience of the world as meaningless or unreal, with the result that one might feel like the dreamer in a dream. Hallucinations might also arise as a result of natural experiences seeming distant, irrelevant and unreal.

For example, some have suggested that auditory verbal hallucinations may occur when internal dialogue comes to seem distant and strange, such that it is no longer situated naturally and meaningfully within the experience of the self (Stanghellini & Cutting, 2003). Merleau-Ponty (1945/1962) also posited that hallucinations are the result of a disruption of the goal-oriented encounter with the world, such that objects lose their relevance or valence as meaningful tools to interact with. Stanghellini (2009) describes this as "a loss of *ready-to-hand meanings* to be attached to things in the world...they appear as *devoid of their ordinary meaning*, i.e. the way one usually puts them to use" (p. 58). As a result, "the initiative [of being drawn to use or interact with something] comes from [the subject] and has no external counterpart" (p. 395): real objects lose their practical meaning, and instead, meaning or practical value comes to be attributed to inappropriate or unreal stimuli.

Disorganized symptoms could be viewed as unusual modes of action or experience in relation to a world that is no longer steady or meaningful, while negative symptoms might be explained as reflections of a loss or inability to respond to an irrelevant or disordered world. For example, in cognitive slippage, a mild form of loosening of associations (Gooding, Talent, & Hegyi, 2001; Meehl, 1963), an unstable relationship to the world may result in something Sass (2003) describes as "a proliferation of viewpoints, a slippage of possible perspectives...that erodes any capacity for conceptual or perceptual hold" (p. 174). Without the reality-based constraints and intersubjectively-determined meanings that occur within a steady and common-sense world, all possible meanings and associations may flood the consciousness, making coherent thinking and communication impossible (see also Stanghellini & Ballerini,

2004, pp., p. 262). Sass (2003) also notes that negative symptoms may result from a total withdrawal from the world, due to a disturbance of the orienting function of the self and a related disturbance of the motivating valences or affordances of objects. It is understandable that patients may experience a loss of motivation, energy, desire, and even emotion in the face of a world that feels flat and meaningless.

Phenomenological research of this type may thus allow us to advance hypotheses about the potential disturbances underlying the diverse symptoms of schizophrenia.

These developments can be useful in guiding future research by helping to design measures or experiments that are sensitive to these potential core disturbances, in order to generate more definitive and nuanced data about their presence and role in schizophrenia, as has been argued elsewhere (e.g., Woods et al., 2014). They may similarly contribute to the development of more effective forms of psychotherapy, which will be discussed in the following section.

Clinical implications The results of this study indicate that the subjective disturbances reported by persons with schizophrenia are related to a distinct and unique disturbance of common sense, or unmooring. By listening for and asking about such experiences, clinicians may be better able to offer empathy to those with this disorder. This may even be the case for schizophrenia patients who have been labeled "incomprehensible" or "un-understandable" due to thought disorder or other disruptions that interfere with communication and empathy. Clinicians might learn to be more sensitive to related issues that could arise in treatment, such as a patient's difficulties expressing him- or herself, maintaining present awareness, and establishing a relationship with the clinician. Unmooring might also provide a useful target for treatment, so that

patients may start to develop a mindful awareness of the unmooring process and learn ways to cultivate and maintain a common-sense relationship to the world.

Unmooring and the phenomenological interview Experiences of unmooring among SZ subjects have significance for other projects involving the phenomenology of schizophrenia. Empirical phenomenology tends to require that research subjects be able think about and articulate the phenomenon under investigation. Van Kaam (1966), for example, writes that while the subjects chosen for phenomenological studies should not be experts in psychology, they should have a number of qualities that would allow them to provide rich accounts of their experiences, including "the ability to express themselves with relative ease," "the ability to sense and to express inner feelings and emotions...and the organic feelings that accompany these feelings," and "a spontaneous interest in his experience on the part of the subject" (p. 317). As the data here suggest, however, the kinds of disturbances that are *fundamental* to the disorder of schizophrenia can be at odds with the qualities required of a phenomenological research subject. If we believe it is important to understand the subjective experience of persons with schizophrenia, it will be the task of future phenomenological studies to develop innovative methods to access those experiences, especially among those who are more deeply affected by disturbances of unmooring.

