KU Leuven
Groep Biomedische Wetenschappen
Faculteit Geneeskunde
Departement Neurowetenschappen

The Phenomenology of Psychosis

A qualitative study investigating the lived experience of psychosis.

Rob SIPS

Jury:

Promotor:
Prof. dr. Inez Myin-Germeys
Co-promotors:
dr. Zuzana Kasanova
Prof. dr. Zeno Van Duppen

Chair public defense:
Prof. dr. Lieven Dupont

Internal jury members:
Prof. dr. Joris Vandenberghe
Prof. dr. Erik Thys
External jury members
Prof. dr. Stijn Vanheule
Prof. dr. Louis A. Sass

proefschrift voorgedragen tot het behalen van de graad van Doctor in de Biomedische wetenschappen

Antwerpen, August 19th 2022

Table of Contents

Foreword

List of abbreviations

Chapter 1: General introduction*:* situating the thesis subject................................7

1.1 Psychosis..8
1.2 Multiple conceptualisations in research and practice..8
1.3 Key concepts in psychosis research and ongoing debates..9
1.4 Classification, diagnosis and patient involvement...10
1.5 Researching psychosis from lived experience...13
1.6 Psychosis as a state of Aberrant Salience and anecdotal first-person descriptions...15
1.7 Phenomenology of psychosis: A double understanding of phenomenology.............18
1.8 The Social and Intersubjective Dimension of Psychosis from a first-person perspective...20
1.9 Informing quantitative research methods: focus groups on the Experience Sampling Method...21

Chapter 2: Aims, methods and general description of the study.........................22

2.1 Specific aims of the project...23
2.2 Methodology and Techniques...23
2.3 Recruitment..23
2.4 Interviews and focus groups...24
2.5 Coding and analysis...25
2.6 Constructing ESM items...25
2.7 Collaboration...26

Chapter 3: Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences..............27

3.1 Psychosis from a first-person perspective
3.2 Loosing grip on perspectives
3.2.1 From a cognitive perspective
3.2.2 From a perceptual perspective
3.3 The Aha-Experience
3.4 The Anti-Aha-Experience
3.5 Aftermath and recovery
3.6 Funding
3.7 Acknowledgment
3.8 References

Chapter 4: Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences: A Qualitative Study……………………………………………………………………………………34

Abstract

Introduction

Methods

Participants

Procedures

Qualitative analyses

Results

Descriptive

Aha-Experiences

Sudden and abrupt insight experiences

Associations and connections

Dialectic of aha- and anti-aha-experiences: shifting from insight to shock

Anti-Aha-Experiences

Fear of possibility and realisation

Seeing the past in a new light

Identity and self-awareness

Discussion

Clinical implications

Limitations

Conclusions

Disclosure statement

Funding

References

Chapter 5: Understanding the blind spots of psychosis: A Wittgensteinian and first-person approach……………………………………………………………………………51

Abstract

Introduction: The Incomprehensibility of Psychosis

A Wittgensteinian Approach

First-Person Perspective on Psychosis

The Dialectic of Aha and Anti-Aha Experiences

Blind Spots

Conclusion: Recovery and Covering the Blind Spots

References

Chapter 6: Psychosis and intersubjectivity: Alterations in social relations throughout psychotic crises…………………………………………………………………68

Introduction

Psychosis as a disorder of intersubjectivity
Pre-psychotic disconnection and alienation (1): Minkowski's *trouble générateur*
Pre-psychotic disconnection and alienation (2): Blankenburg's loss of "natural self-evidence"
"Loss of vital contact" as intersubjective process in an existential context
Breakdown of atmosphere of trust
CASE DESCIPTIONS
(1) Preceding psychosis: Patti
Social isolation, cut off from ambient becoming
Sense of self, common sense and vital contact with reality
Patti: summary and reflection
(2) Psychosis as a breakdown of intersubjective reality: Robert
Robert: summary and reflection
(3) Intersubjectivity and recovery, an important role for the other: Ellen
Conclusion
References

Chapter 7: Conclusions and suggestions for future research..............................84
7.1 Overview of main findings..85
7.2 Overarching discussion point: *Insight experiences Beyond Aberrant Salience*.....87
7.3 Strengths and limitations...88
7.4 Suggestions for future research...90
7.4.1 Implicit bias, pre-judgment, stress reactivity and development...........90
7.4.2 Intersubjectivity, psychotic reactivity and commentary voices............91
7.4.3 Psychosis as existential detemporalisation...92
7.4.4 Aha- and anti-aha-experiences: formation, sustaining and altering of belief systems and worldpictures...93
7.5 Clinical implications...93
7.6 Summary and general conclusion..94

References chapter 1, 2 & 7...96

Acknowledgments, Personal Contribution and Conflict of Interest Statement.100

Foreword

This thesis is the result of more than 6 years – sometimes more (or too) intense study and work. It has also been a period that has caused me great pain, great joy, funny jokes, heated arguments, disordered ipseity periods, broken or severed ribs (no scans, no certainty, but it hurt like hell), a marriage, buying our first house, learning to climb in-door, on rocks, first alpine climbs, more ipseity disorders, a year of working in social housing, seeing astonishing good things happen in causes I always felt were lost, a covid pandemic, a new war in Ukraine, and so on, I have gained a second godchild, and so on… and so on… and so on. Understanding psychosis, and particularly showing what it is and is not has been a strong motivator in continuing this work. To paraphrase Kierkegaard, it is a wholly different thing to write something and be mistaken (about some things) then to not write it at all. In this sense, this thesis undoubtedly contains mistakes but hopefully also contributes to a growing field of research that is opening up whole new ways of understanding psychosis, with the potential of informing clinical practice in new ways.

Abbreviations

CASH	The Comprehensive Assessment of Symptoms and History
CCP	Center for Contextual Psychiatry
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, fifth edition
EASE	Examination of Anomalous Self Experience
EAWE	Examination of Anomalous World Experience
ESM	Experience Sampling Method
GAF	Global Assessment of Functioning
IPA	Interpretative Phenomenological Analysis
SMEC	Social and Societal Ethics Committee Leuven
RDoC	Research Domain Criteria

Chapter 1: General introduction

1.1 Psychosis

Psychotic disorder is generally characterized by hallucinations, delusions, and a loss of contact with reality. Other symptoms associated with the disorder are unusual or bizarre behavior, thought disorder, difficulties with social interaction, and impairments in functioning (American Psychiatric Association, 2013). The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) conceptualizes hallucinations, delusions, positive thought disorder and bizarre behavior as positive symptoms, as they are a considered a surplus on normal behavior. Affective flattening or bluntening, alogia, avolition-apathy, asociality and inattention, are grouped as negative symptoms, referring to an absence or deficit with regard to normal behavior and functioning.

In DSM-5, psychotic disorders are part of a broader categorical division of schizophrenia-spectrum disorders with much overlap in symptoms, including schizophrenia, schizophreniform disorder, schizoaffective disorder, delusional disorder, brief psychotic disorder, substance/medication-induced psychotic disorder, schizotypal (personality) disorder, psychotic disorder due to another medical condition, catatonia, other specified and unspecified schizophrenia spectrum and other psychotic disorders (American Psychiatric Association, 2013). Of these categories, psychotic disorders receive the most attention in both the research and literature. This is likely due to the fact that they are more prevalent among the general population than the schizophrenia categories (Badcock, J. C. & Paulik , G., (eds.) 2020). Although results vary across different studies, the lifetime prevalence of psychotic disorders in the general population has been estimated to range from 0,9 % to above 3 %, of which the diagnosis of schizophrenia is reported to represent less than a third (Taminanga et al., (eds.) 2020; Badcock, J.C. & Paulik (eds.), 2020; Perälä et al., 2007).

A psychotic state, mainly referring to positive symptoms, is considered the main symptom of psychotic disorders. Yet, psychosis actually occurs in a range of other disorders: in mood disorders, substance related disorders, posttraumatic stress disorder, borderline personality disorder and neurocognitive disorders – making it more of a transdiagnostic phenomenon (American Psychiatric Association, 2013). Furthermore, experiences of psychosis do not only occur in individuals with a psychiatric diagnosis. Psychosis has been described as a continuum ranging from psychotic experiences that occur in the general population to full-blown psychotic disorders. The prevalence of psychotic-like experiences, and subtle subclinical symptoms, in the general population has been reported to range somewhere between 3 % and 10 % of the general population (Mcgrath et al., 2015; van Os et al., 2009).

1.2 Multiple conceptualisations in research and practice

Multiple conceptualisations of psychosis have been developed, both in research and in practice. A short overview hereof is relevant to illustrate that despite the more than 100 years of research on psychosis, no scientific consensus on either the definition or the explanatory frameworks of psychosis has been achieved. Different lines of research have considerable overlap but provide different levels of interpretation, e.g., neurobiological, cognitive, phenomenological and socio-

developmental accounts (Humpston & Jackson, 2020). In what follows, these lines of research are briefly described so that the subject of the thesis can be better situated within the field.

Neurobiological models look for underlying mechanisms of psychotic disorders using measures of the brain's structure and function, while in general recognizing that the emergence of psychotic symptoms implicates an interplay between genetic vulnerabilities and exposure to stressors in the environment, or of psychosocial nature (Howes et al., 2017). The most influential neurobiological model of psychosis, which I will discuss in more detail later, is that of the aberrant salience model, that ascribes a central role to the dopamine system (Kapur, 2003).

A second line of conceptualization in research and clinical practice can be grouped under cognitive approaches to psychosis. In these models, appraisals of anomalous thoughts and experiences play a critical role in the transition to overt psychotic symptoms. Recent cognitive approaches underscore that psychosis should be considered as a continuum, whereby symptoms are seen both in patients as in non-clinical populations. Hereby, the experience of hallucinations or delusions is argued not to be necessarily associated with the presence of a disorder (van Os et al., 2009). Cognitive approaches provide psychological descriptions of subjective experiences and often attempt to bridge neurobiological underpinnings and phenomenological experience (Humpston & Jackson, 2020).

A third view is that of the socio-developmental perspective, in which the emphasis is put on early life events and the social environment in relation to personal psychological development. This view also often attempts to link development with neurobiology and cognitive approaches, whereby adverse life events are seen as triggers for the formation of aberrant cognitive appraisals and unhealthy coping mechanisms (Humpston & Jackson, 2020; Reininghaus et al., 2016).

Finally, in phenomenological approaches, psychosis is considered to be the consequence of a basic disturbance of a minimal or basic self. The self-disturbance (or ipseity disorder) model emphasizes qualitative changes in lived experience as a whole or a total transformation in ontological experience. Phenomenological approaches describe altered modalities of world-oriented and self-oriented experience which they argue to be the basis for delusions. Phenomenological psychiatry focusses on the descriptions of experiential phenomena, like experiences of derealization, the so-called delusional mood or phenomena like delusional double bookkeeping (Humpston & Jackson, 2020).

1.3 Key concepts in psychosis research and ongoing debates

In all four accounts on psychosis, delusions and hallucinations have been the crucial phenomena that theories and hypotheses have tried to understand and explain. Both in research and in clinical practice, the concepts of "hallucinations" and "delusions" are used to describe key features of altered experience in psychosis. Although hallucinations and delusions seem to be quite clear, discrete, well-described and homogenous phenomena, there is increasingly ongoing debate as to whether that is truly the case. Furthermore, it is contested that delusions and hallucinations can be clearly differentiated from each other and if theories portraying a linear pathway from hallucinations (as aberrant perceptions) to delusions (as false

beliefs) is indeed a correct portrayal of psychotic experiences. In order to better grasp the relevance of the articles in this thesis, and particularly the focus on insight experiences, a grasp of the debate regarding hallucinations and delusions will be highly relevant.

In the commonly held (or doxastic) view, delusions are considered to be false beliefs held with great certainty despite – and not amendable to change in light of – conflicting evidence (American Psychiatric Association, 2013; Feyaerts et al., 2021). Many current explanatory models operationalize delusions as the result of cognitive appraisals of anomalous experiences that result in delusional beliefs (Feyaerts et al., 2021). In their recent review, Feyaerts et al. have argued that this operationalization needs an update. Delusions, they argue, should be understood primarily as resulting from a qualitative shift or total transformation of the experience of reality, instead of resulting from specific misperceptions in everyday life that lead to cognitive appraisals (Feyaerts et al., 2021). Delusions are argued to be the result of a global ontological transformation that shifts reality experience in its entirety. This conceptualization is argued to account better for the heterogeneity and bizarre nature of delusional thought and allows for the integration of other core symptoms of psychosis, as for instance self-disturbances, eschatological beliefs, grandiose-ontological preoccupations, or the content of bizarre beliefs (Feyaerts et al., 2021).

The APA defines hallucinations as perception-like experiences that occur without an external stimulus being present. These experiences can be present in different sensory modalities and are experienced as clear, vivid and have the same sense of impact and force as normal perceptions (APA, 2013). According to DMS-V, auditory hallucinations are the most common in the schizophrenia spectrum disorders. Most often, auditory hallucinations present themselves in the form of voices that are perceived as distinct from a person's own thoughts and lacking a sense of agency or ownership (APA, 2013; Pienkos et al., 2019). In recent work, hallucinations have been described to be a process that may be continuous with non-hallucinatory experiences like thought insertion, out-of-body experiences, dissociation, and alterations in perception (Pienkos et al., 2019). From their review of the literature, Pienkos et al. (2019) have concluded that when grouping heterogenous experiences under the single operationalizable definition of hallucinations, it is likely that meaningful differences in etiology and phenomenology (or experiential aspects) have been ignored. Instead, multiple and differing processes on different levels, like genetic, neurocognitive, subjective and social processes may underlie what has traditionally been grouped under the definition of hallucinations (Pienkos et al., 2019).

Pienkos et al. (2019) claim that it is highly unlikely that hallucinations or similar experiential alterations connected to psychosis are experienced as so called discrete or static phenomena (Pienkos et al., 2019). Furthermore, they concluded it to be unlikely that there is one core process or causal factor to which the development of hallucinations can be contributed (Pienkos et al., 2019). Instead, the authors have suggested "a complex interplay between genetics, neurocognitive processes, subjective experiences, cognitive styles or patterns of interpretation, and cultural and social environments (…) likely to interact in complex ways", different pathways leading to hallucinations (Pienkos et al., 2019). What is grouped under the concept of hallucinations, then, is considered to be a broad range of experiential alterations.

They may occur in multiple perceptual modalities and it is furthermore plausible that they are continuous with non-hallucinatory experiences like thought insertion, out-of-body experiences, dissociation and alterations in perception (Pienkos et al., 2019). While traditional approaches have placed the emphasis on the sensory qualities, their sense of realness and their distinctiveness from verbal thought and mental imagery, the importance of this demarcation is criticized. Findings that report on a range of experiential transformations, as changes in sense of agency or ownership of experience, separation from self-experience, anomalous awareness and others have put in question the view that hallucinations are a static or discrete phenomenon.

As this short overview of recent debates on the key concepts of "hallucinations" and "delusions" shows, a consensus on what psychosis is remains lacking. A question that arises here is what would be needed to reach a meaningful consensus on psychosis in research. In other words, if the generally accepted definitions of psychosis, and of hallucinations and delusions as core symptoms, do not properly capture or perhaps even misrepresent a process, how can we proceed in research and clinical practice?

1.4 Lived experience: lacking in research

One approach that so far has mainly been lacking in research on psychosis, is the use of a first-person perspective. First-person descriptions can potentially shed light on neurological mechanisms, cognitive strategies, socio-developmental aspects, and the relation with the subjective and intersubjective atmosphere, through valuable case descriptions or detailed experiential descriptions that can enrich phenomenological hypotheses. First-person descriptions have in research practice, however, been received with suspicion, or lacking authority on its "objectivity", as an empirical concept, in contrast to "subjectivity", denoting fact vs opinion. Examples can illustrate and bring to light many aspects of the use and value of a first-person perspective.

