Pathologies of imagination in schizophrenia spectrum disorders

Patients with the schizophrenia spectrum disorders (SSD) often report intense, vivid imagery, typically designated as obsessions, ‘pseudo-obsessions’, worries, or ruminations, etc. Apparently similar phenomena may occur in other disorders such as OCD, PTSD, anxiety and affective disorders. Psychiatrists are therefore frequently exposed to such type of complaints, yet without possessing an adequate conceptual-descriptive framework at their disposal.

In this editorial, we present a discussion of and a proposal for addressing the subjective structure of imagination in SSD, a proposal that is conceptually coherent with the phenomenology of disordered selfhood in SSD (1, 2) and which at the same time illustrates the phenomenological approach in psychopathology (3). The term ‘imagination’ is here used as being synonymous with ‘imagery’ and ‘phantasy’.

Historical and contemporary concepts

Bleuler defined the schizophrenic autism as a detachment from reality associated with a withdrawal to a rich, ‘inner phantasy life’. However, he did not provide any account of the subjective structure of this enhancement of phantasy life. Imagery seems to be considered by contemporary psychopathology as a subordinate aspect of phenomena like obsessions, ruminations, anxiety, etc. Thus, the DSM-IV defines obsessions as thoughts, images, or urges that are repetitive, unwanted, and which the patient tries to suppress or ignore. The subject is required at some point of time to recognize these phenomena as being ‘excessive or unreasonable’. He must also recognize them as a product of his own mind (this last aspect has been deleted in DSM-5).

Other researchers (4) rightly emphasize that a true obsession is characterized by (i) an immediate urge to resist and suppress the intrusive content, (ii) (partly because) the content is experienced as meaningless or irrelevant and (iii) an immediate awareness of the obsession being an involuntary product of one’s own mind. Thus, in phenomenological terms, both immediate and reflective senses of ‘mineness’ of experience are here intact. Lack of resistance is emphasized in the ICD-10 as a characteristic of the obsessive-like phenomena (pseudo-obsessions) and encountered in the schizotypal disorder. However, the features of insight and resistance may be difficult to assess (5, 6).

Recent studies report a 12–25% prevalence of obsessive phenomena in both chronic and first-episode schizophrenia as well as in populations at extremely high risk for psychosis (7). However, a careful review of all published case histories of obsessions in SSD concluded that these cases invariably fail to meet the criteria of true obsessions (5). Since obsessions (apart from OCD) also may occur in mood and anxiety disorders, such complaints pose an important differential diagnostic challenge.

Jaspers on pseudo-hallucination

Jaspers (8) discusses the notion of pseudo-hallucination as an intermediary phenomenon between perception and image. Like perceptions, pseudo-hallucinations stand clearly delineated and detailed. They are constant and are retained unaltered, while the subject remains essentially passive. This is in contrast to imagery, which is incomplete, with sensory elements that are insufficient and easily dissipate.

What distinguishes pseudo-hallucinations from perceptions and hallucinations is that pseudo-hallucinations appear to ‘the inner eye’ as ‘pictorial/figurative’ (Bildhaftig), that is, with a ‘character of subjectivity’ in the ‘inner subjective space’, in the same way as normal imagery. By contrast, true perceptions involve ‘concrete reality’ (Leibhaftigkeit), appearing in the ‘external, objective space’. Jaspers is mute on the diagnostic significance of pseudo-hallucinations.

The term pseudo-hallucination is rarely used today because it has a variety of definitions, deviating from Jaspers’ original formulation (9). These include brief hallucinations in borderline personality disorder, isolated hallucinations, and ‘internal
hallucinations’ (in the SCAN) or ‘hallucination with insight’. The concept has disintegrated, becoming ambiguous and unsuited for research. Useful but untranslated resources may be found in classic and modern French psychopathology (10, 11).

