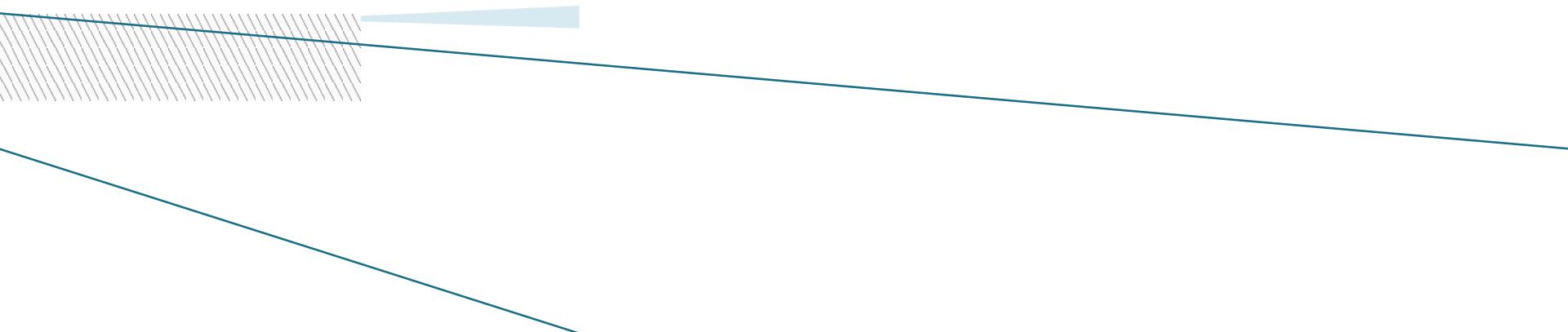


SELF-DISTURBANCE AND SCHIZOPHRENIA:

STRUCTURE, SPECIFICITY, PATHOGENESIS (Current Issues, New Directions)

Louis A. Sass (Rutgers University)



Ipseity disturbance hypothesis

the ipseity-disturbance or self-disorder hypothesis re schizophrenia (Sass & Parnas, 2003; Sass 2010),

a contemporary formulation of something long recognized: the presence (in this illness or syndrome) of difficult-to-define yet distinctive alterations of consciousness or the sense of subjectivity

References re ipseity disturbance hypothesis re schizophrenia

Sass, L.A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, 29, 427-444.

Sass, L.A. (2010). Phenomenology as description and as explanation. In Gallagher, S. & Schmicking, D. (Eds.), *Handbook of phenomenology and the cognitive sciences* (pp. 635-654). Berlin: Springer Verlag.

Ipseity model continued...

E.g., the German psychiatrists Karl Jaspers, Kurt Schneider, and Klaus Conrad:

a “radical qualitative change in the thought processes” that involves diminished first personal givenness and mineness of experience (*Meinhafitigkeit*) (Schneider, 1959, p. 100).

Ipseity defined

Ipseity derives from *ipse*, Latin for “self” or “itself”;

it refers to the most basic sense of selfhood or self-presence... of existing as a vital and self-identical *subject* of experience or *agent* of action (Ricoeur, 1992; Zahavi, 2005).

Also termed core self, minimal self, basic self, prereflective self.

Ipseity defined, continued...

This “central nucleus of the Self” (William James 1981), grounded in lived body (Merleau-Ponty 2012) and implicit temporality (Fuchs 2013)

Not experienced as an entity ... but as unseen point of origin for experience, thought, and action.... As a medium of awareness, source of activity, or general directedness towards the world (Sass 1998). Grounds the first-person givenness or for-me-ness of subjective life.

IPSEITY DISORDER IN SCHIZOPHRENIA

IPSEITY (*ipse* = “self” or “itself”). = experiential sense of being a vital and self-identical *subject* or *first-person perspective*.

IPSEITY-DISTURBANCE has two main aspects:

HYPERREFLEXIVITY, = exaggerated self-consciousness involving self-alienation.