> "… now, here it was, in writing: The Diagnosis. What did it mean? Schizophrenia is a brain disease which entails a profound loss of connection to reality. It is often accompanied with delusions, which are fixed yet false beliefs – such as you have killed thousands of people – and hallucinations, which are false sensory perceptions – such as you have just seen a man with a knife. Often speech and reason can become disorganized to the point of incoherence. The prognosis: I would largely lose the capacity to care for myself. I wasn't expected to have a career, or even a job that might bring in a paycheck. I wouldn't be able to form attachments, or keep friendships, or find someone to love me, or have a family of my own – in short, I'd never have *a life."* (Saks, 2007)

> "I'd always been optimistic that when and if the mystery of me was solved, it could be fixed; now I was being told that whatever had gone wrong inside my head was permanent and, from all indications, unfixable. Repeatedly, I ran up against words like "debilitating," "baffling," "chronic," "catastrophic," "devastating," and "loss." For the rest of my life. *The rest of my life*. It felt more like a death sentence than a medical diagnosis." (Saks, 2007)

The quotes above come from Elyn Saks (220)' famous memoir "The Center Cannot Hold: My Journey Through Madness" (Saks, 2007), in which she describes her experiences of psychosis and life with the diagnosis of schizophrenia. Saks describes how she was told to suffer from a permanent "debilitating" and unfixable illness in her brain, from which she would suffer for the rest of her life. Apart from antipsychotic medication and its often severe side effects, there was little encouraging medical news on treatment for schizophrenia. Furthermore, medication was already not guaranteed to work for everyone to prevent future psychotic experiences. More than undoubtedly many others, Saks was lucky to have a supportive network, the capabilities to fight prejudice, and the ability to see herself as a law student more so than a patient with a debilitating disorder. And more than others, as a prominent figure her voice has been heard. The point here is that the scientific conceptualization of psychosis and diagnostic practice, and of key concepts like hallucinations and delusions, has effectively had harmful and damaging consequences, and that individuals voicing those concerns, from their own experience, have often been neglected or disqualified as unscientific. Even though the zeitgeist is changing, at the time of my own first psychosis and first admission to psychiatry in 2009, this prognosis was no different. The same terms, of "illness", "debilitating", "chronic" and the perspective of lifelong medication was the information I was given in the hospital and corresponded to what I found on the Internet. The information given both in the hospital as found on the Internet felt, as Saks describes, to offer grim future prospects and a life of "learning to live with" an "illness" of the brain.

From a reductionist perspective of psychosis as a disorder of the brain, the subjective is at best epiphenomenal – it offers us descriptions of "underlying" brain processes or at worst it is unnecessary to understand the phenomenon of subjectivity. There is, from a reductive materialistic perspective, no need to listen to the experiences of individuals with psychosis or for instance to read more of Saks' book. As websites or movements like Psychosenet.be and TeGek!? and recent publications with co-participation of researchers and individuals with lived experience (Fusar-poli et al., 2022) illustrate, times are however changing and progress is being made.

The view that psychosis, and particularly schizophrenia, is a chronic debilitating disorder of the brain has however framed research endeavors for over decades, without offering a satisfying description or explanation of psychotic experiences and with highly narrow and limited treatment options (Van Os, 2016). The mechanisms and phenomenology of psychosis remain poorly understood – even though much knowledge has been gained. What is still lacking in the way we assess psychotic experiences and build theories and hypotheses, is input of and participation in research from people who have experienced psychosis. If we want to further verify fundamental questions as e.g., whether the doxastic account of delusions is indeed in need of an update, or if hallucinations are not operationalizable under a single definition, but indeed a heterogenous phenomenon or further explore and examine psychotic experiences we need first-person descriptions and participation (Feyaerts et al., 2021, Pienkos, 2019).

If theories such as the basic self-disturbance theory map better onto the broad variety of experiences of psychosis, fundamental concepts and views are in need of an update. We

therefore highly need more first-person descriptions of experiences of psychosis to enhance and broaden our understanding and investigate if theories properly explain and correspond to what patients actually experience. This point of view is being recognized throughout recent novel phenomenological projects like the "Renewing Phenomenological Psychopathology" project initiated by Stanghellini and Broom, and research acknowledging the importance of first person perspective and important new studies incorporating the study of subjective experience on a larger scale. (Sass, 2022; Fusar-Poli et al., 2022). We do still need more development of and involvement in research of the first-person perspective, as it can potentially be sensitive to blind spots in research practices – as the example of Saks and the work of Nev Jones can support (Jones, 2016). Therefore, in this doctoral project we use qualitative methods – in the form of individual interviews and focus groups with individuals with experience with psychosis - to examine and further explore the phenomenology of lived experiences of psychosis.

1.5 Researching psychosis from lived experience

One of the fundamental starting points of this doctoral project is the view that research on psychosis is lacking input from individuals that have experienced psychosis. For that reason, we set up an exploratory qualitative study to let individuals with experience of psychosis describe their experiences in their own way, bracketing pre-defined definitions. Another starting point of this PhD was that I as a researcher have personal experience with psychosis. This offered both advantages and disadvantages. One of the disadvantages was (is) the risk of findings being discarded or considered as biased, one-sided or subjective – in contrast to objective and measured – which is also the risk that study participants face when describing their experiences. On the other hand, if input from those who have experienced psychosis is not suitable to help settle the matter on what psychosis is – and is not – it begs the question who's input or which measurements would be needed to settle the matter.

In recent years the involvement of people with lived experiences, in literature often referred to as "service-users", has seen a marked increase. An increase in the investment of participatory research methods has been reported with qualitative studies reporting on first person perspectives of psychosis (Jones et al., 2020; Jones et al.; 2016, Fusar-Poli et al., 2022). This increasing involvement has convincingly shown that oversimplification and over-generalized assumptions from researchers and clinicians stand in the way of better understanding experiences of psychosis (Jones and Shattell, 2016; Fusar-Poli et al., 2022). In studies researching psychotic disorders, individuals with lived experience or service users have often only been included in the research as study objects from which the research community extracts data, in contrast to subjects that can properly describe their own experiences. Data is gathered through interviews, questionnaires, standardized tests, and fMRI studies. Individuals with lived experience hereby have little say on their own experiences and their input may indeed even seem merely "subjective", with a connotation of un-credible, biased, or only to be interpreted by the experts. This is of course not to say that expertise in psychology, psychiatry or other relevant disciplines should be discarded, but instead that subjective experience should be given a proper place as a valuable and necessary part next to the "professional" experts in

these fields. And, furthermore, "professional" experts can equally be experts "with experience": as psychiatrist, psychologists, clinicians, and so on. While now, as many in the field know, experts tend to hide their experience (with few exceptions) so as not to undermine their own authority or out of fear for the stigma involved in facing the same bias their patients often face. Jones and Shattell articulated very eloquently why research involving individuals with lived experience matters:

> "Our work is not the final word on anything, and it is not meant to be; we nevertheless see ourselves as sounding an alarm and asking – perhaps even demanding – that clinicians, researchers and community members start listening more carefully to what it is that persons labelled with psychosis are 'actually' experiencing, to the impact of these experiences on them – in both deep and superficial ways – and to the importance of a process of personal meaning-making that goes well beyond the conventional ethos of illness self-management. Living life, for all of us, is much more complicated than that, and so is living with psychosis" (Jones and Shattell, 2016).

From their clinical research and experience, Jones and Shatell (2016) have argued that very few people's experiences of psychosis actually map onto conventional understandings of psychopathology. They found that research participants across studies struggle to explain and communicate their experiences. What these individuals felt, so they established, simply did not map onto the available terms and constructs. Once this was acknowledged, the most solid change reported that these individuals could communicate was "a series of fundamental, "invisible" or nonliteral changes in their experience of and interaction with the social and physical world." (Jones & Shattell, 2016). Common among many was a profound change in their perception of things, whereby the fold and feel of things had fundamentally been altered. A quote from their paper, from one of the participants can serve as an example thereof – resonating the earlier discussion surrounding conceptualizations of delusions.

> "One's entire experience", explained one young woman, "in other words [one's experience] of the world and how one is situated in it and of one's self changes. It's like one aspect of [these changes] can maybe get pulled out and described as a 'voice', but [such terms] are just explanations. They're just explanations or a way of articulating to other people this kind of fundamental breakdown in everything" (Jones & Shatell, 2016).

First-person descriptions such as these support the view that, as Feyaerts et al. have argued, the phenomena of hallucinations and of delusions might not be captured as the distinct phenomena they are described as in DSM-5 (Feyaerts et al., 2021). On the contrary, they lean more towards renditions of psychosis that emphasize this fundamental alteration in reality experience and sense of self. Many participants in the study of Jones & Shatell indicated to experience strong fluctuations in their experience of reality and of their beliefs, and described again and again how personal histories – for which there is little room in DSM or Research Domain Criteria (RDoC) – and community life appeared to provide the themes and variations of their hallucinatory experiences. This begs for further exploration of the first-person

perspective, that can give us more insight on both qualitative changes of reality experience, situatedness as on relations between the social and community life. Peer-reviewed journals have, however, offered little space for detailed discussion on such particular findings.

Experiences of psychosis are often seen as mere expressions of an "underlying" alteration or as symptoms. They are targets for therapeutic of pharmacological interventions and deemed meaningless or senseless. Hence, it is deemed unnecessary, or by some even considered dangerous for relapse, to enter in dialogue about those experiences themselves. Many dimensions of these heterogenous, complex, often contextually situated and layered experiences remain thus thoroughly overlooked and under-researched. Oversimplified conceptualizations have, furthermore often undermined the legitimacy of first-person perspectives and kept individuals from finding the much-needed help and understanding. Jones and Shatell describe the following event:

> "One of us, presenting to a large group of persons with primarily psychotic diagnoses in the community a few years ago, was deeply saddened when a woman raised her hand, very hesitantly at first, and asked to confirm if what we were saying was indeed that "voices without literal sound(s) were still legitimate symptoms"; yes, we responded, and then two other women in the room broke down in tears. "I've always been afraid to say this to my doctor," one explained, "because the 'voices' are terrible, but I don't actually 'hear' them in a literal way, and I was worried that he wouldn't think they were real, would just say I was experiencing the same things everyone does." (Jones and Shatell, 2016)

> "Another reported that her therapist had informed her that there was "no such thing" as non-auditory voices and so she simply stopped correcting clinicians who asked if she "heard" things." (Jones and Shatell, 2016)

"Hearing" voices need not be "auditory" as is often assumed and this assumption has led this person not to seek help.

1.6 Psychosis as a state of Aberrant Salience and anecdotal first-person descriptions

As we discussed in 1.2, there are different conceptualizations of psychosis, and often the first - person perspective is lacking. We will now zoom in specifically on the aberrant salience hypothesis of psychosis and discuss how this widely accepted hypothesis appears to be strongly contradicted by many first-person descriptions of psychosis, which indicates that its status as a theory, rather than a hypothesis, requires further investigation.

Discussion of the aberrant salience hypothesis is highly relevant to the topic of this thesis on "the phenomenology of psychosis"(Kapur, 2003). This framework attempts to link neurobiology, phenomenological experience, and pharmacological aspects of what Kapur conceptualizes as "psychosis-in-schizophrenia" into a unitary framework (Kapur, 2003). With phenomenology, Kapur refers to information that is extracted from patients at a "mind" or "behavioral" level, in clinical interactions. He uses the concept of "phenomenology" either to

refer to first-person descriptions of the "mind" level of the experience of psychosis (as opposed to the "brain" level) or uses the concept to refer to the level of description of symptoms or behavior. As we will see further on, what was meant with "phenomenology" is only supported by a very limited input from phenomenological or experiential descriptions. But as will become apparent in this thesis, the interpretation of these experiential descriptions might not be as clear cut as Kapur has proposed.

With the aberrant salience framework, Kapur wanted to provide a heuristic framework that "could provide the basis for uniting the patients experience, the clinical presentation, the neurobiological theories, and the pharmacological interventions." (Kapur, 2003). It is needless to point out that this goal would likewise require substantial and sound evidence from all levels of description and explanation that it attempts to connect. The conceptualization of the main explananda, hallucinations and delusions, would need to correspond and align well with first-person descriptions of lived experience for the theory to be sound.

Aberrant salience is defined as "an aberrant assignment of salience to external objects and internal representations", mediated by a dysregulation of dopamine transmission, that leads to stimulus-independent release of dopamine (Kapur, 2003). Salience in this model refers to the motivational properties of a stimulus: those which attract attention and drive behavior, or as Winton-Brown and Kapur (2020) concisely put it in recent work, salience is "prominence within a context". In lay terms, that which attracts sensory attention in a certain environment is what is salient. The most salient stimulus at a given point in time and place is in this theory determined by an interaction between stimulus-driven processing and internal state and trait factors (Winton-Brown & Kapur, 2020).

Aberrant salience is described as a tendency whereby irrelevant stimuli are attributed motivational salience, thereby attracting attention, and influencing behavior improperly (Kapur, 2003; Roiser et al., 2012). The aberrant salience theory presents aberrant salience as a process occurring during the prodromal phase of psychosis (or the phase preceding frank psychosis), postulating that an exaggerated release of dopamine, independent of, and out of synchrony with a context, leads to an inappropriate salience and motivational significance to external and internal stimuli. From this hypothesis arises the assumption that delusions "are a 'top-down' cognitive explanation that the individual imposes on (these) experiences of aberrant salience in an effort to make sense of them" (Kapur, 2003). Hallucinations, in this view, arise from a conceptual similar and more direct process: the abnormal salience of the internal representations of percepts and memories (Kapur, 2003). Howes and Nour have argued that it is, however, less intuitive how anomalous experiences lead to positive symptoms, suggesting an addition of cognitive approaches is needed (Howes & Nour, 2016). Aberrant salience is thus a grounding concept in present-day research into the mechanisms and phenomenology of psychosis.

As described in the introduction, research has cast doubt on long held assumptions and conceptualizations of delusions and hallucinations. Delusions, Feyaerts et al. (2021) have argued, have been commonly conceived as false beliefs held with great certainty that cannot be corrected (the doxastic view). In the explanatory model of aberrant salience, the doxastic view of delusions is the taken for granted assumption or definition. In his 2003 paper that first

described psychosis as a state of aberrant salience, Kapur defined psychosis as "the experience of delusions (fixed, false beliefs) and hallucinations (aberrant perceptions) and the secondary related behavior." *(Kapur, 2003)*. He described a series of stages that individuals that experience psychosis go through. Delusions are, in the aberrant salience theory, "essentially disorders of inferential logic" that are highly improbable, and hallucinations are "by most accounts (…) exaggerated, amplified, and aberrantly recognized internal percepts".

For Kapur, hallucinations are aberrant perceptions that reflect a direct experience of aberrant salience of internal representations (Kapur, 2003). They are "by most accounts (…) exaggerated, amplified, and aberrantly recognized internal percepts" *(Kapur, 2003)*. This conceptualization can be described as what Pienkos et al. (2019) referred to as a view of hallucinations as a discrete or static phenomenon (Pienkos et al., 2019).

The key concepts in this theory are attention and selection. These notions exemplify the fact that the aberrant salience theory only takes in account the subjective point of view or lived experience as an epiphenomenon of an aberrant process of attention and selection and its neurobiological underpinnings. As mentioned earlier, Kapur's still very influential aberrant salience theory is based on his description of anecdotal patient reports (Kapur, 2003). For Kapur, psychosis is a "neurochemical aberration" that "leads to aberrant assignment of salience to external objects and internal representations". Kapur builds his theory of aberrant salience within the framework of incentive salience reward in which dopamine is conceptualized as a signal of incentive salience. He argues that problems with reward-processing and anticipation of reward underly the earlier mentioned neurochemical aberration (Kapur, 2003; Winton-Brown and Kapur, 2020).