<u>Limitations</u> Because the sample was limited to the population of patients at an intensive outpatient program (and one patient from an inpatient psychiatric unit), the ability to generalize these findings to all persons with schizophrenia is limited. Further studies need to be completed in order to determine whether the themes and gestalt described here apply to persons with schizophrenia at other stages and forms of the

illness, for example, prodromal/ultra high risk populations, first-episode populations, and high functioning populations. However, the fact that previous theoretical and clinical findings fit within the basic concepts described here lends them validity, even without comparisons in other populations.

Similarly, possible contributions of psychotropic medications to anomalous experiences were not evaluated. Subjective reactions to psychiatric medications can include affective flattening, decreased motivation, "clouded thinking," and significant distress (Belmaker & Wald, 1977; Jones, 2012; Lewander, 1994). These side effects may in fact be similar to some of the experiences described in remoteness of the world, for example, feeling unable to connect with the present moment. However, many of the experiences described by subjects in this study seemed to have a unique quality of strangeness to them. Furthermore, subjects did not describe the kind of global and pervasive flattening that seems to characterize the side effects described above. Finally, most of subjects' reports included experiences that occurred prior to any treatment.

Another potential limitation is that SZ data were compared to data from only three MDD subjects, and none of whom had experienced psychosis. To demonstrate the uniqueness of the unmooring gestalt and its related themes, it would be necessary to compare these results to populations who are likely to have experienced similar kinds of experiences, at least superficially. These could include psychotic mood disorders, dissociative disorders, borderline personality disorder (suggested to be a disturbance of *narrative*, not basic, self (Nelson, Thompson, Chanen, et al., 2013)), and schizoid personality disorder. Such comparisons might help to isolate those qualities that are truly

characteristic of schizophrenia, or to suggest shared qualities or dimensions of experience that may manifest along a continuum.

Furthermore, it is possible that the EAWE, which is designed to directly target specific changes in world experience, may represent a difficult task for many people: although they may have experienced a number of these disturbances throughout their lives, they may not have found them relevant, and thus failed to store them in memory. Directly asking about such experiences may not be adequate for accessing descriptions of them. Some persons with schizophrenia, on the other hand, have been shown to be pathologically introspective, at times focusing *too much* on intrapsychic processes (Sass, 2001; Sass & Parnas, 2003). This may make them more likely to notice, store, and recall such disturbances, thus biasing the study toward more world disturbances in schizophrenia-spectrum subjects. Of course, this may not be true for all persons with schizophrenia, and some may suffer from the same or even worse difficulties noticing and remembering subjective experience.

Finally, with a relatively small sample (though adequate for qualitative purposes), it is difficult to determine the representativeness of these findings. Quantitative methods, using a much higher sample size, could provide stronger support by determining whether there are significant differences between number and types of world disturbances in schizophrenia and other disorders, and by potentially highlighting factors that predict lower scores on the EAWE by persons with schizophrenia diagnoses.

However, in spite of these limitations, the value of such a study should be apparent. By asking individuals with mental illness about their experiences in a structured way, it becomes possible to begin to highlight important but often subtle

qualities of specific illnesses that may otherwise be (and often are) overlooked. This study thus represents an important step toward the development of a nuanced and experience-rich understanding of mental illness, particularly schizophrenia. Future studies, potentially targeting the limitations described here, can add to this model, strengthening and sharpening its delineations to provide a fuller, and likely more valid, picture of schizophrenia than the diagnostic criteria currently available.

## Conclusions

By applying a phenomenological analysis to subjects' responses to the Examination of Anomalous World Experience, it was determined that the experience of the lived world in schizophrenia seems to be characterized by a sense of the *Unmooring* of the World, something that is not present in severe affective disorders. This unmooring was reflected through several unique themes: Distorted appearances, Erosion of selfworld boundaries, Shifting relevancies, Precarious reality, and Remoteness of the world. Not all persons with schizophrenia-spectrum disorders described this sense of unmooring; however, there is reason to suspect that an unmooring process may, in fact, have interfered with the ability of some subjects to express their subjective experiences in a meaningful, relevant manner. Significant evidence of unmooring was not found among non-schizophrenia-spectrum subjects. This research has implications for future phenomenological work with this population, as such studies may need to develop novel methods to elicit and accurately identify forms of unmooring in subjects who may have trouble expressing their experiences. It also has implications for clinical work, suggesting that clinicians may use the developing concept of unmooring to convey understanding to patients and to focus therapeutic efforts.