DIMINISHED SELF-AFFECTION, = diminished intensity or vitality of one’s own subjective self-presence.

A third aspect: DISTURBED “HOLD” OR “GRIP”

= loss of salience or stability with which objects stand out in an organized field of awareness.

Antonin Artaud on ipseity

Antonin Artaud (1976)... speaks of consciousness as the “the essential illumination” or “phosphorescent point at which all reality is recovered,” around which everything “clusters”—the “very substance of ... the soul”;

Artaud associated “dispossession [of this] vital substance” with what he experienced as “constant leakage of the normal level of reality” (pp. 82, 44; Sass, 2003).

Artaud continued...

This disturbed hold or grip, typically involving perplexity (*Ratlosigkeit*) or loss of common sense (Störring 1987, Stanghellini 2000), often associated with *hyperconsciousness*.

Artaud (1976) described his “dispossession” and “disorganization” as compatible with a “lucidity” that was “total, keener than ever.”

What declined was Artaud’s engagement and vitality: thus, “emaciation of my self,” “sever[ing of] vital ties,” “excruciating abstinence” (pp. 82-83, 169, 91-94).

Structured vs qualitative (semi-structured)

Structured interview techniques miss subtler aspects of psychopathology perhaps better captured by a phenomenological approach.

SEE Nordgaard, J., Sass, L.A., Parnas, J. (2012). The psychiatric interview: validity, structure, and subjectivity. *European Archives of Psychiatry and Clinical Neuroscience*.

EASE: Examination of Anomalous Self

The EASE (2005): a qualitatively rich, 57-item semi-structured interview. The EASE operationalizes and quantifies the ipseity-disturbance model and is designed to detect sub-psychotic experiences.

Parnas, J., Möller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of anomalous self-experience. *Psychopathology*, 38, 236-258.

EASE: 5 DIMENSIONS

1, cognition & stream of consciousness

2, self-awareness and presence

3, bodily experiences

4, demarcation/transitivism

5, existential reorientation:

EASE items operationalize ipseity disorder

diminished self-affection (e.g., 2.1:Diminished sense of basic self, 2.16:Diminished initiative),

forms of hyperreflexivity
(1.7:Perceptualization of inner speech or thought, 2.6:Hyperreflectivity)

disturbed “hold” or “grip” on the world
(1.10:Inability to discriminate whether an experience is perception/fantasy/memory, 2.12:Loss of common sense/perplexity);

EASE studies

Schiz and schizotypal patients distinguished

- 1, from psychotic bipolar patients (Haug et al 2012, Parnas et al 2003).
- 2, from other heterogeneous psychiatric samples: Parnas et al 2005, Raballo & Parnas 2011, etc.

Also: Hi EASE scores found in 1, at-risk patients, 2, genetic relatives, 3, prodromal individuals: Raballo et al 2011, Nelson et al 2012, Parnas et al 2011

Hyperreflexivity, subtypes

Hyperreflexivity cannot be reduced to an exaggeration of “reflective,” “introspective,” or “top-down” awareness of an essentially intellectual or volitional nature (Sass, Parnas, Zahavi, 2011).

more central (and pathogenetically primary) is “*operative* hyperreflexivity,” which involves processes that are generated automatically and passively experienced.

Hyperreflexivity continued...

This spontaneous “popping-out” of phenomena (e.g., cenesthetic sensations, fragments of inner speech) ...

engages attention, often motivating further, more intense forms of attentive scrutiny, including reflective and defensive forms; these latter can, however, be counterproductive, exacerbating abnormal salience and associated fragmentation (Sass, 2003; 2010).

Ipseity unstable

Ipseity often unstable in schizophrenia, turning “wobbly,” in the words of one patient whose “vantage point,” the “solid center from which one experiences reality,” would, she said, become “fuzzy” at times, “break[ing] up like a bad radio signal” or eroding “like a sand castle ... sliding away in the receding surf” (Saks, 2007).