The reports Kapur used in his original paper, taken from various studies [1] and reproduced below, seem however insufficient to underpin a theory that generalizes from these anecdotal descriptions to an overarching theory of psychosis. For a theory that wants to link phenomenology with biology and pharmacology, the phenomenology or first-person descriptions that are being linked are seriously underrepresented and lacking, highly selective and could hardly pass the basic requirements of data gathering in qualitative research. In retrospect, it is peculiar that one of the most influential theories on psychosis contains only a few anecdotal descriptions, picked out by the author from papers mostly from the 1950s and 1960s. It is furthermore curious that the examples offered far from match his theory in a clear-cut manner, and are interpreted with a great sense of certainty through the lens of reward processing frameworks. They furthermore by no means cover the wide variety of experiences that are commonly grouped under the phenomena of psychosis. Subjective reports and lived experience almost seemed only relevant and necessary in so far as they would be able to offer us with statements matching an aberrant neurological process.

> "'I developed a greater awareness of…. My senses were sharpened. I became fascinated by the little insignificant things around me'", "Sights and sounds possessed a keenness that he had

[1] From: Bowers MB Jr, Freedman DX, (1996)."Psychedelic" experiences in acute psychoses. **Arch Gen Psychiatry** 1966; 15:240-248 - McDonald N (1960) Living with schizophrenia. **Can Med Assoc J**, 82:218-221 - Bowers, MB Jr (1968) Pathogenesis of acute schizophrenic psychosis: an experimental approach. **Arch Gen Psychiatry**, 19:348-355

> never experienced before", "'It was as if parts of my brain awoke, which had been dormant'" ; "'My senses seemed alive…. Things seemed clearcut, I noticed things I had never noticed before'" ; "'I felt that there was some overwhelming significance in this'" ; "'I felt like I was putting a piece of the puzzle together" (Kapur, 2003).

In recent work from Winton-Brown and Kapur (2020), the authors argued that Kapur's original theory was incomplete because the experiences of so-called aberrant salience are most often not only rewarding, but often perplexing, threatening and frightening. To counter this problem, the authors refer to work that argues that dopaminergic regions are also involved in responses to anticipation of aversion and monetary loss. Hereby, they have suggested the new notion of "aberrant aversive coding" of neutral stimuli to explain how anomalous experiences in early psychosis are filled with a sense of threat and fear from which persecutory delusions follow. Notably, again, in formulating this new concept, the authors did not actually provide any descriptions of individuals with lived experience, let alone detailed accounts that situate and contextualize these descriptions. One can question, then, if the authors are not looking for their keys under the lighting pole – using their predefined framework to shine a light on the experience of psychosis while ignoring what falls outside its scope.

In this part, we zoomed in on the aberrant salience hypothesis for several reasons. First, with the risk of making a "subjective" argument: the theory does not match the descriptions now gathered by researchers listening to what patients are actually describing. As is clear from the earlier introduction: there is no clear consensus about the meaning of the key concepts of hallucinations and delusions and the way they were used by Kapur. Furthermore, as discussed, the original theory lacked actual descriptions to substantiate its explanandum – descriptions of altered experiences: what is it exactly that is different when one experiences psychosis? It might even be considered circular reasoning: to select a small number of experiences that are interpreted in the light of the conclusion.

The first and second paper of this thesis zoom in on one phenomenon in particular, the "insight experience". These use my personal experience with psychosis as a starting point. There we agree with Kapur on the relevance of understanding the phenomenon of insight experiences in psychosis but give a different descriptive account of the process. In the second paper, we zoom in on precisely these types of experiences that we gathered from the interviews and focus groups.

1.7 Phenomenology of psychosis: A double understanding of phenomenology

We now zoom in on the notion of phenomenology to help understand its different meanings and why and how philosophical practice is still relevant for "psychiatric" questions. With a very basic discussion of phenomenology as a philosophical practice, the thesis can be better understood as inexplicitly using this practice. Inexplicitly, because we believe our findings are relevant not just for phenomenological psychiatry and as such, we hope it has something to offer to bridge disciplines that perhaps have been rather unaware of the research that has been done in the field of phenomenological psychiatry.

In psychiatric research, phenomenology is often understood in different, albeit supplementary manners. On the one hand, the term refers to a method of understanding subjective experience, as a form of introspection or interpretative practice, focused on the manner individuals make sense of their experience (Smith, Flowers, & Larkin, 2009). In neurobiological research, phenomenology is in general used to denote experiential descriptions or descriptions of "mind" level that are contrasted to "brain" level descriptions (e.g., Kapur's use of the concept). From a philosophical perspective, phenomenological psychiatry finds its theoretical grounding in the works of continental philosopher Edmund Husserl. There, the focus lies on investigating the structure of experience. Husserl examined relations between consciousness, perception, judgment, memory and so on. This double understanding of the notion of phenomenology is relevant, since as illustrated earlier, some of the most influential hypotheses on psychosis are based on phenomenological (as experiential) observations of patients, albeit often anecdotal descriptions, lacking further in-depth inquiry (Kapur, 2003; Mishara & Fusar-Poli, 2013). To clarify this, we will first briefly explain the different uses of the concept of phenomenology using an example, followed by a description of a phenomenon central both to this thesis and to Kapur's Aberrant Salience hypothesis: the aha-experience.

The different uses of phenomenology become apparent through the example of perceiving a bottle of water. Phenomenology as introspection would take the cognitive aspects or the thoughts and descriptions of the perceiver as the object of study. The point of locus would here be to ask a subject "what" he sees when perceiving a bottle of water, or the "content" of perception. One might expect descriptions as: "it is a large bottle", "the bottle is on the table", "the bottle is blue", "the bottle contains water" or associating thoughts as "I am thirsty", "this bottle reminds me of…"

In philosophical phenomenology, instead of the descriptive subjective content, the question of the "act" of perceiving (or remembering, imagining, believing) comes to the foreground. In other words, the focus shifts to the structure of the perceptual (modal) act itself. For instance, phenomenology would remark that when we perceive a bottle, we only see it from a certain limited and incomplete perspective. While we only see "shadows" or "adumbrations" (*Abschattungen)* of objects – we never see an object from "every" perspective, we generally have the feeling that our perception of objects offers us an objective view on reality – it shows things "as they are". For phenomenology, objects appear to us in relation to our embodied situatedness and the "virtual" possibilities of interactions objects afford us. I can pick up the bottle of water, walk around it, open it and drink from it, I can throw it, or stand on it. The way the bottle appears thus stands in a strong relation to the embodied and sensorial setup of us as human perceivers. This point of view, particularly regarding the embodied situatedness, has strong relations with ecological psychology or enactivism, where person-environment interaction, movement, and embodied situatedness stand central in questions regarding perception. Phenomenological psychiatry argues that through first person descriptions we can not only detect alterations in the structure of experience and the act of perception (and imagination and memory), but likewise bring to light relevant aspects of experience and phenomena relevant for understanding psychopathology.

Authors doing research in phenomenological psychiatry have already convincingly demonstrated that certain aspects of structural qualitative changes in experience, such as alterations in temporal experience and disturbances in the sense of reality, can feasibly be described and made more comprehensible (Fuchs & Van Duppen, 2017; Schwartz, Wiggins, Naudin, & Spitzer, 2005; Feyaerts et al., 2021). Among many other contemporary publications, the "Examination of Anomalous Self-experience" (EASE) (Parnas et al., 2005) and the "Examination of Anomalous World Experience" (EAWE) (Sass et al., 2017) can serve as illustrations for research in phenomenological psychiatry. The EAWE aims to explore in a qualitative manner six key domains of subjectivity: space and objects, time and events, other persons, language, atmosphere, and existential orientation. The EAWE lists 75 specific items and subtypes and domains, accompanied by descriptions of experiences of patients (Parnas et al., 2005). The EASE focusses on experiential or subjective anomalies that are regarded to relate to disorders of a basic or "minimal" self-awareness.

In this thesis, we took a minimal theoretical stance regarding the use and meaning of phenomenology. For the interviews and focus groups, we made use of Interpretative Phenomenological Analysis (IPA) (Smith, Flowers and Larking, 2009). While this method has its roots in phenomenology, its focus is less on the qualitative changes of experience but more on qualitative methodology and interpretative or hermeneutical practice, or the practice of interpreting or of "fusing of horizons" – between "text" and "reader" –, as the philosopher Gadamer put it. In the first two papers of this thesis, we focus specifically on the aha-experience in a descriptive manner (Sips, 2018; Sips et al., 2020). Thereby, we question whether earlier interpretations of the aha-experience in psychosis, like that of Kapur, have properly captured the phenomenon and show that we need subjective descriptions to better understand the role and impact on a person experiencing psychosis. This, so we argue, can help us better understand aspects of the psychotic process, and more importantly, offer us clues on what it actually is that individuals have to recover from after psychosis. With this work, we do not offer a complete or exhaustive account of the phenomenon, but open a perspective for further phenomenological research, in both its meanings of philosophical phenomenology and of "subjective descriptions of mind level".

In the third paper we use the concept of "blind spots" and the philosopher Wittgenstein's concept of language games to approach the phenomenology of psychosis (Wittgenstein, 1958; Van Duppen & Sips, 2018). The question of "veracity" of insight experiences, if insights are "true" or not, is not necessarily relevant to its effect on experience – as will become clear in the first two papers.

1.8 The Social and Intersubjective Dimension of Psychosis from a first-person perspective

A second objective of the study was to examine difficulties that individuals that have experienced psychosis have in social interactions and situations. By conducting focus groups about social interaction, we further explored how individuals experience social interaction, how the experience of psychosis plays a role in changes in social interactions and social relations, and how these are affected. Since some of these factors are reported to predate the

onset of a first episode, in addition we inquired about how individuals experienced social relations and interactions before and leading up to the first psychotic crisis (Henriksen, Kodlar, Sass, & Parnas, 2010; Marder & Galderisi, 2017).

In the fourth paper on Psychosis and intersubjectivity, we use first-person descriptions we gathered in the interviews and focus groups. There we combine conceptualizations from phenomenological psychiatry that describe qualitative changes of experience but argue that they lack a contextualized understanding. In the descriptive part of that paper, we offer an interpretative or hermeneutical take on experiences of psychosis, as described by participants of this qualitative study. These subjective descriptions, so we argue, offer us valuable insight that can possibly bridge gaps between alterations in qualitative experience as described by phenomenological psychiatry and alterations in social, relation and narrative life context. We follow IPA in that an insightful analysis of data from sensitively conducted interviews can make significant contributions to psychology and psychiatry (Smith, Flowers and Larkin, 2009). Van Duppen (2016) argued in his doctoral thesis that phenomenological psychiatry in its conceptualization of psychosis as a disorder of a minimal self, or an ipseity disorder, has neglected intersubjectivity disturbances in schizophrenia. In the last paper on inter-subjectivity, we analyze subjective descriptions of alterations in the inter-subjective atmosphere and argue that these conditions themselves can lead to problems with open subjectivity – and subjectivity itself. Thereby, we argue for the need and relevance of concrete first-person descriptions to help better understand the social intersubjective lifeworld and possible relations between alterations in qualitative experience and changes in a intersubjective atmosphere. Investigation of case descriptions can offer perspectives for further research.

1.9 Informing quantitative research methods: focus groups on the Experience Sampling Method

A third objective of the PhD project was to apply knowledge gathered from the input of individuals with lived experience to improve empirical research into psychosis. A methodology that is often used in the Center for Contextual Psychiatry is the Experience Sampling Method. The Experience Sampling Method is a structured diary technique to investigate how actions, emotions, mood, and symptoms fluctuate together with context, company, activities and events (Myin-Germeys et al., 2009). In ESM research, participants provide self-reports in real-time in the context of everyday life. The questionnaires mainly consist of items rated on a Likert scale ranging from one to seven, although open questions have been used as well. We wanted to put the items used to self-assess psychosis in real life to the test, by gathering feedback from individuals with lived experience in focus groups. Do these items sufficiently relate to how people with lived experience would describe their own experiences of psychosis? Or do we need to significantly improve our ESM self-assessment questionnaire, based on the first-person perspectives? And are there certain aspects and themes that we can investigate better with new psychosis items, or protocols we can improve, based on input of the participants?

Chapter 2: Aims, methods and general description of the study

2.1 Specific aims of the project

We re-examined concepts used to describe psychotic experiences and focused specifically on the concepts of the "aha-experience" – the experience of a sudden insight, and "aberrant salience". Second, we investigated the role of social interaction and changes therein to explore how individuals make sense of their experiences of social interaction and social relations in connection to psychosis. Thirdly, we held focus groups to make the first steps toward improving ESM items that capture psychotic symptoms and social interaction in real life, based on input of individuals with lived experience. Since the aim of this project was in part to further explore these experiences, this will offer possibilities for further research and for the advancement of new hypotheses, instead of answering fully pre-formulated hypotheses. We gathered data that will offer future researchers the chance to pick up where we left of, and furthermore acquire experience necessary to set up, organize and work out qualitative studies.

2.2 Methodology and Techniques

For the conceptual part, we carefully examined and compared different existing theories in order to see how they correspond with descriptions of individuals with lived experience. We focused particularly on the experience of sudden insight often reported in descriptions of psychosis, sometimes described as the aha-experience, and the way a better understanding of these experiences might help us to reframe the psychotic process. We set out an alternative formulation of this experience of insight in relation to the course of psychosis, further elucidated with support of the interview- and focus group material and insights from phenomenological psychiatry.

To investigate social interactions, we organized focus groups in which participants were asked about the topic. Using the data from these focus groups, and parts of interviews revolving around social interactions, we wrote on findings and emerging topics.

To acquire input on the Experience Sampling Method, and on ESM-items, we organized two focus group sessions. First, the Experience Sampling Method was explained to the participants by a research assistant with experience in working with ESM. We then asked participants to think of themes and wordings that might help us better capture their experiences, and to their general attitudes and opinions regarding ESM. Using this material, we will be able to further explore the development of new ESM questions and write about the attitudes, opinions and suggestions on ESM expressed in the focus groups.

For this study, we acquired approval from the following ethical committees: ethical approval of the Social and Societal Ethics Committee (SMEC), reference number G-2017 07 851 and ethical approval from ethical committee of University Psychiatric Center (UPC) KU Leuven, reference number EC2017-356.

2.3 Recruitment

We first contacted several psychiatric institutions at different locations and presented the project at UPC KU Leuven, campus Kortenberg, ZNA Stuivenberg Antwerpen and PC Sint-Hieronymus Sint-Niklaas. Then, we put out a poster at UPC KU Leuven, campus Kortenberg

and presented the research on a regular basis on the morning meetings for patients at the Sint-Joris ward, for young adults with psychosis, at UPC KU Leuven, campus Kortenberg. Several individuals were recruited here. A number of other individuals were recruited via the Monica ward at UPC, a ward for long term care for individuals with difficulties due to psychosis. We also collaborated with a patient organization, Uilenspiegel, that distributed our call for participants via their digital newsletter and social media. Before we included participants in the study, we first set up a screening interview where we explained the purpose of the study and went over the details of the study and the informed consent. After the screening interview, a date was set for the interview, at least a week later.

2.4 Interviews and focus groups

Before starting the interviews, we collected signed IC's and general demographic info. We have in-depth interviewed 21 individuals with lived experience with psychosis, using a semi-structured format. Beforehand, a non-exhaustive list of topics was composed, based on findings from empirical and phenomenological literature, and the lived experience of the researcher. Participants where first asked to sketch the context leading up to the first psychotic episode, and the interview proceeded on from there. Since experiences of psychosis are heterogeneous and vary from one another substantially, we then asked questions about specific salient aspects of these descriptions. While the topic list served as a guide for these follow-up questions, the questions where not limited to these topics since one of the aims of qualitative research is explicitly to surface novel insights, experiences and perspectives. After the interview, we asked a number of questions to ascribe a general score of symptoms and functioning using the GAF and Cash scales (American Psychiatric Association, 2000, 2005).