**Phenomenology of imagination**

Phenomenology describes and provides an account of the structures of subjectivity (consciousness) (3). The focus is not so much on the content of experience (the *what* of experience) but rather on the structure or form of experience (the *how* of experience). Most experiences are characterized by ‘intentionality’, that is, they are directed toward an object or content; they are ‘about something’. Thus, ‘intention’ does not mean here a willing or a motive, but the fact that consciousness is always a consciousness *of something*. The object of intentionality is not necessarily something perceived and ‘real’; it may be intended in different modalities or *acts* of intentionality, for example, as imagined, remembered, thought of, or perceived.

The literature on imagination agrees on a number of points, which we find essential for assessing imagination in a psychiatric context (12–14). Briefly, imaginative experience is characterized by *irreality*, *ipseity* (first-person perspective, ‘mineness’ of experience) and *interiority*.

The act of imagination is inherently experienced with another ‘reality status’ or sense of reality than perception. A perceived object is experienced as present, perhaps graspable (like the computer in front of me) and characterized by a *perceptival* givenness, that is, it never appears in its totality, but always from a specific distance and angle. By contrast, the imagined object is experienced as an absence, as re-presented, and it makes no claims about reality at the intersubjective, social level (12). Presence and absence are prereflectively, automatically given as intrinsic and defining aspects of the experience of perceiving or imagining. We have no need of introspective scrutiny to ‘know’ if we perceive or imagine. This is so because all modes of intentionality (e.g., perceiving, imagining, remembering) are intrinsically self-aware, that is, lived in the first-person perspective (1, 15). When I visually perceive my friend, his ‘reality’ is given in *the* very structure of the perceptual act. In the same way, when I imagine my friend, I ‘know’ automatically that he is absent and merely given to me as an image.

Sartre (13) emphasizes *irreality of imagination*. It means that one is prereflectively aware, *in the very act* of imagining, that it is another kind of *experience than perception*: the imagined object is given as absent. Thus in the case of imagination, the usual distinctions between correct/incorrect, apparent_REAL*_true* or true/false are suspended as not relevant for the imagined experience. This does not imply that the imagined object necessarily is non-existent. Rather, it does not affect my possibility of imagining a pink unicorn or Empire State building that one of them exists and the other does not. The content of the imagination may of course be related to the external/social world, but the imaginative act itself remains essentially different from perceptions. This intrinsic irreality implies that imagination typically does not provoke affects with an intensity generated by perceptions (13, 14).

Furthermore, contrary to a perceptual object, imagined objects are always given as private, inaccessible to others (aka ‘epistemic asymmetry’). Other people may access my imaginations but only through my verbal report. Thus imagination is experienced with an immediate sense of interiority. Importantly, expressions such as ‘interiority’, ‘inner subjective space’ or ‘inner world’ are all metaphors, referring to consciousness that resists a spatial description. This ‘sense of interiority’ fluctuates and correlates inversely with our engagement in the world. It increases in self-conscious, reflective awareness, for example, when lying sleepless in bed and worrying about something. When we are immersed in the world (e.g., playing a game of tennis), our consciousness is, so to say, out on the ball and our adversary, with none or only a minimal sense of interiority. These phenomenal aspects of irreality,ipseity, and interiority articulate the experience as just a ‘phantasy’, no matter how vivid it may be.

**Imagery as relation and intentionality**

In describing the act of imagination, it is important not to confuse the notion of image with an object of ‘inner perception’ or attention. This mistake is coined as an ‘illusion of immanence’: we confuse the notion of mental imagery with perceiving pictures like paintings (12, 13). In this misleading analogy, mental imagery is considered as just such a picture, only located in ‘the container of consciousness’ (theater of consciousness) or ‘inner space’. However, we do not experience an image as a picture or any other kind of spatially extended object. When I imagine my friend Pierre, I do not intend his image as a sort of a mental photograph of Pierre. I intend the entity ‘Pierre’, a particular person. Pierre is given as an irreal (absent) object, and this irreal object is experienced as an image or more precisely as ‘a consciousness of
Pierre-as-imagined’. The point is here that a mental image is more a relational medium to the imagined object than a complete, self-enclosed object in itself like a perceived painting or other picture (13). Moreover, my image of Pierre does not refer to the person Pierre through similarity or likeness. My image of Pierre is not explored or observed like a painting in order to find such a likeness. Rather, we immediately grasp the phantasy content (Pierre) to which the image refers. This means that the imagination has an ‘apodictic’, absolute, ‘all at once’ certainty (I cannot be mistaken in imagining my friend Pierre) (14).