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## APPENDICES

## Appendix 1: Guide to EAWE Items (Interview Version)

1 <b>O</b> b	jects and space	1.19.4	Affective experience of space
1.1	Blindness or partial blindness	1.19.5	Other distortions of space
1.1.1	Blurred vision	1.20	Loss of boundaries with the physical world
1.1.2	Partial seeing	1.20.1	Physical boundary loss
1.1.3	Transitory blindness	1.20.2	World control
1.2	Disturbed integrity of objects and scenes	1.20.3	Pseudomovements of objects
1.2.1	Disorganized object contours		
1.2.2	Loss of perceptual stability: fluidity or	2 <b>Ev</b>	ents and time
	contamination	2.1	Disturbed experience of the past
1.2.3	Object fragmentation	2.1.1	The past seems cut off
1.2.4	Break-up of a scene	2.1.2	The past seems vague or obscure
1.3	Captivation of attention by isolated details	2.1.3	The past disappears
1.4	Abnormal awareness of background	2.1.4	The past seems accelerated
	sensations: visual	2.1.5	The past seems slower
1.5	Recurrence or prolongation of visual stimuli	2.1.6	The past seems disjointed
1.6	Changes in intensity of visual perception	2.1.7	Intrusiveness of the past
1.6.1	Increases in intensity of visual perceptions	2.2	Disturbed awareness of the future
1.6.2	Decreases in intensity of visual perceptions	2.2.1	Awareness of future totally absent
1.7	Changes in quality, size, or shape of visual	2.2.2	Awareness of seeming nonexistence of
	perceptions		future
1.7.1	Changes in quality of visual perceptions	2.2.3	Avoidant strategies not to deal with future
1.7.2	Micropsia/macropsia	2.3	Disturbed or diminished anticipation
1.7.3	Metamorphopsia	2.3.1	Feeling that anything is possible
1.7.4	Dysmegalopsia	2.3.2	Disturbed responsivity to future events
1.7.5	Other distortions	2.4	Time appears to move faster or slower (in
1.8	Disturbanes of distance perception		the present moment)
1.8.1	Objects seem closer or farther away	2.5	Experience of time as infinite or standing
1.8.2	Disturbance of the relative spatial		still
	relationship of objects	2.6	Sense of time as mere agitation
1.9	Disturbances in reality of visual perceptions	2.7	Experience of time as disjointed
1.9.1	Visual illusion		1
1.9.2	Visual pseudohallucinations	3 Per	rsons
1.9.3	Visual hallucinations	3.1	Difficulties in interpersonal rapport
1.10	Auditory fragmentations	3.2	Other difficulties with others
1.11	Recurrence of auditory stimuli	3.3	Reactions to interpersonal difficulties
1.12	Abnormal awareness of background	3.4	Abnormally strong empathy or identification
	sensations: auditory	3.4.1	Mind-reading of others
1.13	Changes in intensity of auditory perception	3.4.2	Mind-reading of oneself
1.13.1	Increases in intensity of auditory perception	3.4.3	Experiences of control
1.13.2	Decreases in intensity of auditory perception	3.5	Dissolution of ego boundaries in
1.14	Problems localizing sounds		interpersonal sphere
1.15	Disturbances in reality of auditory	3.5.1	Uncertain psychological boundaries
	perceptions	3.5.2	Uncertain physical boundaries
1.15.1	Auditory illusions	3.5.3	Uncertain personal identity
1.15.2	Auditory pseudohallucinations	3.5.4	Experience of being imitated
1.15.3	Auditory hallucinations	3.6	Decreased ability to tolerate social situations
1.16	Other sensory disturbances	3.7	Anomalous behavioral responses to others
1.16.1	Tactile disturbance	3.7.1	Active withdrawal
1.16.2	Gustatory disturbance	3.7.2	Oppositional/rebellious behavior
1.16.3	Olfactory disturbance	3.7.3	Social disinhibition
1.17	Synaesthesia	3.7.4	Total compliance
1.18	Geometric preoccupation – morbid	3.7.5	Compulsive entertainment of others
	geometrism\	3.7.6	Alienated scrutinizing
1.19	Distorted experiences of space	3.8	Depersonalization of others
1.19.1	Experience of isotropic space	3.8.1	People seem dead
1.19.2	Experience of infinite space	3.8.2	People seem hyper-alive
1.19.3	Abnormal focus on space	3.8.3	People seem unreal