From this group of 21 individuals, 10 took part in the focus groups. Two separate groups were composed of participants living in the same region and were organized at locations in Antwerp and in Leuven. Both in Leuven and in Antwerp, we had five individuals engaging in the focus groups. Both of these regional groups participated in three sessions each: one on the experience of psychosis, one on social interaction and one on Experience Sampling items. Small groups, between four and eight people, are preferred when participants are asked to share intense experiences about a topic or when participation from each subject is desirable (Bloor, Frankland, Thomas, & Robson, 2001). Focus groups lasted between one and two hours, as recommended for this type of qualitative research (Morgan, 1997).

As the PhD researcher, I acted as a moderator in the focus groups and was assisted by one of the research assistants of CCP, Davinia Verhoeven, who took the role of the facilitator. As the moderator, I led the focus groups, asked questions and made sure everyone got the chance to share his or her thoughts. As moderator, I guided the conversation to remain on topic and asked further questions, eliciting discussions on arising themes of interest. The facilitator had two main responsibilities: On the one hand, the facilitator helped "facilitating" the event, making sure there were drinks, welcoming people, distributing vouchers and making sure the correct forms were filled out. On the other hand, the facilitator observed the group conversation more distant than the moderator, making notes and sometimes feeding the conversation based on these notes. The focus groups started with an opening round, whereby one by one every

participant reflected on an opening question, answering preferably with one sentence – as suggested in a course on focus groups the leading researcher followed at Oxford University. These first answers were written down by the moderator and then used to initiate the conversation, by first selecting one answer and asking the participant to elaborate on her or his answer. Participants were invited to converse with one another as in a "regular" conversation, and to direct conversation at each other. I moderated and guided the conversation further, although not steering it too strongly, while making use of the answers participants gave in the first round.

2.5 Coding and analysis

All interviews and focus groups were recorded digitally and transcribed verbatim following the sessions. They were coded using NVivo 12. Generally, the method of Interpretative Phenomenological Analysis (IPA) (Smith & Osborn, 2008) was followed. IPA is specifically designed to capture the experiences of individuals, as they would describe these in their own words (Reid, Flowers, & Larkin, 2005). In this methodological approach, participants are considered experts on their own experiences, and they can offer researchers an understanding of their thoughts, experiences and feelings by discussing them in detail. IPA asks the researcher in first instance to take the insiders" perspective, which means that the researcher tries to understand descriptions of participants as they understand them themselves from their lived perspective. In a later step, the researcher takes a step back and offers and interpretative account of what experiences meant in the particular context.

As a result of the focus groups and the use of IPA, I came to a number of nodes, which group together similarities in experiences or narratives of participants. These nodes are then further grouped thematically. The nodes and themes should represent commonalities across participants' accounts, while also accommodating views that are not shared by a majority, since unique descriptions might also offer relevant insights. While some of these nodes were based on the topic lists and the literature, many where created bottom-up, based on themes emerging from the transcripts.

The IPA approach was broadened to also highlight alterations in the "form" of experience, in order to categorize descriptions under themes such as for instance "salience" and the aha- and anti-aha-experience. We broadened the scope of this method to offer descriptions of experiences that differ from interpretative phenomenological accounts, since we are also interested in specific phenomena in the experience of psychosis, such as the aha-experience and the prodromal phase.

2.6 Constructing ESM items

Based on the acquired data from the two focus groups on Experience Sampling items, a group of colleagues from the Center of Contextual Psychiatry that have extensive expertise and experience with ESM questionnaires will come together and create a consensus for developing new ESM items. By combining different themes and general input on ESM from the participants, they will have the tools for further research to further explore new items and the ability to base the wording of new items on how patients describe their experiences.

2.7 Collaboration

The researcher presented the project at PC Sint-Hiëroymus Sint-Niklaas, at the psychiatric hospital Stuivenberg, Antwerp and at two psychosis wards at UPC KU Leuven, campus Kortenberg. In UPC KU Leuven, campus Kortenberg for recruitment we collaborated with head psychiatrist prof. dr. Ruud van Winkel at the Monica ward, and the head nurse of the Sint-Joris Ward, Gert Wouters. In addition, we collaborated with the patient organization Uilenspiegel, that distributed our call for participants and our flyer via their newsletter and social media channel. For conducting the interviews and focus groups, I worked with two research assistants and colleagues at the CCP, Silke Apers and Davinia Verhoeven. For the ethical plan and ethics concerning data management, I collaborated with dr. Martien Wampers, data manager at the CCP. For a better understanding of NVivo and writing qualitative papers, I consulted with prof. dr. Kristien Hens, whom has experience with qualitative research methods. The first published paper was a collaboration with my two co-promotors, dr. Zuzana Kasanova and prof. dr. Zeno Van Duppen, and my promotor prof. dr. Inez Germeys. The second published paper was a collaboration with prof. dr. Zeno Van Duppen. Our Third, first author, paper, was a collaboration with prof. dr. Zeno Van Duppen, dr. Zuzana Kassanova, Lena De Turah, dr. Ana Teixeira, prof. dr. Jasper Feyaerts en prof. dr. Inez Myin-Germeys.

2.8 Role of the researcher

I first familiarized myself with the literature on different aspects of qualitative research and theoretical and phenomenological approaches to psychosis. Guided by my promotor and co-promotors, I first worked on a paper combining lived experience and philosophical perspectives. We wrote an application for the ethical committee (SMEC). While the approval of the SMEC protocol was pending, I contacted psychiatric hospitals and began further exploring on how to conduct a qualitative study. For this reason, I followed a course on conducting focus groups in Oxford in May 2017. Recruitment for individual interviews and focus groups was done by myself, supported by two research assistants, Davinia Verhoeven and Silke Apers. Most of the data was transcribed verbatim by the researcher, with exception of a number of interviews transcribed by a master student biomedical sciences, Jade Coudré, the researcher was supervising. After transcriptions, the data was coded and analyzed in a first stage by the researcher. Based on this data, we wrote up papers on the different topics, in collaboration with my promotor and co-promoters. The data from this process will be processed and the results will be published by myself in collaboration with my promotor and co-promotors.

Chapter 3: Psychosis as a Dialectic of Aha- and Anti-Aha Experiences

Published as:

Sips, R. (2018). Psychosis as a Dialectic of Aha- and Anti-Aha Experiences, *Schizophrenia Bulletin*, 45(5), pp. 952-955, https://doi.org/10.1093/schbul/sby072

Psychosis from a first-person perspective

In this article, I offer my first-person perspective on psychosis. To help clarify the devastating impact psychosis can have, I use notes I took during my psychotic episodes and combine them with my training as a philosopher. I describe psychosis as a dialectical process of aha- and anti-aha-experiences that destabilizes and completely undermines a personal framework.

Loosing grip on perspectives

The onset of my first psychotic episode started distinctively with changes in perspectives, gradually undermining my position. At first this started with sudden new perspectives on problems I had been struggling with, later the world appeared in a new manner. Even the places and people most familiar to me did not look the same anymore. Yet, it was not a matter of hallucinations or delusions but implied changes in my lived world as a meaningful whole: the perspective I held on things and people.

The well-known account of the schizophrenic patient Anne, that the German psychiatrist Blankenburg describes, illustrates that losing grip on perspectives is not unique to my own experience with psychosis.

> "I can't find personal rest, as if I had no point of view... I have no firm position faced with the thing... The others see only the right questions... the natural problems... I don't know how to manage with other men and with this flaw ... others, life and so on, it's always like that... in a framework... What I lack, it's according to what we behave ..." (Blankenburg, 1971)

From a cognitive perspective

Arguably, our everyday perspective on the world is not an objective representation of reality, but is on the contrary very selective, subjective and dependent on life experience. The way we interpret the world around us depends on a framework, formed over time. This framework offers a more or less stable and consistent perspective, while giving us the feeling that our perspective is an objective point of view. For instance, how we interpret the behavior of others is dependent on our knowledge of the situation, the behavioral patterns of others, and the connection of these patterns to ourselves in a commonsensical manner. We have different interpretations of the same situation. In a healthy state of mind, we are aware of different modes of interpretation, but we have a sort of core interpretation around which these other possibilities circle, tied up closely to our personal identity. These habitually formed patterns of interpretation put constraints on how we interpret the world and how we interact with others, or in other words, structure our experience, action and interaction in such a way that we do not have to reflect on everything constantly. In a psychotic state, this pre-reflective framework appears to break down and give rise to a multiplication of perspectives. As a result, the own "core" interpretation loses its place as an "objective" ground. In other words, other perspectives invalidate or undermine this former center of interpretation. Important to understand, I believe, is that psychosis affects this pre-reflective framework that makes the world appear as familiar, stable and trusted.

From a perceptual perspective

Looking at things from a new perspective is an important process that accompanies growth, learning and development. What is salient in one's perceptual point of view results largely from life experience. Different (aspects of) objects are salient for different persons. If an architect and a mason look at the same building, they will visually notice other things. An educated musician compared to a layman will not have the same auditory experience when they hear the exact same song. The musician will, for instance, recognize the guitar, the amp, the effects or the type of snare drum. When tasting a good wine, a sommelier will have a different olfactory experience than someone without knowledge and experience of different wines, being able to differentiate more. Salience is thus highly subjective, not a direct correlate of the world, and there is no such thing as "neutral" stimuli. All these different perspectives have similarities, but in a way constitute different worlds. Although one can argue that a more developed view on the world is more "accurate" compared, for example, to the perspective of a child, both perspectives are real and have in this sense an equal sense of realness. In this way, there are different gradations of perceived reality.

During psychosis, I could suddenly notice things that had never grabbed my attention before. I perceived the world anew as if awaking from a dogmatic slumber. In part, this implies a realisation and seeing of complexity in things that we normally take for granted, which makes one literally question everything. It is like an opening up to different perspectives without being able to understand what is going on. It is not purely and inseparably perceptual, but also concerns social and interpersonal elements, like one's sense of identity, how one looks at past and present and how one sees others, social structures and roles. Not only was this sensitivity directed outwards, it also became focused on my experience itself. This process was extremely devastating because it felt as if the way I conceived people, roles, situations, time, my own convictions, identity and so on suddenly seemed enormously insufficient in every possible manner to understand this world before me.

The Aha-Experience

A notion that can help to make sense of the process of losing grip on perspectives is the aha-experience. The aha-experience is often defined as the experience of a sudden insight, a solution to a problem that presents itself, a sudden moment of clarity or a breakthrough. The aha-experience can be both of cognitive and of perceptual nature. One can suddenly interpret or literally "see" a situation in a new light. For instance, one can think of the well-known bistable images that require a perceptual shift to see either a young girl or an old woman, a duck or a rabbit (Wittgenstein, 1953). An example that combines cognitive and perceptive aspects of the aha-experience could be a game of chess, whereby after a moment of insight, the game is "seen" in a new light; the pieces on the board do not move (the "objective" world does not change), and yet the game is seen from a new perspective. In literature, the aha-experience has earlier been connected to psychosis by several authors, most often in relation to the phase of onset or delusional mood (Conrad, 1958; Mishara, 2012).

The notes I took nine years ago during the onset of my first psychosis illustrate this feeling of clarity and sudden insight. I started to take notes because the insights followed one another in an unprecedented manner. I had the feeling that if I would not write down my thoughts, they would be lost in the accelerating stream. These insights or sudden perspective changes in first instance concerned my personal and interpersonal life and did not result from hallucinations. The following quote is an illustration of the feeling of the aha-experience at the onset or "breakthrough":

> "I don't know if I will be able to explain, but I believe to have understood the essence of my existence… The word to which it all seems to come back, and what I believe makes me different from most people, is goal… Many people do not explicitly ask themselves what their existence is about, and why they want to reach certain goals apart from the happiness that is acquired by this, or furthermore, what this happiness is apart from a feeling, something that can't be touched, something that is actually in their brains."

From this point on, it took less than two weeks before I was acutely psychotic and admitted to a psychiatric ward. Further on in these notes, I described the feeling accompanying this onset as finding a key for something that had been locked. Compare the feeling described in the quote below to the aha-experience, that can be like suddenly finding a solution for a problem one has been struggling with.

> "It is a super weird feeling, from one day to the next, even from one moment to the next, it is as if I can think and reason clearly again… It even kind of seems as if I have found a key to something that has been locked for a long time."

A quote from the same notes clearly illustrates the suddenness and the switch in perspectives:

> "It really feels as if I am suddenly capable of putting things in perspective, that the light has suddenly switched on inside of my head and that because of this I am capable of reasoning again".

The Anti-Aha-Experience

To better understand my experience in its entirety, I devised the concept of *anti-aha-experience*. The anti-aha-experience, as I define it, is an experience of a sudden insight that does not fit within one's framework, convictions, or worldview. The anti-aha-experience refers to the same process of insight or shifts in perspectives but has a destabilizing effect that invalidates how one perceived things before. Anti-aha-experiences undermine one's existential position in, and perspective on the world. While the aha-experience connects and reorients, the anti-aha experience shatters into pieces and is literally and figuratively a disorienting experience.

This feeling can be related to everyday experience. Think of a fierce discussing with a friend, a family member or a colleague in which the other strongly opposes your point of view or opinion on a topic. You both defend a conviction with strong confidence and a strong feeling of certainty of one's point of view, or of how one "sees" it. Now imagine the feeling that a sudden

insight clearly disproves your point of view. The conviction you defended strongly and passionately is suddenly proven wrong. The entire framework that comprises this point of view is abruptly contradicted and needs to be reconsidered. What I label as the anti-aha-experience is the feeling that accompanies this process: a sudden realisation that disconfirms how one looked at the world before, without offering new, solid ground.

In psychosis, this process unravels with much larger force. What happens is not just a deconstruction of a conviction or a perspective. This process, in my experiences, was wrecking what I considered to be my "personal worldview". Like a conviction proven wrong, it felt as if evidence kept piling up against my entire view of the world. These insights and changing perspectives undermined or "derealized" (Pienkos, 2015) how I looked at things before. In contrast to the positive feeling that accompanies the aha-experience, the anti-aha-experience is shocking, terrifying, utterly destructive, disorienting, painful and difficult to understand or to explain to others.

The process I try to grasp with the aha- and anti-aha-experiences did not immediately result in delusional ideas, but led to a deconstruction of a personal framework first, only after that serving as a matrix for delusions. These aha-experiences and anti-aha-experiences were not just wrong or delusional, but often showed the world from so many different perspectives that my own position had to be reconsidered over and over.

Where at first this dialectic process of changing perspectives concerned mostly personal and interpersonal matters, this expanded to more fundamental aspects of my existence and being in the world. Consider the quote below, where this expansion is exemplified by a reflection on time.

> "The entire world runs on a time that people have invented. They did this by seeing a certain logic in things… (day, night, morning, evening, midday → half of a day) There is a recurrent logic in the way we reason about time… To really realize what time is, you arrive at the eternal questions, namely why does it become dark and light… In this you can go further again. Why does the sun move in front of the moon… And then (I think) you arrive at gravity… Then you can ask, why is there gravity… and then you can try to explain gravity… like this, you can keep going on until you're not able to grasp things anymore, or someone else sees the logical connections and you are able to understand them. PI in mathematics? How far can one contain PI, or the absolute truth?"

The anti-aha-experiences, mixed in, were like a backlash of this shifting reality and resulted from the impact of seeing these sudden new perspectives. In my notes, I described this process as the feeling of a breaking of a dam, flooding the lands behind and leaving the landscape unrecognizable.

Aftermath and recovery

Especially after my first encounter with psychosis, what I found most devastating was the feeling that I did not comprehend the world, myself or others anymore. It was as if experiencing psychosis completely destroyed the landscape that I once knew. After my first psychotic

episode, I described this feeling as having lost "the right way" of looking at things, of acting and interacting with others. This experience has earlier been described as a "loss of common sense" (Blankenburg, 2001).