Pathology of imagination in SSD: Perceptualization

We will now present a case history, which illustrates anomalies of imagination in the SSD. A patient, 23-year-old male, with schizotypal disorder, gave the following report, when asked about vivid fantasies or images:

Sometimes it is like they [inner images] come up in front of me and I kind of see them, almost like sitting in a cinema watching a 3D-movie... like when a projector throws an image on a wall... E.g. I was thinking about the universe and suddenly this image of Mars appeared. I saw a red landscape with mountains in the horizon. The surface was bumpy. I could see the sand and winds whirling it up. It was very detailed. I don’t think anything was missing... Depending on what I wished to look at I could focus on that area and more details would appear. The landscape remained stable, but things would be a bit fussy when I focused somewhere else. ... I could get very close at things, almost like standing there oneself although I knew for sure deep down that I did not do that... The horizon, particularly the huge mountain ridge, was very fascinating. It was sort of overwhelming, you know like “wow”. But I knew all the time that it really wasn’t there.

The patient may be absorbed in such a fantasy for 10–15 min at a time and the same scene may reoccur many times. It stops, if he is interrupted by something or someone ‘from outside’ or if he chooses to terminate his experience by redirecting his attention to something else. Most often, his vivid imaginations appear spontaneously but sometimes he can induce its ‘popping up’; for example, by thinking intensely ‘about the universe’. He had other experiences with a similar structure for as long as he can remember.

The imagery in this case displays the features of spatio-temporal constancy, delineation, and fresh sensory elements, noted by Jaspers as features that pseudo-hallucinations share with perception. However, we believe that these aspects are not just an expression of some hypothetical construct of ‘vividness’, but rather indicate a more specific structural pathology of imagination.

The described images fail to function as a medium of intentionality, like a thought, intending its objects as perceptually absent. Rather, the images appear to be experienced as complete objects and hence are liable to inspection. This process can be designated as a perceptualization of the image because the experience acquires certain quasi-perceptual qualities. These include explorability of the image, constancy, spatialization, autonomy of the image, and a sense of experiential distance between the subject and his image.

In our example, spatialization is not only conveyed by metaphors such as ‘a 3D-movie’. The image is described as a fixed, quasi-spatial structure, making it possible to describe its details, contours, positions, and relations. This is inseparable from the experience of spatial and temporal constancy, which is here radically different from the normally fluid, dissipating, and unstable nature of imagery. The patient can focus at the lower left part of the image, shift his attention to another part, and return to the previous one. There is here a similarity with an exploration of a perceived object, say, a house or a painting. In the latter cases, we explore external, stable objects, focus on alternating details, discover new features, judge quality, etc. Explorability is an intrinsic aspect of a perceptual act. The perceived object is always experienced partially, aspectually, from a certain spatio-temporal perspective, and it ‘invites’ to further possible explorations. This aspectuality is absent in imagery. Thus, the quality of phantasy-image normally has an ‘essential poverty’ (13): images are unstable, vague, have few details and few inner relations. Similarly, imagined ‘time’ and ‘space’ are also vague and unstable. It is typically impossible to count the columns when imagining the pantheon in Paris.