Depersonalization Disorder

Focused on purest instance of diminished self-affection in psychopathology:
Depersonalization Disorder:

Sass, L.A., Pienkos, E., Nelson, B., & Medford, N. (2013). Anomalous self-experience in depersonalization and schizophrenia: A comparative investigation. *Consciousness and Cognition*, 22: 430-441

Introspectionism

A sister study focuses on an experiential condition that is a pure instance of hyperreflexivity (or, at least, of hyper-reflectivity): the method of self-observation adopted by “introspectionist” psychologists such as E. B. Titchener:

For ex: Titchener (1912). Description vs statement of meaning. *American Journal of Psychology* 23: 165-182.

Sass, L.A., Pienkos, E. & Nelson, B.
(submitted) Introspection and schizophrenia:

**EASE items: 72% of items
in Depers disorder; 77% in**

Not surprising to find:

Introspectionism

diminished self in depersonalization disorder;
alienating self-reflection in Introspectionism

..... But also found:

diminished self in Introspectionism

Alienating self-reflection in Depers disorder

Introspection & Depersonalization: nature of Ipseity alteration

Hyperreflexivity in Introspection = hyper-reflective hyperreflexivity: i.e., volitionally initiated, intentionally driven, quasi-intellectual, etc.

Loss-of-self in Depersonalization = unconsciously goal-directed process, a defense

Findings re Depers, Introsp & Sz

EASE items indicating feelings of passivity and alienation or fading of self and world were prominent in Depersonalization, Introspection as well as in schizophrenia.

By contrast, items suggesting more severe and distinctive *dislocation*, erosion, or dissolution of first-person perspective, such that self and other can seem fused or confused—tended to occur only in schizophrenia.

“Affinities” suggest accurate “insight” into

After all, according to

subject/self?

Kant, the “transcendental ego” (potential equivalent of ipseity?) has no phenomenal manifestation

For Sartre: being-for-itself (the “pour-soi”, rough equivalent of ipseity?) = “nothingness”

And, of course, various Buddhist formulations of no-self doctrine.

Affinities (found in Depers and Introsp as well as in SZ)

1.2 Loss of thought ipseity (one's own thoughts seem foreign)

1.7 Perceptualization of inner speech or thought (sees own thoughts as on screen)

2.1 Diminished sense of basic self (person feels he/she does not exist)

2.3 Psychic depersonalization (mind feels apart from body; person feels unreal, like actor in a play.)

2.5 Derealization (world seems like a postcard)

Affinities continued

3.1 Morphological change (one's head or one's legs feel oddly enlarged)

3.6 Spatiality of bodily experience (odd access to “inner” experiences: person feels bubbles in head, sensations in heart)

4.4 Passivity mood (person feels like automaton, without will of his/her own)

Discrepancies (found in Sz, but *not* in Depers and Introsp)

Introspectors failed to report *Identity confusion* (2.9), and *Bodily disintegration* (3.5), and (?) *Mimetic experience* (3.9) and (??) *Confusion with one's own specular image* (4.2), *Threatening bodily contact* (4.3).

Depersonalized subjects failed to report *Mimetic experience* (3.9), *Confusion with the other* (4.1), *Confusion with one's own specular image* (4.2), and (?) *Threatening bodily contact* (4.3).

Discrepancies (in Sz, but not in Depers and Introsp),

Also, both introspectors and depersonalized subjects failed to report two items suggesting fundamental disturbance of self-identity:

Sense of change in relation to chronological age (2.10) or gender (2.11).

Also, both introspectors and depersonalized subjects failed to clearly report *Discordance between intended expression and the expressed* (EASE 1.16)—an item that may reflect a fundamental disturbance of either language or experience distinctive of

EASE affinities and discrepancies

Affinities: these may reflect the paradoxical nature of *normal* self or subject, at least as analyzed by Kant (whose “transcendental ego” lacks phenomenal manifestation) or Sartre (normal subjectivity as “nothingness”).