While delusions and the consequences thereof are embarrassing and frightening, it is not that aspect of psychosis that is so devastating. It is the complete loss of perspective on the world, and how one looked at things before: oneself, one's friends and family, literally "everything" in the world. As I have tried to show, an important consequence for recovery is that there is not "one fixed reality" or perspective that one can return to after psychosis. Recovery was, for me, less a matter of losing delusional convictions than of actively rebuilding my comprehension of the world and regaining my trust in how I perceive myself and others.

Although I have gone through five psychotic episodes, resulting in two psychiatric admissions, recovery (and growth) was not the result of finding the right medication. For me, neuroleptics were even a hindrance in recovery; something I would not have discovered if I had not been studying and working. They impeded the return of natural fluency in my action, interaction and thinking, and had adverse effects on working, reading and studying. Instead, people close to me patiently took me in tow in the world familiar to them, hereby offering me time and support to recover, rediscover and re-establish my relation to the world I shared with them. At first, I was finding refuge in the world of other people, while the world I knew before had been torn apart. After later episodes, however, recovery was facilitated greatly because the roles, structures and relations I had built were still standing. This enabled me to recover in real-world action and interaction: as a brother, a friend, a colleague, a student, a musician, a runner, and so on.

Recovery, in my experience, implies an active task in which abilities and taking up roles should be stimulated and developed. Much can be achieved by physical, interpersonal and cognitive challenges that appeal to the capacities of individuals and take place in real-world settings. This process does not happen overnight or without stumbling and falling. One needs to accept that the impact will hurt for a while, and just get up again and again, eventually becoming an expert getting-upper.

Funding

This work was supported by the FWO Odysseus grant to Prof. Inez Myin-Germeys (G0F8416N). The author declares that there are no conflicts of interest.

Acknowledgment

I greatly acknowledge Zuzana Kasanova and Zeno Van Duppen for their work, advice and patience, which strongly improved the arguments and focus of this paper. I further express my gratitude to Inez Myin-Germeys for guiding and reviewing the paper and for funding. Lastly, I acknowledge Erik Myin for discussing ideas and providing suggestions.

References

Blankenburg, W. (1971). *Der Verlust Der Natürlichen Selbstverständlichkeit*. Berlin: Springer.

Blankenburg, W. (2001). First Steps Toward a Psychopathology of Common Sense. *Philos Psychiatry, Psychol.*, 8(4), 303-315. doi:10.1353/ppp.2002.0014.

Conrad, K. (1958). *Die Beginnende Schizophrenie. Versuch Einer Gestaltanalyse Des Wahns*. Stuttgart: Thieme.

Mishara, A.L. (2012). The `Unconscious' in Paranoid Delusional Psychosis: Phenomenology, Neuroscience, Psychoanalysis. In: Lohmar D, Brudzinska J, eds. *Founding Psychoanalysis Phenomenologically: Phenomenological Theory of Subjectivity and the Psychoanalytic Experience*. Dordrecht: Springer Netherlands; 169-197. doi:10.1007/978-94-007-1848-7_9.

Pienkos, E. (2015). Intersubjectivity and its role in schizophrenic experience. *Humanist Psychol.,* 43(2), 194-209. doi:10.1080/08873267.2014.990459.

Wittgenstein, L. (1953) *Philosophical Investigations*. Vol 1999/1967. Oxford: Blackwell.

Chapter 4: Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences: A Qualitative Study

Published as:

Sips, R., Van Duppen, Z., Kasanova, Z., De Thura, L., Teixeira, A., Feyaerts, J.& Myin-Germeys, I., (2020), Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences: A Qualitative Study, *Psychosis,* 13(1), pp. 47-57, DOI: https://doi.org/10.1080/17522439.2020.1798492

Abstract

Experiences of sudden and abrupt insight, sometimes termed aha-experiences, are often reported during psychosis. The aha-experience is described as a radical and sudden restructuring, realization or change in understanding. Based on personal experience, we argued that alongside this aha-experience exists the *anti*-aha-experience. The anti-aha-experience refers to an experience of sudden insight that does not fit within one's framework, convictions or worldview and has an undermining effect. We have conceptualized psychosis as a dialectic of aha- and anti-aha-experiences and argue that a dialectic tension between aha- and anti-aha experiences undermines a stable personal perspective. In this study, we set out to investigate whether individuals with lived experience of psychosis do indeed report forms of sudden insight, and particularly if they report aha- and anti-aha experiences, and the dialectic between them. We therefore conducted 21 in-depth interviews and 6 focus groups with individuals with lived experience of psychosis and analyzed the transcripts using Interpretative Phenomenological Analysis (IPA). The findings show that these phenomena are indeed often reported and could play a significant role in psychosis. Integrating these phenomena into our understanding of psychosis could help to better grasp the lived experience of individual patients and additionally inform other forms of research on psychosis.

Introduction

Experiences of psychosis are traditionally conceptualized as false perceptions and false beliefs that fundamentally distort the experience of reality. Hallucinations are described as perception-like experiences that occur in the absence of external stimuli (American Psychiatric Association, 2013), whereas delusions are generally described as fixed false beliefs held with great certainty, despite strong contradictory evidence (American Psychiatric Association, 2013). Phenomenological and qualitative research has, however, shed light on other important aspects of psychosis. One of them is the "insight experience" (Cicero et al., 2010; Conrad, 1958; Kapur, 2003; Sips, 2019). These insight experiences have been described as "a sudden new awareness", "feelings of extraordinary insight", "revelation" or "apophany" (Conrad, 1958; Jaspers, 1997; Kapur, 2003; Mishara, 2012; Parnas et al., 2005). A number of authors have specifically referred to this phenomenon using the concept of the aha-experience (Conrad, 1958; Deikman, 1971; Mishara, 2012; Sips, 2019). Such insight experiences are sometimes claimed to be the consequence of a particular affective tension, emerging in the often perplexing pre-delusional state (often called "delusional mood" or "delusional atmosphere") preceding actual psychotic breakdown (Conrad, 1958; Gozé et al., 2017; Humpston & Broome, 2016; Jaspers, 1997; Kapur, 2003; Mishara, 2012). This pre-delusional state is described as an uncanny experience, where people can experience an unbearable and unknown tension, confusion, or feelings of exaltation (Jaspers, 1997; Ratcliffe, 2017; Sass & Pienkos, 2013). Jaspers already (Jaspers, 1997) reported that "to reach some definite idea at last is like being relieved from some enormous burden." According to Jaspers, real delusions and delusional perceptions result from this pre-delusional state, as people try to make sense of feelings of significance and of an unbearable confusion (Jaspers, 1997).

This view on insight experiences is not restricted to phenomenological psychopathology, however. In his discussion of the different stages of psychosis, Kapur (2003), for example, argued that after a stage of heightened awareness and emotionality, combined with a sense of anxiety and impasse, insight experiences bring forth a sense of relief in the form of a new awareness. This *insight relief* alleviates the unbearable tension. Delusions then crystallize and hallucinations arise.

It remains questionable, however, whether this interpretation properly captures the phenomenology of insight experiences in psychosis. Based on personal experience, Sips (2019) has argued that the insight experience extends *beyond* the aha-experience. In fact, Sips describes a dialectic of aha- and *anti*-aha experiences. The anti-aha-experience constitutes an experience of sudden insight that does not fit within one's framework, convictions, or worldview, and refers to the same process of insight or shifts in perspectives, while having a destabilizing effect that undermines a personal and lived perspective on reality (Sips, 2019). The anti-aha-experience thus expresses a fundamental loss of trust with respect to the continuity of experience, a trust built up through life experience. The effect of the anti-aha-experience is not merely its impact on how one "sees things", but as well on habitual and embodied ways of experiencing, anticipating, acting and interacting that we have incorporated in our most personal convictions, ideas and self-evident behaviors (Van Duppen & Sips, 2018).

The aha- and anti-aha-experiences are considered to be a part of a dialectic process: things first appear in a new light or seemingly become clear in the initial aha-experiences, after which the effect of these insight experiences undermines or negates a familiar and trusted view on oneself, others and the world and fuels anti-aha-experiences (Sips, 2019; Van Duppen & Sips, 2018). This perspective can help to elucidate our understanding of the subjective experience of psychosis and could inspire research and treatment. This paper therefore aims to investigate whether and how insight experiences, in particular aha experiences, anti-aha-experiences and the dialectic between them, play a role in psychosis as reflected in reports of people with actual experience of psychosis. To focus on the actual experience of individuals with psychosis, a qualitative methodology is best suited. We, therefore, conducted interviews and focus groups with individuals with experience of psychosis, aimed at acquiring their first-person accounts.

To clarify the research questions of this paper, we defined the dialectic of aha- and anti-aha-experiences as a process of recurring insight experiences that (1) abruptly pierce through an everyday sense of understanding of oneself, others and reality – through perception and beliefs (aha), (2) leaves a visible and lasting impact on such forms of understanding (through a dialectic process), and (3) can have strong ungrounding, derealizing and undermining effect, affecting how people perceive the relation between past, present and future (anti-aha).

Methods

Participants

We recruited a purposive sample of 21 individuals with experience of psychosis. For inclusion, participants were required to be at least 18 years old, having undergone at least one psychotic episode and having received a diagnosis in the schizophrenia spectrum disorders. Presence of reality-based decision-making capacity, that does not interfere with conversational ability, orientation to person, place, time and self was a further inclusion criterium. Participants were recruited in Belgium through two psychiatric wards and through a patient organization. Written informed consent was obtained from all subjects. Ethical approval with number G-2017 07 851 was obtained from the SMEC, Leuven. This study was part of a wider research project on first-person experience of psychosis, in particular the phenomenology of psychosis, on the role of social interaction in different stages of psychosis, and on the use of Experience Sampling Method (ESM) (Myin- Germeys et al., 2018).

Procedures

The first author and a research assistant interviewed, in-depth, 21 individuals with lived experience with psychosis, using a semi-structured format. Interviews were conducted in Dutch. For the creation of the interview guide, a non-exhaustive list of topics was composed beforehand, based on empirical and phenomenological literature, and the lived experience of the first author. The interviews started by asking individuals to sketch how they experienced their first psychotic episode and the events and experiences preceding this period, that they found relevant. Following, participants where asked about diverse aspects of their experiences with psychosis that they touched upon, ranging from experiences of acute psychosis, to

aftermath and recovery. Conducting the interviews before the focus groups offered several advantages. First, it gave in-depth backgrounds of individuals experiences, which already showed us differences and commonalities, which was of use in the focus groups. Secondly, the interviews offered the participants the chance to be familiarized with the researchers, which made it easier for them to share their experiences in the focus groups with others.

From this group of 21 individuals with lived experience of psychosis, based on availability, 10 took part in a total of six focus groups. Two groups of five individuals were composed of participants living in the same region. Both of these groups participated in three focus group sessions on different topics: (1) the phenomenology of psychosis, (2) social interaction and (3) input on the Experience Sampling method, a smartphone-based questionnaire used in quantitative research. The focus groups were moderated by the first author and a research assistant. This paper reports findings relevant for the topic of the paper from both individual interviews and focus groups.

Qualitative analyses

All interviews and focus groups where recorded digitally and transcribed ad verbatim by the first author and a research assistant. Participants were ascribed an alias to guarantee anonymity. The transcriptions were coded using NVivo 12. Quotes were translated from Dutch to English by the first author. For the analysis of the interview and focus group transcriptions, the method of Interpretative Phenomenological Analysis (IPA) (Smith et al., 2009) was generally followed. IPA is specifically designed to capture the experiences of individuals, as they would describe these in their own words (Smith et al., 2009). For this method, a sample between 2 and 25 is considered adequate. We followed the six steps described by Smith et al. (2019), with a shift in emphasis more on the key emergent themes for the whole group, as suggested for larger samples. First, the first author read and reread the interviews. This was followed by initial noting, close to a free textual analysis to further familiarize with the data. Repeated induction lead to a number of concepts (nodes in NVivo). Following, emerging themes were developed that explore interrelations, connections and patterns between concepts. A next step consisted in a mapping of the interrelations of the themes, followed by looking for patterns across cases. For this paper, we deviated in part from the IPA approach with additionally coding for insight experiences deductively, with the aha- and anti-aha-experiences in mind (Sips, 2019). These steps were repeated for all cases and focus groups. In this paper, we focus on those themes relevant for the current research question regarding insight experiences, gathered from the interviews and focus groups. Concepts and themes were discussed by the first author with two research assistants.

Results

Descriptive

The sample consisted of 21 individuals (Table 1). Seven of these participants were inpatients at a psychiatric institution at the time of the interview, 14 were receiving outpatient care. Participants achieved a moderate level of functioning and a mild to moderate average severity of positive symptoms of psychosis as measured with the Global Assessment of Functioning

scale (GAF) (American Psychiatric Association & American Psychiatric Association, 2000) (Table 1). At the time of the interview, four participants expressed delusional thoughts, and three expressed to have experienced hallucinations recently, as scored with the Comprehensive Assessment of Symptoms and History scale (CASH) (Andreasen, 1992) (Table 1). All participants except one reported having been hospitalized one or more times for psychosis.

Table 1. Description of the sample.

	Mean (SD) – [range]
Age	39 (11) – [19–59]
Sex	15 M (71%) – 6 F (29 %)
GAF symptoms (0–100)	57 (17) – [25–90]
GAF limitations (0–100)	54 (15) – [25–81]
CASH delusions present (0–5)	1 (2) – [0–5]
CASH hallucinations present (0–5)	1 (2) – [0–5]

Aha-Experiences

Aha-experiences are reported in over two thirds of interviews and focus groups and a distinction can be made between two kinds: the first concerns a sudden and abrupt insight experience, while the second concerns new associations and connections.

Sudden and abrupt insight experiences

Many individuals describe a great variety of experiences of sudden or abrupt insights, like experiences of "all-knowing", "seeing through everything" or of "the pieces of the puzzle falling together".

> "At that moment, everything is right, and is logical … and … reality is … completely clear for you. It is the pieces of the puzzle falling in place. You understand everything, you see everything, you grasp everything." (Ellen, in interview)

In this description of Ellen, different aspects of the aha-experience come together, from "the pieces of the puzzle falling in place", to the experience of understanding, seeing and grasping things. These types of experiences come back in the descriptions of many other participants, as the following examples show.

> "I really thought: 'I see through it all here'. (Nathan, in interview)

> "My interpretation was so … accurate – or how should I say. (claps hands) … It made sense to me. I felt, 'that must be it'." (Josh, in interview)

> "I thought I could explain everything." (Simon, in interview)

> "I had that a few times, especially during my first two psychoses, deep moments of the feeling of all-knowing, aha-moments. Incredible. It is an explosion of truth in your head, and that truth is so simple you can't explain." (Rita, in interview)

> “At that moment, everything seemingly and by coincidence seems to fall in place.” (Steve, in interview)

While some already described these particular types of insight experiences as distressing or disturbing, many participants in the study explain how these experiences are laden with exaltation and positive excitement, as Ellen for example, describes vividly:

> “At that moment you know everything is right, and you have confidence. And everything will be all right… and yeah… That is actually a very nice time, that first part.” (Ellen, in interview)

Associations and connections

When asked about experiences preceding the aha-experiences and acute psychosis, participants often described how they experienced a stream of thoughts, associations, and insight experiences. In a focus group, for example, a conversation starting from a description of Simon leads to many responses of other participants finding these descriptions of insights and associations during onset highly relatable. Simon describes specifically how these connections he makes and explanations he finds concern things he normally does not think about.

> “Usually, these are connections that you make, so things you start to connect to each other. (…) You start finding many explanations for things you… never used to dwell upon. (Simon) Yes, and associations.” (David)

> “In a way, that is all a bit the same, no? Because… yeah, you suddenly figure out the system… In a way that is a eureka experience, it’s like ‘I understand it’.” (Robert)

> “Yes, but that keeps going further, like: “Ah, but I hadn’t thought of that. But yea, if I then… like that . . ., then it would still make sense. (…) And you make U-turns to make things fit.” (Simon, in focus group)

Participants recognize the stream of thoughts and associations, which Robert calls eureka experiences.