Explorability presupposes spatial extension and spatio-temporal constancy. Perceptualization also implies a sense of experiential distance between the subject and his image. The patient is in a position of inspecting his mental content from afar; he becomes to some extent a spectator of his own inner life. Normally, there is no such sense of distance between the subject and her mental imagery as an intentional medium. Rather the subject coincides or is intertwined with her imagery – her consciousness ‘is’ her imagery. However, patients may speak of ‘seeing images on an inner screen’ or of the image being ‘projected’ or ‘seeing movies behind my eyes’.
The autonomy of the image implies that the imagination acquires its own flow, seemingly independent from the will of the subject. Jaspers speaks here about passivity and receptivity of pseudo-hallucination. Yet, our patient described different techniques to instigate such experiences. The important point is, however, that as the imagination undergoes ‘perceptualization’ (it pops up), it somehow continues as if on its own, seemingly without any activity on the part of the patient.

The notions of spatialization, constancy, explorability, autonomy, and sense of experiential distance are all essentially intertwined aspects of an alteration of the structure of experience. They are not discrete features but inseparable aspect of perceptualization/spatialization of imagery, expressive of a disturbed structure of subjectivity and first-person perspective. We can say that the patient lives in an ‘illusion of immanence’: he seems to ‘see’ spatially extended, stable pictures in a consciousness that acquired a container- or ‘theater-like’ quality and with an experiential distance between his sense of being a subject (the self) and the content of his imagination.

A similar process seems to operate in ‘audible thoughts’ (Gedankenlautwerden). The patient attends or listens to his own thoughts as linguistic signs in order to grasp what he is thinking. Normally, there is no knowledge relation here at all: we coincide with or saturate our thoughts – we ‘are’ our thoughts (1).

Erosion of irreality

In our patient, the sense of irreality and privacy of imagination were intact. The imagined content did not motivate an emotional reaction corresponding to a potential perceptual experience. The experience takes place in a different dimension of reality than the one, which is socially shared. The patient is able to terminate the experience. The irreality and interiority make it meaningful to call the patient’s experience ‘phantasy’ in spite of its perceptualized character.

However, other patients may describe that the sense of irreality may partly erode and become insecure. A young woman with schizophrenia reported ‘seeing a movie inside her head’ of a planned visit to the cinema. She clearly described the characteristics of spatialization, explorability, autonomy, etc. Later that day, she decided not to go to the cinema after all because the phantasy had left an unpleasant feeling that it probably would not turn out nicely. Although, she knew ‘deep down’ that it was all just a phantasy, ‘it felt like being there [in the cinema] in person’. She had to remind herself deliberately that it was a phantasy. In this case, the prereflective self-awareness of the intentional act (1, 15) is failing, demanding an additional deployment of reflection to determine whether the experience was indeed an instance of phantasy.

Another patient, a 59-year-old male with schizotypal disorder, described recurrent, involuntarily popping up, ‘very vivid, inner visions’, in which he kicked the head of an unknown man lying defenseless on the ground, until the head was severed from the body. He felt angry during and shameful after the experience. He became ‘carried away’ by the experience with no urge to resist it. During his ‘vision’ and seconds thereafter, it seemed as if ‘these events were really happening’. Shortly after, however, he realized that it was just an absurd phantasy. In both cases, there seems to be a clear deficiency of the sense of irreality.

Implications

The anomalies of imagination in SSD reflect changes in the structures of consciousness. The normally fluid, unstable image becomes transformed into a perception-like, complete object, characterized by spatial extension, constancy, autonomy, explorability, and a sense of experiential distance between the subject and her imagery. Such experiences may be accompanied by an insecure sense of irreality, placing them closely to the phenomena of psychosis (15). Obviously, anomalies of imagination should play an important role in early differential diagnosis.

Our account illustrates a phenomenological approach for obtaining a refined and faithful grasp of altered structures of experience (16, 17). Such approach, if implemented in systematic empirical research (18), may contribute to a resolution of divisive issues in psychiatric description and classification and help protecting the status of clinical psychiatry as a scholarly, medical-academic discipline (19).

A. Rosén Rasmussen1 and J. Parnas1,2

1Psychiatric Center Hvidovre, University of Copenhagen, Broendby, Denmark,
2Psychiatric Center Hvidovre & Center for Subjectivity Research, University of Copenhagen, Copenhagen S, Denmark
E-mail: Arr@dadlnet.dk

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