3.8.4	People seem mechanical	5.4.8	Nonspecific derealization
3.9	Changes in familiarity of others	5.5	Perplexity
3.9.1	People seem familiar in a strange way	5.5.1	Loss of topographical orientation
3.9.2	People seem unfamiliar in a strange way	5.5.2	Overwhelming sensory stimulation
3.10	Changes in others' appearance	5.5.3	Confusion of realms
3.10.1	People seem disguised	5.5.4	Incoherence of the world
3.10.2	People seem threatening in a strange way	5.6	Disturbances of ontological quality, reality,
3.10.3	General changes in physical appearance		or independence of the world
3.11	People seem as if they are communicating	5.6.1	Double bookkeeping
	something special (beyond the obvious)	5.6.2	Subjectivism
3.11.1	Grandiose significance	5.6.3	Magical ideas related to way of experiencing
3.11.2	Metaphysical significance	5.6.4	Physical instantiation
3.11.3	Unknown significance	5.7	Quasi-mystical experiences
4 I		5.7.1	Mystic union with the world
	Iguage Conord speech anomalies (visual and	5.7.2	Mere being
4.1	General speech anomalies (visual and	5.8	Splitting between perception and meaning
111	acoustic)	5.9	Apophanous mood
4.1.1	Focus on appearance or sound of words	5.9.1	Unspecifiable strangeness
4.1.2	Meaning/sound fragmentation Distraction of possibilities	5.9.2	Uncanny particularity
4.1.3 4.1.4		5.9.3 5.10	Self-referentiality All-inclusive self-consciousness
4.1.4	Distraction by individual words Word fragmentation	5.10	
4.1.3		5.11.1	Anomalous meaning
4.2	Difficulty understanding nonverbal communication	5.11.1	Meaning imposed on object Meaning is inherent in object itself
4.3	Words seem absurd/arbitrary	5.11.2	Anomalous classification
4.3	Unconventional semantic determination	5.12	Anomalous sense of causal relationships
4.5	Words or language seem alive	5.13.1	Actions seem controlled by external force
4.6	Disturbances of the abstract and the concrete	5.13.1	Actions seem predetermined
4.6.1	Difficulty with or dislike of abstract or	5.13.2	Actions seem arbitrary or random
7.0.1	general concepts	5.14	Conceptual freedom
4.6.2	Refusal of ineffability	5.15	Experiences of the end of the world
4.6.3	Forgetting the ontological difference	3.13	Experiences of the end of the world
4.7	Difficulty with emotional/expressive aspects	6 Ex	istential reorientation
	of speech (aprosody)	6.1	Disinclination for human society
4.8	Anomalous word choice	6.2	Psychotic guilt
4.8.1	Made-up words (neologisms)	6.3	Willful eccentricity and sense of specialness
4.8.2	Stock words	6.3.1	Antagonomia
4.9	Anomalous use of grammar and discourse	6.3.2	Idionomia
4.10	Anomalous style of speech	6.3.3	Messianic duty
4.10.1	Mannerisms and stilted speech	6.3.4	Solipsistic grandiosity
4.10.2	Diminished control over speech	6.4	"As if" feelings of extraordinary power or
4.10.3	Mutism due to inadequacy of language		insight
4.10.4	Other mutism	6.5	Sense of loss of freedom or uniqueness
4.10.5	Echolalia	6.6	Adherence to abstract, intellectualistic,
4.10.6	Derailment		and/or autonomous rules
		6.7	Adherence to other idiosyncratic rules
	nosphere	6.8	Existential or intellectual change
5.1			Pervasive disbelief
5.1.1	Déjà vu or jamais vu experiences	6.9	
	Déjà vu experiences-the unfamiliar looks	6.10	Feeling of centrality
	Déjà vu experiences-the unfamiliar looks familiar		
5.1.2	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks	6.10	Feeling of centrality
	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar	6.10	Feeling of centrality
5.2	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity	6.10	Feeling of centrality
5.2 5.3	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional	6.10	Feeling of centrality
5.2 5.3 5.4	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling)	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1 5.4.2	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling) Loss of affordances	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1 5.4.2 5.4.3	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling) Loss of affordances Deanimation	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1 5.4.2 5.4.3 5.4.4	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling) Loss of affordances Deanimation Static quality or stillness	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1 5.4.2 5.4.3 5.4.4 5.4.5	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling) Loss of affordances Deanimation Static quality or stillness Falseness	6.10	Feeling of centrality
5.2 5.3 5.4 5.4.1 5.4.2 5.4.3 5.4.4	Déjà vu experiences-the unfamiliar looks familiar Jamais vu experiences-the familiar looks unfamiliar Hyperbolic identity Inanimate things seem alive or intentional Derealization Remoteness or barrier (plate-glass feeling) Loss of affordances Deanimation Static quality or stillness	6.10	Feeling of centrality