What Simon adds, and is also found in the accounts of others, is that these experiences appear to expand further and further and generate new questions and ideas regarding their sense of reality and the apparent self-evidence thereof that is being questioned or stripped away. Strikingly similar, Karl describes how he starts seeing links between things:

> “I think it has to do with making connections. It doesn’t matter at that moment if these connections are right or wrong, but… it makes you enthusiastic that you are seeing links, and uhm… it often starts piling up… That’s my experience, that enthusiasm, like “Ah, I see this! And I see that there!” (Karl, in focus group)

Dialectic of aha- and anti-aha-experiences: shifting from insight to shock

Many individuals describe how in acute psychosis a tension arises where each appearing insight is undermined by a new one. The tension of the pre-delusional state seems to be driven by a dialectic back and forth between experiences of insight and shock. The following description shows the rapidity of "falling from one reality into the other":

> "I mean, the feeling of strong agitation… The continuous… a bit like in a dream, like… falling from one thing into the other. You have 'those' thoughts, and suddenly it shifts in another direction. You can have this experience in a dream as well, that you're dreaming something, and suddenly it goes in a completely different direction. I had that in psychosis as well, like 'tsch', 'tsch' (gestures movement). Like when you are dreaming at night, where you can also fall from one reality into the next. That really was the case." (Simon, in focus group)

What becomes clear in descriptions, is that there are shifts from believing something could be the case to believe that this actually is the case. The shift from what could be possible, or what is merely thought, to what is real is reported to be frightening:

> "Something I also think of now, is thoughts that make you… becoming startled and frightened by one's own thoughts. (…) So there is no one there at that moment, but normally it is a busy street. And I thought… It felt so weird… And suddenly I think: 'It's happened. I have died'. (…) It is as if… As if you thought this was not possible, and then you are startled and frightened by the thought that it might be possible." (Simon, in focus group)

> "In that context, what frightens me the most is that I then think a new age has dawned, or something like that… The heaviest thing I thought was… was… that I was really walking around on a star. That the earth was no longer the earth, but that I was somewhere else, with alien life." (Karl, in focus group)

Sometimes, the dialectic emerges in individual's shift in and out of an intersubjectively shared reality and their idiosyncratic delusional reality. The following description shows how there is no stability, but an ever shifting between perspectives on reality:

> "But… very important… My husband says: "I was then talking with you… You believed me… And half an hour later, you would again be questioning this. (…) So I… I always went back into MY reality. I did trust him enough to say: 'Maybe that is not right… ' But five minutes later, I would forget this, and I was back in my… like that . . ." (Ellen, in interview)

Anti-Aha-Experiences

In contrast to the idea that insight experiences mainly provide individuals a sense of relief, participants describe how these experiences evoke a fear for the possibility and realisation thereof. They can show the past in a new, often devastating light and the anti-aha-experiences can have a long-lasting impact on one's sense of identity and self-awareness. Anti-aha-experiences were reported by about a third of the participants.

Fear of possibility and realisation

Some participants describe how the ideas and links arising in aha-experiences sometimes evoke experiences of fear and anxiety, by the creation of possible interpretations that individuals start to experience as reality.

> "You're in a certain train of thoughts in which you try to understand. And then suddenly you get scared from a thought that arises. (...) A possibility created by your train of thoughts." (Simon, in focus group)

Another participant picks up on this description and asks him if it corresponds to experiences he has had:

> "Is that getting scared something like... that suddenly... you think like... : "Wow... if THAT can be true... " That you suddenly are completely powerless, that you feel like a complete moron?" (Robert, in focus group)

> "Yes, something like that, yes." (Simon, in focus group)

In many descriptions of participants' experiences of acute psychosis, at a certain point their reality no longer corresponds to reality as experienced before. Contrary to the early insight experiences which seem to offer an apparent better or new understanding of things ("I understand the world", . . .), these anti-aha-experiences cause implosions or reversals of what used to make sense.

> "Yes, you are afraid, but it is much bigger than fear. (...) Nothing is right anymore. The entire world... seems to implode upon you... Nothing is as you thought it was anymore . . ." (Robert, in interview)

> "You can't trust anything anymore. Is this a table? It might seem so, but is it really the case? Probably not (laughs). These people are sitting here, but are they really people or is it my imagination, or... ? Pff... everything is possible... everything is possible . . ." (Robert, in interview)

Participants describe the anti-aha experience as devastating. It undermines, questions and destroys earlier beliefs and basic assumptions about the world and oneself.

> "From the moment you realize that something is wrong, then suddenly you are... It is actually worse than before. Because suddenly you realize: 'Oh no, you pushed it all towards the other', like, 'the others can't handle it, nothing is wrong with me,' to (loud) 'BANG: something is grandiosely wrong with me'. (...) I couldn't trust anything anymore. (...) I just couldn't trust anything, and then I completely collapsed." (Robert, in interview)

Ellen even explicitly contrasts this feeling to the feeling that accompanies the aha-experiences and the experiences of all-knowing:

> "Because it really gives you a great feeling, and you see through everything, and you understand everything… But afterwards… you plunge in a hole, because you have NOTHING (emphasizes) left. And you are… You are down on the ground, and you feel you can't go on any longer. And you think: 'I quit'." (Ellen, in interview)

In a focus group, Simon describes how the perspective of his psychiatrists shifts his view on how he thinks he is doing. As in the previous examples, this mismatch between his own point of view and reality undermines his trust and self-confidence and makes him doubt everything.

> "And when you start realizing that… what you are thinking is not possible . . ., and then a psychiatrist tells you: 'I think you are not doing well.' And you yourself think you are doing great. And yes… the confidence afterwards, that is completely… You start to doubt everything." (Simon, in focus group)

Seeing the past in a new light

Some of the insight experiences, both aha- and anti-aha, concern the way people regard their own history. These sudden changes of perspective often turn out to be false or delusional, although they are experienced as highly shocking and disturbing. Sometimes, they come with a sense of relief and understanding, while only later initiating opposing anti-aha-experiences that undermine earlier temporary feelings of relief and positive affect.

David described how, after the initial stage of a flood of associations and the feeling of understanding the world, he felt overwhelmed by anxiety and fear caused by a delusional belief that made him see his past in a different manner:

> "I then got an emergency appointment with my psychologist. And there, I had a panic attack. Because I had… what later appeared to be a sort of delusional idea… that I was abused by a family member." (David, in interview)

In a focus group, he explained how he kept holding on to this conviction of having been abused, for even half a year after acute psychosis, while he was on medication. During this half year, he felt then that *"It must be true, since, I am taking my medication"*.

Several other individuals specifically describe experiences such as these, whereby abrupt perspective changes in how they see past and present play a role in their psychosis. The following example displays strong similarities to that of David. A delusional belief suddenly formed and strongly impacts how she in acute psychosis looks at her past and present. Things suddenly appeared to make sense, making the world appear in a different meaningful constellation.

> "At a certain moment I thought, 'I am adopted', because… yeah… because I had a difficult relation with… But they never wanted to tell me the truth." (Ellen, in interview)

Identity and self-awareness

The anti-aha experience can bring forth a fundamental uncertainty. In the interviews and focus groups, participants describe metaphorically how this fundamental uncertainty undermines their thoughts, perception and often their sense of identity and self-awareness:

> "It is a strange feeling. A sort of void… a total void… As if who you were was wiped away… really wiped away. And… and… and… there is nothing really that comes to take its place. And that is very difficult to understand. People have a hard time understanding that." (Simon, in focus group)

> "At a certain moment, nothing remained. I did not even know who I was anymore, I still have problems with that sometimes. Like, who I was, it wasn't there anymore. Or who I was twenty years ago, it was gone. And what was there, was sometimes difficult to determine. And now it is slowly but surely coming back." (Simon, in interview)

Others described how an altered sense of reality can spread to one's sense of self and identity, and the other way around:

> "I found that very confusing as well, like okay, but…. Who is now the real me…? Huh? The one that is just me, or the other one?" (Robert, in focus group)

> "A shift in values, the undercurrent: identity, and so on… That completely shifted. (…) And then you start to rebuild. Like, yeah, "What is real now and what is not?" (Raymond, in focus group)

The anti-aha-experience has a long-lasting impact on the sense of reality and identity. It undermines trust and judgement often for years to come after the psychotic episode. Questions then arise how one could be sure about anything, when their experiences have demonstrated that they cannot even trust their own thought and perception anymore:

> "But afterwards… It turns out you can't trust what you think. If found that very confusing. Like: 'What is real now, and what is not?'. Because, yeah… it all seemed real." (Robert, in focus group)

> "And you doubt yourself very much, because you had been 'wrong' for a while. (…) I clearly recognize that that confidence is gone. You never really know for certain… Is what I am thinking right?" (Ellen, in focus group)

Discussion

The present study used interviews and focus groups to investigate the phenomena of aha-experiences, anti-aha experiences and their dialectic. Results showed for most participants, psychosis was accompanied by sudden experiences of insight – aha-experiences, and that anti-aha experiences were reported by about a third of the individuals. However, they do seem to play an important role alongside the aha-experience, particularly because of its reportedly

long-lasting impact. Our findings support examples and singular illustrations given in literature, for example, in the description of the gradual onset of psychosis, where everything becomes meaningful and meaningless in Humpston and Broome (2016). In many cases, these aha-experiences are laden with exaltation and positive affect, similar to earlier descriptions of insight experiences in psychosis (Cicero et al., 2010; Kapur, 2003). However, contrary to the vast bulk of phenomenological work and to the view of Kapur (2003) mentioned in the introduction, insight experiences are not just a matter of sudden relief and delusion formation. They rather seem to express a complex interplay of a dialectic process between building and unbuilding.

Insight experiences occur outside psychotic experience as well, and it is useful therefore to connect to this literature. The notion of the aha-experience has been defined most notably in problem solving literature as the experience of sudden insight, a solution to a problem that presents itself, a sudden moment of clarity or a breakthrough (Topolinski & Reber, 2010). In creative psychology literature the insight process is described as a "restructuring", or a radical and usually sudden change in how a problem is conceived (Cunningham et al., 2009). In their naturalistic study to insight, Klein and Jarosz (2011) proposed that the process of insight involves a change in understanding while often also involving action, or a new realisation of how to make things happen (Klein & Jarosz, 2011). They proposed an "anchor model" of insight, and argued that insight generally requires a person to abandon one or more beliefs, whereby a person reorganizes a "frame" or constructs a new frame, and so-called anchors are revised (Klein & Jarosz, 2011).

Anti-aha-experiences appear to reflect a similar structure to that of negative insight experiences, that provoke a process initiating problem finding. Common to many of these descriptions, is that these experiences invoke difficult questions, new ways of looking at things or new understandings that often induce shock and anxiety, that impact a person's perspective on one's personal history, and one's sense of identity and self-awareness.

Anti-aha-experiences bear resemblance to a form of negative insight, earlier described in the field of creative psychology (Hill & Kemp, 2018). They formulated the concept of the "*Uh-oh moment*", as "*a sudden realisation… which could be considered as an antonym to the Aha moment"* (Hill & Kemp, 2018). They describe Uh-oh moments as initiating a problem finding process, as opposed to aha-experiences that are more associated with the sudden solution phase, or new understanding. This conceptualization of negative insight as initiating a problem finding process connects well with our previous conceptualization of the anti-aha-experience as a fear of possibility and realization in that these experiences trigger questions, perplexity and can put previously self-evident aspects of the way we perceive ourselves, others and the world into question (Fuchs, 2010; Henriksen & Parnas, 2012).

In acute psychosis, our descriptions of the anti-aha-experience follow a similar line of reasoning, conceptualizing it as a problem finding process, or a fear for a "what if… ", as has been described, that individuals have the "feeling that anything could happen"(Sass et al., 2017). In contrast to psychosis as a discrete process of false perceptions and false beliefs, our conception of insight experiences in psychosis as a process of re-structuring of a pre-reflective and embodied understanding might help to further increase our understanding of experiences

of "derealization", "unworlding", "unbuilding" or even of psychosis as an "ipseity disorder", that have been described in qualitative and phenomenological psychiatry (Raballo & Nelson, 2010; Sass & Parnas, 2003; L. Sass & Ratcliffe, 2017; Schwartz et al., 2005). These notions point to the subjective existential position of a unique individual that can be shaken to the core, as attested in the descriptions of the anti-aha experience and the impact of the dialectic. As Dunkley et al. have reported, disintegration of experience can endure long after acute psychosis has resolved (Dunkley et al., 2015). One could thus imagine that the impact of the dialectical process on experience as such can be so devastating that self-experience becomes problematic. With the current study in mind, this remains speculation, however.

Lastly, it is worth noting that phenomenological accounts have traditionally neglected qualitative research and based their conceptualizations on clinical experience or one case-studies (Blankenburg, 1971; Jaspers, 1997; Minkowski, 1927). Although these accounts have contributed vastly to our understanding of psychosis (and other psychopathologies for that matter), we would consider a further exploration through qualitative research a logical next step.

Clinical implications

Our findings imply that treatment of psychosis that primarily focusses on hallucinations and delusions, and the dampening of salience, misses an important aspect of psychotic experiences. As we have shown with the concept of the anti-aha-experience, psychotic experiences can severely undermine an individuals' existential sense of self and their trust in others and even reality as such. It became clear that these disruptions to core aspects personhood (a sense of self, trust in others and reality) are not just episodic but can remain present long after overt psychotic symptoms have disappeared. Furthermore, treatment from psychosis itself is often difficult, disrupting or even traumatic. With these results in mind, we would argue therefore that an already fragile sense of self, personal meaning and trust in others should be something to care about, to take care of and to consider in every kind of treatment one intends. Covering these often claimed incomprehensible experiences (Van Duppen, 2016) may be a first step towards the assimilation of psychotic experiences in ones' personal and interpersonal context and narrative. From the first-person accounts studied here we would argue that solely targeting overt symptoms could imply the vital neglect of what it actually is like to suffer from psychosis.

Limitations

Since the conceptualization of psychosis as a dialectic of aha- and anti-aha-experiences is based on a combination of the first author's first-person experience and literature, some question of objectivity and research bias might be raised. We did try to take in account the double hermeneutic, of meaning and meaning making between researcher and participants, inherent in any qualitative research project. The interviewer furthermore did not specifically ask about insight experiences and did not disclose personal experience with psychosis before the focus groups, to avoid leading the participants. The present study is the result of a focus of the data in the light of insight experiences, while this did not influence the data gathering (i.e. the interviews and focus groups). It should be added that this possible limitation could at the same

time be seen as a significant strength, as so-called service user involvement in conceptual and clinical studies is very limited. If we take the idea seriously that the first-person perspective is relevant, then this limitation needs to be balanced against this uncommon advantage of the study approach: it is based on first-person perspective and it inquires into first-person perspectives to help inform clinicians about the possible first-person perspective of our patients.

Furthermore, although we have discussed the non-psychotic presence of insight experiences in the discussion, it should be further stressed here that this study cannot claim that aha- and anti-aha experiences and their dialectic relation are specific for psychosis. Such a claim would at least require a control group, which the study design does not permit.

Conclusions

The present study provides qualitative evidence that supports the idea that insight experiences may play an important role in psychosis, both in early stages as well as during the aftermath. This study shows that concepts like aha- and anti-aha-experience and their dialectic are not idiosyncratic, but seem to be present in more (but not all) psychotic people. This is clinically highly relevant, since it implies that an important focus for treatment should be on the subjective and existential impact of having undergone psychosis, and not merely on a supposed underlying discrete neurological process.