Discrepancies: these suggest collapse of transcendental structures of experience—e.g., of very polarity of subject-vs-object/other or of basic temporality of ipseity.

Sz, Mania, Melancholia

published accounts of mania, psychotic depression (melancholia), and schizophrenia examined with respect to the five EASE dimensions:

1, cognition & stream of consciousness, 2, self-awareness and presence, 3, bodily experiences, 4, demarcation/transitivism, and 5, existential reorientation:

Sass, L.A. & Pienkos, E. (in press). Varieties of self experience: A comparative phenomenology of melancholia, mania and schizophrenia, Part I. *Journal of Consciousness*

Sz, Mania, Melancholia

a tripartite/dialectical structure:

A, obvious *differences* between schizophrenia and affective disorders,

B, striking *similarities* between the two conditions, including self anomalies. Finally

C, more subtle but fundamental *distinctions* between schizophrenia and mood disorders.

Sz, Mania, Melancholia, continued...

Although important self-related anomalies do occur in mania and psychotic depression (e.g., “feeling of having no feeling” in melancholia),

more severe dislocations of self or self/world boundaries were *not* observed (e.g., confusion with the other, solipsistic experiences, radically self-alienating mental reflexivity).

Radically self-alienating mental reflexivity

Antonin Artaud describes his own face seeming to float upward and away, like a mask or “lubricating membrane” of infinite complexity—as if this most intimate part of himself were turning into an external object.

Even consciousness itself, in its most subjective dimensions, can be reified and alienated: Artaud describes seeing (or quasi-seeing) what he call “the rootlets which were trembling at the

Rationale for experimental research

Our research on Depersonalization Disorder and Introspection indicates that changes of either self-affection or hyperreflexivity can be associated with *some* of the most characteristic anomalies of schizophrenic experience.

Techniques to alter ipseity

Diminished self-affection: meditative techniques designed to bring on loss-of-self experience;

Hyperreflexivity: introspective processes.

In addition, neuropharmacological manipulations perhaps involving ketamine (i.e., diminish self affection) (Moore et al, 2013) or psilocybin (increase hyperreflexivity) —though these psychological correlates are

Hunt & Chefurka, 1976

Subjects reported sensory hypersensitivity, depersonalization and derealization, perceptual anomalies with “felt portentousness,” feeling watched by a room that seemed somehow alive, aloneness and detachment, and ideas of reference, together with “mental daze” involving “cognitive disorganization” or “blank empty awareness.”

Petitmengin et al 2005.

Sass 1992

Petitmengin et al (2005): a reflective focus on normally pre-reflective levels of awareness is associated with diminished agency and body ownership, permeable ego boundaries, and ineffability.

Sass (1992,1994): the hyperreflexivity and “alienation” (the latter akin to diminished self-affection) of literary and artistic modernism parallel virtually every key symptom of schizophrenia.

Cognitive impairments

enigmatic pattern: an illness strongly *manifested* in cognitive impairments (Heinrichs, 2005) yet that seems *other-than-purely-cognitive* in its essence or core).

SEE Urfer-Parnas, A., Mortensen, E.L., Parnas, J. (2010). Core of schizophrenia: estrangement, dementia, or neurocognitive disorder? *Psychopathology*, 43, 300-311.

References discussed above

Hunt, H.T. & Chefurka, C.M. (1976). A test of the psychedelic model of altered states of consciousness. *Archives of General Psychiatry* 33: 867-876.

Petitmengin, C., Bitbol, M., Nissou, J.M. (2009). Listening from within. *Journal of Consciousness Studies* 16: 252-84.

Sass, L.A. (1992). *Madness and modernism: Insanity in light of modern art, literature, and thought*. New York: Basic Books.

Sass, L.A. (1994). *The paradoxes of delusion: Wittgenstein, Schreber and the schizophrenic*

Fronto/temporal coherence and auditory

During speech increased EEG coherence between frontal and temporal cortex language areas in healthy people ... but diminished in schizophrenia. This neural abnormality may contribute to misattribution of inner thoughts to external voices, resulting in auditory hallucinations (Ford et al, 2002, 2005).