What we consider vital is that research focusing on the actual subjective experience of people with experience of psychosis can show aspects thereof which are often overlooked and even unknown. Our study did focus on these actual experiences, and demonstrated the presence of insight experiences in the form of aha-, anti-aha-experience and their dialectic. Focusing on these elements helped to show that long after acute psychosis, things can often still appear and feel totally different than before. Clinically, this means that psychosis does not end when overt symptoms disappear, and neither should treatment and care end at that stage. The conceptualization of psychosis as a dialectic of aha-and anti-aha experiences, substantiated with lived experiences as studied here, are therefore crucial for a better understanding of what is actually happening to a person, and how this affects a sense of self and perspective on others and the world, even after overt symptoms have disappeared.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the Fonds Wetenschappelijk Onderzoek [FWO Odysseus grant (GOF8416N) to Inez Myin-Germeys].

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

American Psychiatric Association. (2000). Global Assessment of Functioning (GAF) scale. In American Psychiatric Association Ed., *DSM-IV-TR Diagnostic and statistical manual of mental disorders*.

Andreasen, N. C. (1992). The Comprehensive Assessment of Symptoms and History (CASH). *Archives of General Psychiatry*, *49*(8), 615. https://doi.org/10.1001/archpsyc.1992.01820080023004

Blankenburg, W. (1971). *Der Verlust der natürlichen selbstverständlichkeit: Ein Beitrag zur Psychopathologie symptomarmer Schizophrenien*. Enke.

Cicero, D. C., Kerns, J. G., & McCarthy, D. M. (2010). The aberrant salience inventory: A new measure of psychosis proneness. *Psychological Assessment*, *22*(3), 688–701. https://doi.org/10.1037/a0019913

Conrad, K. (1958). *Die beginnende Schizophrenie. Versuch einer Gestaltanalyse des Wahns*. Thieme.

Cunningham, J. B., MacGregor, J. N., Jenny, G., & Haar, J. (2009). Categories of insight and their correlates: An exploration of relationships among classic-type insight problems, rebus puzzles, remote associates and esoteric analogies. *TheJournal of Creative Behavior*, *43*(4), 262–280.

Deikman, A. J. (1971). Bimodal Consciousness. *Archives of General Psychiatry*, *25*(25), 481–489, https://doi.org/10.1001/archpsyc.1971.01750180001001

Dunkley, J. E., Bates, G. W., & Findlay, B. M. (2015). Understanding the trauma of first-episode psychosis. *Early Intervention in Psychiatry*, *9*(3), 211–220. https://doi.org/10.1111/eip.12103

Fuchs, T. (2010). The psychopathology of hyperreflexivity. *The Journal of Speculative Philosophy*, *24*(3), 239–255. https://doi.org/10.1353/jsp.2010.0010

Gozé, T., Grohmann, T., Naudin, J., & Cermolacce, M. (2017). New insight into affectivity in Schizophrenia: From the Phenomenology of Marc Richir. *Psychopathology*, *50*, 401–407. https://doi.org/10.1159/000481516

Henriksen, M. G., & Parnas, J. (2012). Clinical manifestations of Self-disorders and the Gestalt of Schizophrenia.*Schizophrenia Bulletin*, *38*(4), 657–660. https://doi.org/10.1093/schbul/sbs033

Hill, G., & Kemp, S. M. (2018). Uh-Oh! What have we missed? A qualitative investigation into everyday insight experience.*The Journal of Creative Behavior*, *52*(3), 201–211. https://doi.org/10.1002/jocb.142

Humpston, C. S., & Broome, M. R. (2016). Perplexity. In G. Stanghellini & M. Aragona (Eds.), *An experiential approach to psychopathology* (pp. 245–264). Springer. https://doi.org/10.1007/978-3-319-29945-7_13

Jaspers, K. (1997). *General Psychopathology* (Vol. I). J. Hoenig and Marian W. Hamilton, Trans.). Johns Hopkins University Press.

Kapur, S. (2003). Psychosis as a state of aberrant salience: A framework linking biology, phenomenology, and pharmacology in schizophrenia. *American Journal of Psychiatry*, *160*(1), 13–23. https://doi.org/10.1176/appi.ajp.160.1.13

Klein, G., & Jarosz, A. (2011). A naturalistic study of insight. *Journal of Cognitive*

Engineering and Decision Making, *5*(4), 335–351. https://doi.org/10.1177/1555343411427013

Minkowski, E. (1927). *La schizophrénie. Psychopathologie des schizoïdes et des schizophrènes*. Pavot.

Mishara, A. L. (2012). The "Unconscious" in paranoid delusional psychosis: Phenomenology, neuroscience, psychoanalysis.In *Founding psychoanalysis phenomenologically: Phenomenological theory of subjectivity and the psychoanalytic experience* (pp. 169–197). https://doi.org/10.1007/978-94-007-1848-7_9

Myin-Germeys, I., Kasanova, Z., Vaessen, T., Vachon, H., Kirtley, O., Viechtbauer, W., & Reininghaus, U. (2018). Experience sampling methodology in mental health research: New insights and technical developments. *World Psychiatry*, *17*(2), 123–132. https://doi.org/10.1002/wps.20513

Parnas, J., Møller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of anomalous self-experience. *Psychopathology*, *38*(5), 236–258. https://doi.org/10.1159/000088441

Raballo, A., & Nelson, B. (2010). Unworlding, perplexity and disorders of transpassibility: Between the experiential and the existential side of schizophrenic vulnerability. *Psychopathology*, *43*(4), 250–251. https://doi.org/10.1159/000315123

Ratcliffe, M. (2017). *Real hallucinations. Psychiatric illness, intentionality and the interpersonal world*. MIT Press.

Sass, L., Pienkos, E., Skodlar, B., Stanghellini, G., Fuchs, T., Parnas, J., & Jones, N. (2017). EAWE: Examination of anomalous world experience. *Psychopathology*, *50*(1), 10–54. https://doi.org/10.1159/000454928

Sass, L., & Ratcliffe, M. (2017). Atmosphere: On the phenomenology of "atmospheric" alterations in Schizophrenia -Overall sense of reality, familiarity, vitality, meaning, or relevance (Ancillary Article to EAWE Domain 5). *Psychopathology*, *50*(1), 90–97. https://doi.org/10.1159/000454884

Sass, L. A., & Pienkos, E. (2013). Delusion: The phenomenological approach. In K. W. M. Fulford, M. Davies, R. G. T. Gipps, G. Graham, J. Z. Sadler, Stanghellini, Giovanni, & T. Thornton (Eds.), *The Oxford handbook of philosophy and psychiatry* (pp. 1322). Oxford University Press.

Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, *29*(3), 427–444. https://doi.org/10.1093/oxfordjournals.schbul.a007017

Schwartz, M. A., Wiggins, O. P., Naudin, J., & Spitzer, M. (2005). Rebuilding reality: A phenomenology of aspects of chronic schizophrenia.*Phenomenology and the Cognitive Sciences*, *4*(1), 91–115.

Sips, R. (2019). Psychosis as a dialectic of Aha- and Anti-Aha-Experiences. *Schizophrenia Bulletin*, *45*(5), 952–955. https://doi.org/10.1093/schbul/sby072

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis. Theory, method and research. SAGE Publications Ltd*. Sage.

Topolinski, S., & Reber, R. (2010). Gaining insight into the "Aha" experience. *Current*

Directions in Psychological Science, *19* (6), 402–405. https://doi.org/10.1177/0963721410388803

Van Duppen, Z. (2016). The phenomenology of hypo- and hyperreality in psychopathology. *Phenomenology and the Cognitive Sciences*, *5*(3), 423–441. https://doi.org/10.1007/s11097-015-9429-8

Van Duppen, Z., & Sips, R. (2018). Understanding the blind Spots of Psychosis: A Wittgensteinian and first-person approach.*Psychopathology*, *51*(4), 276–284. https://doi.org/10.1159/000490257

Chapter 5: Understanding the blind spots of psychosis: A Wittgensteinian and first-person approach

Published as:

Van Duppen, Z., & Sips, R. (2018). Understanding the blind Spots of Psychosis: A Wittgensteinian and first-person approach.*Psychopathology*, *51*(4), 276–284. https://doi.org/10.1159/000490257

Abstract

Background: Experiences of psychosis are often assumed to be strange, bizarre, or incomprehensible. The aim of this article is to offer a new step towards a better understanding of how the psychotic process affects a prereflective background. **Methods:** We use concepts from the philosophy of Ludwig Wittgenstein to clarify the first-person perspective on psychosis of one of the authors. **Results:** We describe the early psychotic process as breaking down the "nest of propositions," shaking the scaffolds of our language games. Hereby, the prereflective background that forms our existential orientation in the world is fundamentally altered. We identify different aspects of this process: a dialectic of aha and anti-aha experiences, the experience of groundlessness, and blind spots. Acknowledging and exploring the depth and impact of this process on a person's world may be a first step towards resolving their isolation and suffering. Philosophy can facilitate such an exploration, while interpersonal activation may offer structure and trust in the world, helping the patient to find solid ground in action and interaction. **Conclusion:** This article combines a philosophical approach with a first-person perspective on psychosis to illuminate aspects of psychosis that have not been described or elaborated on before. We argue that psychosis entails an experience of existential groundlessness. Our view has implications for treatment of and recovery from psychosis.

"The reasonable man does not have certain doubts." (Wittgenstein, 1969, p. 220)

Introduction: The Incomprehensibility of Psychosis

Delusions, hallucinations, disorganized thought, disorganized psychomotor action, and negative symptoms are all clustered under the diagnostic concept of psychosis (APA, 2013). The presence of one or more of these psychotic symptoms can be an indication of one of the psychotic disorders, with schizophrenia considered the most severe. Although psychotic symptoms may seem strange and bizarre, research has shown that the prevalence of these symptoms in the general population may be remarkably high (Van Os et al., 2000; Johns & van Os, 2001; Rössler et al., 2007; Yung et al., 2009). In one large-scale research project, up to 16% of the general population reported having experienced phenomena that clinicians would describe as psychotic (van Nierop et al., 2012), and a recent review reports that more than 30% of the general population claims to have had experiences that can be described as psychotic (Nuevo et al., 2012).

Although it has been argued that the nature of such experiences in nonclinical populations are generally different from those in psychotic clinical populations (Stanghellini et al., 2012), the high incidence of psychotic phenomena did lead to reformulation of the "continuity hypothesis." This hypothesis states that there is continuity between normal and psychotic phenomena rather than a discrete and distinct entity of psychosis (Strauss, 1969). This is remarkable, firstly because of the well-known stigma concerning psychosis in the general population (Penn et al., 1999), and secondly because the conceptual history of psychosis, and particularly of schizophrenia, has emphasized the incomprehensibility and bizarreness of these phenomena (Kraepelin, 1904; Gilman, 1983). Karl Jaspers (1948) argued that delusion-like ideas, like preoccupations and real delusions, can be distinguished objectively by 3 criteria: the presence of absolute certainty, incorrigibility, and the lack of concordance with reality. He further argued that failure to understand the delusional experience is in fact the hallmark of real delusions (Seikkula & Olson, 2003). This idea influenced current views that emphasize the need for an "explanation from the outside," in the words of Jaspers (1948), instead of an empathic or phenomenological approach "from the inside", which would focus on grasping the lived experience itself. Despite the difficulty of understanding psychotic phenomena or symptoms, certain therapeutic approaches do favor a more comprehensible attitude. Indeed, movements like "open dialogue," as developed by Seikkula and Olsen (2003) in Finland, particularly claim that psychosis should be treated firstly by dialogue and attempts at understanding. It thus seems that there is tension between the assumption of incomprehensibility and consequently the necessity for more explanatory approaches, e.g., neurobiology, on the one hand, and the idea that understanding is not only possible but that it may even contribute to treatment, on the other.

Phenomenological psychopathology could play a crucial role in this debate, as phenomenological authors have already shown how certain aspects of psychosis can indeed be made more comprehensible. Examples thereof are the alteration in temporal experience in the psychotic experience and schizophrenia (Fuchs & Van Duppen, 2017) and the change in the sense of reality (Schwartz et al., 2005; Ratcliffe, 2013; Van Duppen, 2016). Phenomenology

also offers arguments for a different kind of understanding of these phenomena, e.g., by developing narrative or philosophical approaches to psychosis (Ratcliffe, 2012; Stanghellini, 2013; Henriksen, 2013). Nevertheless, phenomenology has only clarified certain aspects of psychosis and no one would claim to have understood psychosis in its totality.

The aim of this article is therefore to offer a new step towards a broader understanding of psychosis. The article does so by combining two perspectives: the first is the philosophy of language games as developed by Ludwig Wittgenstein; the second is the first-person perspective on psychosis of one of the authors. Wittgenstein's work has already been fruitfully used to investigate delusions (Sass, 1994; Varga, 2012; Broome, 2012). Rhodes and Gipps (2008), e.g., argued for a Wittgensteinian approach to delusions and particularly to the question how we are able to know whether someone is deluded without first making decisions about the prevalence of the belief. They employ the concept of the "background," to which we shall return further on. What we focus on here, however, is the process that precedes and outlasts the development of those delusions. In the following section, we will argue how Wittgenstein's ideas can help to disentangle this complex event. Then, in First-Person Perspective on Psychosis, we offer insights from the experience of psychosis of the second author and show how Wittgenstein's ideas can make these more understandable. Lastly, in Conclusion: Recovery and Covering the Blind Spots, it will become clear why these insights can be relevant for therapy and recovery.

A Wittgensteinian Approach

In this section, we present some of the key notions in the work of Wittgenstein, which will help to elucidate a part of the psychotic experience. We discuss in particular language games, forms of life, and the background, and we pay special attention to the notions of doubt and certainty.

Wittgenstein introduced the concept of language games to address problems concerning the meaning of words, i.e., their unfixedness, the multiplicity of uses, and their being relative to an activity (Biletzki et al., 2008). This allowed for a flexible and action-oriented perspective on language and words. Although he did not explicitly define the concept of language game, we find preliminary indications for the concept already in the *Tractatus Logico-Philosophicus*. There, he considered language to be a structure of signs, names, and propositions [Wittgenstein, 1922, §4.22). Propositions are built of more elementary propositions, which in turn are constituted by names and signs that cannot be further "taken to pieces by definitions" [Wittgenstein, 1922, §4.221). Those most elementary parts only become meaningful in their use and application [Wittgenstein, 1922, §3.262). It is this practical and action-oriented turn that he would further elaborate in his later works.

In *On Certainty*, e.g., Wittgenstein described how language games emerge from action (Wittgenstein, 1969). A language game is a practically learned interconnection of propositions that are coherently bound together through its use and application. A language game is purpose relative and could be considered as the set of words and phrases determined by and determining adequate ways of dealing with a particular activity. If one were aiming to justify the propositions within a language game, through empirical testing, e.g., justification of these propositions ultimately would come to an end. Even at the foundation of well-founded belief

lies belief that is not founded [Wittgenstein, 1969, §253). Logically, Wittgenstein expresses it in the following way: "If the true is what is grounded, then the ground is not true, not yet false" [Wittgenstein, 1969, §205). An attempt to justify or reduce once firmly held propositions, even in an intersubjective context, leads to the discovery of ungrounded belief. Our judgments, e.g., about activities, are not based on a single foundational proposition but rather on "a nest of propositions" (Wittgenstein, 1969, §225). It is its interconnection from which the language game derives its structure rather than from a solid ground. Using the metaphor of a house, Wittgenstein indicated that the "foundation walls are carried by the whole house" (Wittgenstein, 1969, §248), thereby inverting our conventional understanding of (architectural) foundations (Rhees, 2008). What holds the house together is the interconnection and our practice: "The only end one could discover is not an ungrounded presupposition: it is an ungrounded way of acting" (Wittgenstein, 1969, §110). One could interpret the concept of common sense of the German psychiatrist Blankenburg (Blankenburg, 1969) in very much the same way, as the prereflective and prepredicative self-evident apprehension of the everyday world that arises from interaction with others. Blankenburg (1969) pointed out that it is exactly this self-evident common sense which breaks down in schizophrenia.