Fronto/temporal coherence and auditory

The reduced connectivity, however, could as well result from an unusual experiential *orientation*: a passive, hyperreflexive stance toward one's own thoughts or speech.

This is perfectly consistent with the finding that healthy people *also* show such decreased fronto-temporal coherence when they are listening to recordings of their own voice.

References: fronto/temporal

Ford, J.M., Gray, M., Faustman, W.O., Heinks, T.H., Mathalon, D.H. (2005). Reduced gamma-band coherence to distorted feedback during speech when what you say is not what you hear. *International Journal of Psychophysiology* 57: 143-150.

Ford, J.M., Mathalon, D.H., Whitfield, S., Faustman, W.O., Roth, W.T. (2002). Reduced communication between frontal and temporal lobes during talking in schizophrenia. *Biological Psychiatry*, 51: 485-92.

Possible pathogenesis

Many of these neurocognitive correlates may be, pathogenetically, downstream from a more core alteration of basic self-experience.

Consider the well-studied phenomena of

- 1, impaired corollary discharge (or efferent feedback), which provides feedback re. one's own activity; and
- 2, salience dysregulation (both discussed in Nelson et al, *Schizophrenia Research*, forthcoming)

Feedback re one's own activity

Conventional interpretation: a disturbance of neural pathways results in impaired *efferent feedback* or *corollary discharge*, leading to diminished experience of agency over one's own bodily action.

Equally possible: a passive and self-contemplative stance (hyperreflexivity) helps to *bring on* the diminished feedback or altered corollary discharge (perhaps ultimately leading to a neurophenomenological disturbance of what has been called

Salience dysregulation

Conventional view: a purely brain-based dysregulation of perceptual salience (grounded in hippocampus etc.) could encourage a passive contemplative stance toward random phenomena that tend (for purely neurobiological reasons) to emerge and seize one's attention.

Equally possible: a certain disengagement (associated with diminished self-affection) might *bring on* the unpredictable and disconcerting saliences (perhaps associated

Self, World, or Presence?

The ipseity-disturbance hypothesis offers a holistic model.

This accords with a classic observation about schizophrenia: “no psychic feature is definitely missing so that the central factor cannot be the disturbance of any one feature” (Jaspers, 1963, p 581).

One might, however question the emphasis on self as opposed to something equally general: world.

Self, World, or Presence? cont...

Husserl re constituting “transcendental ego,”
vs Heidegger re *Dasein*, “Being-in-the-world.”

Might schizophrenia more accurately be described as a *presence*-disturbance, in accord with Merleau-Ponty’s (2012) statement: “subject and object [are] two abstract ‘moments’ of a unique structure, namely, *presence*.”

EAWE: Examination of Anomalous World

EAWE targets five experiential dimensions:

Experience

1. Objects and Space,
2. Events and Time,
3. Persons,
4. Language,
5. Atmosphere (feelings of altered familiarity, meaning, reality).

(EAWE is under development by

Sass, Pieknik, Skodlar, Barnes, Jones.)

EAWE-related studies

Two exploratory studies using published accounts of melancholia, mania, sz:

Sass, L.A. & Pienkos, E. (in press). Space, time, and atmosphere: A comparative phenomenology of melancholia, mania, and schizophrenia, Part II. *Journal of Consciousness Studies*.

Sass, L.A. & Pienkos, E. (under review). Faces of intersubjectivity: Interpersonal experience in melancholia, mania, and schizophrenia.

Conclusion

This paper emphasizes need to examine disturbed ipseity or minimal self-exper. in more detail, in order to clarify:

1, its inherent structure (component aspects: namely, hyperreflexivity and diminished self-affection of various kinds; basal, consequential, and compensatory processes, etc.) and

2, its psychopathological specificity (differential association with Depersonalization, Introspectionism, Melancholia, Mania, Schizophrenia, etc.): and