We learn the rules of the language game "purely practically, without learning any explicit rules" [Wittgenstein, 1969, §95). It is, however, against a particular background that we are able to learn these rules and meanings. This is the background of what Wittgenstein called our forms of life or our world picture, i.e., our habits of doing things together in common environments, which make meaning and learning of meaning possible (Philström, 2012). The ungrounded way of acting to which Wittgenstein refers does offer a certain ground. However, this ground is not the propositional certainty within a particular language game but rather a certainty in action (Moyal-Sharrock, 2013). Language games are characterized by the exclusion of particular doubts. According to Wittgenstein, our attempts to enquire, e.g., in scientific research, are set up in such a way that some propositions are exempted from doubt, if they were ever formulated in the first place. "They lie apart from the route travelled by enquiry" [Wittgenstein, 1969, §88). We can certainly question the correspondence to reality or the correctness of specific propositions, yet there are some which we cannot even think of questioning because they are like "hinges" on which the whole language game turns. Thus, it belongs to the logic of our investigations "that certain things are in deed not doubted" [Wittgenstein, 1969, §342). This is not only the case for scientific research but also for every kind of enquiry, idea, or belief about the world. Even our concept of rationality itself depends on the correct exclusion of certain doubts [Wittgenstein, 1969, §220). This is not to say that doubt is not possible within the language game. However, the doubt within the language game is doubt about a particular knowledge, e.g., a proposition, while the doubt which is excluded from the language game concerns those basic certainties that function as conditions for the language game itself. They "enable sense" instead of themselves having sense (Moyal-Sharrock, 2003, p. 134). These certainties in action build the background or bedrock that allows for doubt to be possible in the first place. In other words, "propositions evincing knowledge claims belong to the language game, whereas certainty grounds the language game and is a condition of its

possibility” (Stroll, 1994, p. 7). A language game and the meanings it carries emerge from a practical reality or community in which activities take place. The basic certainties are instinctively and immediately relied on. They constitute a certain trust in the world, in the reality of things (Pihlström, 2012). We do not get our picture of the world by testing every propositional statement about the world, nor do we have to satisfy ourselves about the correctness of our beliefs. “No: it is the inherited background against which I distinguish between true and false” (Wittgenstein, 1969, §94). In their work on delusions, Rhodes and Gipps (2008) argue that it is this very prepredicative and prereflective background that allows us to grasp a delusional belief as delusional. Yet it is possible that forms of life or world pictures, and therefore the language games that emerge from them, change. Thus, language games are not universal or invariable. Wittgenstein compares these changes to a changing riverbed: some elements are part of the river, of the ever changing and instable stream, while others are firmly sedimented into the riverbed. Yet, even though there seems to be a strict distinction between the stream and the riverbed, some sediments may shift into the stream, while elements of the stream become part of the riverbed. This means that certain beliefs we hold for undeniable certainties may one day change and become obsolete or lose their status as certainties. Certainly, there are empirical propositional truths we hold, and uncertainties and doubts we may have, but the difference between the two, Wittgenstein argues, is not that strong (Wittgenstein, 1969, §97). Our picture of the world can change, and with it the meanings of the propositions and names of language games change (Wittgenstein, 1969, §65). A clear example thereof in the history of science is the discovery of heliocentrism, or more recently the discovery of genetic material (Kuhn, 1962; Feyerabend, 1993).

Thus, Wittgenstein claims that a language game is a practically learned interconnection of propositions coherently bound together through their use and application. They are not based on any final foundational justification. They rather emerge from a background that reflects forms of life or a world picture. Although the lack of a foundational ground may indicate groundlessness, there are certainties in action and shared forms of life. The exclusion of the formulation of, and doubt about particular propositions enables a language game and the meanings it holds. These propositions function “like hinges” on which the language game turns. The language game thus emerges as a given within a broader background of forms of life, which themselves may change. Wittgenstein’s philosophy itself points to the “hinge propositions,” the undoubted certainties and the inherited background and forms of life. Philosophy practice and writing itself include a multitude of language games. Yet, they help us indicate the limitations, the blind spots, and the uncertainties that are seldom acknowledged. One could even feel unconformable reading about the groundlessness of one’s belief and start to doubt the “rules of the game.” Indeed, as Wittgenstein acknowledges himself: “The difficulty is to realize the groundlessness of our believing” [Wittgenstein, 1969, §166). We will see now how this will help us to understand a vital aspect of psychosis.

First-Person Perspective on Psychosis

In this section, we offer insight into psychosis as based on the experience and descriptions of the second author (hereafter R.S.). A first-person perspective is, however, not entirely

unproblematic. The language one uses to describe these experiences might sound banal or seem incomprehensible. Nevertheless, such descriptions may be attempts to express the breath-taking disorientation and the terrifying confusion psychosis often implies. Philosophy may play an important role here. It can help to examine aspects of reality that usually fall outside of our common-sense understanding and it can help to translate and facilitate the expression of seemingly incommunicable experiences. By applying Wittgenstein's philosophy in particular, we hope to illustrate aspects of the psychotic process from the earliest predelusional alterations past the well-developed delusions. A second problem related to the first-person account is whether the results of our phenomenological examination will be generalizable to other people's psychotic experiences. Although we find indications thereof in our clinical experience, the aim here is to firstly clarify this process based on one account, and only secondarily will we search for generalizability and extrapolation, in much the same way as phenomenological analyses work. To do so, we rely on the notes that R.S. took during psychotic episodes, and we will show how Wittgenstein's vocabulary can be of help to increase our understanding of psychosis. We will firstly encounter the delusional mood, followed by the dialectic of aha and anti-aha experiences, and lastly we will describe blind spots. This will enable us to clarify, in Conclusion: Recovery and Covering the Blind Spots, what the role of philosophy could be in the process of recovery.

Delusional Mood

Delusional mood or delusional atmosphere is the state preceding the development of delusions, in which patients describe experiential changes to the environment, and in which it seems that, somehow, the world acquires new meaning (Ratcliffe, 2013; Fuchs, 2005). Jaspers (1948) first coined the term to emphasize the uncanny and puzzling feeling that something indeterminate is happening. We will illustrate here that this predelusional state concerns more than an altered perception and that, indeed, the delusional mood already illustrates the disconnection from a common language game and from the background that Wittgenstein described.

This predelusional state often has a revelatory character, as Conrad (1958) already noticed and defined as "apophany." During the onset of the first psychosis, R.S. described it in the following way:

> "… it is as if I am looking at reality with other eyes, it almost seems as if I am awakening." (R.S.) "It is a super weird feeling. From one day to the next, even from one moment to another, I can think and reason again clearly… It sort of feels as if I have found a key to something that has been locked for a long while… Because my head is clear, and my process of reasoning seems to function better than ever before, I seem to perceive much more and seem to be capable of much, much more." (R.S.)

To him, it felt as if the world showed itself anew. Although it clearly involved an altered experience, it did not concern or follow from a perceptual change, e.g., a hallucination. There was an increasing subjective tension, accompanied by continuously recurring "insights." These were new ways of looking at things, of understanding problems and situations one has to deal

with, that usually seem self-evident. The recurrent insights during the first delusional mood mostly concerned his personal and relational life, while afterwards the new perspectives included more existential and transcendental matters. One's world picture that enables one to meaningfully experience the worlds, others, and oneself was fundamentally altered. It felt like he could suddenly see things from completely new perspectives. These new perspectives weakened in R.S. the bias through which we consider our own perception, thoughts, and beliefs as objective (Wittgenstein, 1960, p. 43). The rigidity of the language game that normally pervades our lives became questionable (Wittgenstein, 1960, p. 59). While the new perspectives on the world were overwhelming and frightening, there were no easy answers to be found. Although the beginning of the delusional mood mostly entailed questions and perspectives on his personal life, later on everything became doubtful and everything seemed different.

> "I suddenly question everything, and look for confirmation of the multitude of insights that come to mind, just because I literally question everything... The question of The One, the all-encompassing... I can't explain what this feels like. My whole world is upside down." (R.S.)

He felt urged to question everything, from personal motivations to philosophical themes like the principle of unity and temporality. These themes are often found in first-person accounts on psychosis, but they also play an important role in mystic philosophy (Kusters, 2014). In the following quote, one recognizes the need to question what once seemed self-evident.

> "The entire world runs on a time that people have invented. They did this by seeing a certain logic in things (day, night, morning, evening, midday → half of a day). There is a recurrent logic in the way we reason about time... To really realize what time is, you arrive at the eternal questions, namely why does it become dark and light... In this you can go further again. Why does the sun move in front of the moon... And then (I think) you arrive at gravity. Then you can ask, why is there gravity, and then you can try to explain gravity... Like this, you can keep going on until you're not able to grasp things anymore, or someone else sees the logical connections and you are able to understand them. Pi in mathematics? How far can one contain pi, or the absolute truth?" (R.S.)

In striking similarity to these descriptions of the onset of the first psychotic episode, Wittgenstein describes the stream of thoughts of "the man who is philosophically puzzled."

> "The man who is philosophically puzzled sees a law in the way a word is used, and, trying to apply this law consistently, comes up against cases where it leads to paradoxical results. Very often the way the discussion of such a puzzle runs is this: First the question is asked, 'What is time?'. This question makes it appear that what we want is a definition. We mistakenly think that a definition is what will remove the trouble (as in certain states of indigestion we feel a kind of hunger, which cannot be removed by eating). The question is then answered by a wrong definition; say: 'Time is the motion of the celestial bodies.' The next step is to see that this definition is unsatisfactory. But this only means that we don't use the word 'time' synonymously with 'motion of the celestial bodies.' However in saying that we must replace it by a different

one, the correct one. If we are ready to give any explanation, in most cases we aren't. Many words in this sense don't have strict meaning." (Wittgenstein, 1960, p. 27)

Both the psychotic questions in the first quote and the philosophical reflections of Wittgenstein's example reach the limitations of our language games. They stumble upon the background beliefs that seem valid because of their application rather than because of a certain ground or foundation. The concept of time is indeed a clear example of such a background notion. Everyone uses it daily, while at a closer glance few are able to give a satisfying final answer to the question on the nature of time. And for R.S., the common-sense notion of time did not suffice and kept urging further questioning without offering solid ground for answers.

However, the example of time does not suffice to grasp the whole puzzling experience of the delusional mood and of the onset of psychosis. This equally implies losing grip of "the right manner" of seeing things. The language games and the background beliefs constitute social reality as well, and they structure our perception of and interaction with others. The habitual ways we have learned from others and which we have incorporated into our own most personal ideas, convictions, and behaviors may suddenly lose their self-evidence (Blankenburg, 1971). A simple thing like cooking dinner thus becomes an impossible task, irrelevant in light of a changing reality. We consider it crucial that one aspect that determines the devastating experience of psychosis is this fundamental alteration of a framework of meaning and significance, which Wittgenstein called the background. To clarify how the pre-delusional state of confusion, questioning, and insights further evolves into a psychotic breakdown, we introduce what R.S. called the dialectic of the aha and anti-aha experiences.

The Dialectic of Aha and Anti-Aha Experiences

What are the recurrent insights we claim are an essential part of the early psychotic experience? To understand this, Sips (2018) revisited the notion of the aha experience and introduced the anti-aha experience to denote the psychotic process as dialectical. The former involves a sudden insight, understanding, or realization[1] of a previously incomprehensible or even undetected problem. In case descriptions of the predelusional state one can find many examples of the sudden and unexpected aha experience (Fuchs, 2005; Conrad, 1958; Kusters, 2014; Mishara, 2010; Kusters, 2016; Parnas et al., 2016). The aha experience can have both a perceptive and a cognitive dimension. An example of the former would be the shift we experience in the famous "duck-rabbit" image, where one first and only perceives either a duck or a rabbit, and suddenly one sees the other one (Wittgenstein, 1953). A cognitive example would be solving a riddle after a phase of incubation, where one suddenly understands the clue. Another example would be a game of chess, where one can suddenly "see" a possible move or a strategy. This insight is not rationally devised or argued for, but it presents itself to the player. Suddenly the game is seen from a new perspective. Without one piece on the board being

[1]The term "realization" is used to denote a subjective experience of clarity and insight, without any reference to an objective or external truth. 2 See Sass [p. 24 in 24] where he writes that "it has not in fact been sufficiently noted how often schizophrenic delusions involve not belief in the unreal but disbelief in something that most people take to be true."

moved, the game acquires a new meaning for the player. The aha experience in psychosis equally involves a sudden feeling of clarity and, as the first quote in this article illustrates, R.S. experienced it as an "awakening."

There is, however, also an antithetical variation of the aha experience. Sips (2018) defined this anti-aha experience as an experience of sudden insight that does not fit within one's framework, convictions, or worldview. Like the aha experience, it involves a clear and sudden insight, but instead of contributing to one's personal worldview it breaks it down and disconfirms the previous standpoint or convictions. To return to the game of chess, one could have a particular move or strategy in mind that would clearly lead to victory. The feeling one has could then be one of confidence, belief, and certainty about the outcome of the game. Then, suddenly, the opponent makes a move and, unexpectedly, one finds oneself in a checkmate position. In a brief moment, one's perspective on the game is completely changed. The confidence and certainty about the victory are replaced by feelings of disbelief, shock, and defeat. In very similar ways, the anti-aha experience can suddenly devastate earlier beliefs, convictions and a particular perspective that one held to be undoubtedly true. An example thereof is the sudden realization R.S. had that his entire life before the psychotic episode was just as unreal as the experience of psychosis itself. R.S. equally experienced how certain insights could undermine the meaning of things, words, and concepts in such a way that even the foundation of his moral views seemed to become groundless.

We propose to think of the onset of a psychotic episode as involving a dialectal process of aha and anti-aha experiences that dismantle the "nest of propositions" (Wittgenstein, 1969, §225) that forms the background of our existential orientation (Ratcliffe, 2008) and motivates our actions, perceptions, and beliefs. The anti-aha experiences are "insights" that cause shifts in the character of language games and urge reinterpretations of reality or world pictures, possibly resulting from an invalidation of previously held and mostly prereflective convictions or beliefs. Even though a world picture, as we have seen, is an interpersonally constituted framework, it does determine one's most subjective or personal relation with the world (Rhodes et al., 2008, p. 306). Therefore, an alteration in this framework, as we suggest happens in psychosis, equally leads to a drastic change in the totality of one's personal experience and view of the world, as the example of the undermining of the meaning of things, words, and concepts illustrated earlier.

We describe the dialectic between the aha and the anti-aha experience as a process rather than a single event. It is the repeating and recurring character of these oppositional and undermining insights that leads to a feeling of groundlessness. If every new insight shows a different perspective, which perspective is the right one? If a new insight is invalidated by a following one, what is there to be certain about? In contrast to the lack of multiperspectivity within the delusion (Blankenburg, 1991), the predelusional state may thus include an overwhelming multiperspectivity (Schwartz et al., 1997). The sequence of questions and answers ultimately leads, as Wittgenstein already indicated, to a lack of foundation. This, in turn, induces the frightening experience of groundlessness, and a "certain uncertainty" [Müller-Suur, 1950, p. 45). Within the natural attitude of everyday life, we seldom arrive at this conclusion. It even seems that we have a certain resistance against this perspective on reality.

Yet, where Wittgenstein describes that the difficulty "is to realize the groundlessness of our believing" (Wittgenstein, 1969, §166), the early psychotic process seems to show the difficulty to deal with this groundlessness without finding any appropriate answer.

Blind Spots

One way to understand the realization of groundlessness is to focus on "blind spots." Blind spots are those elements that determine a language game and that we are (or can be) blind to in our everyday interactions. To reiterate the game of chess, a blind spot could be a possible move on the board that one just did not see. Yet, our blindness to the craftsmanship with which the pieces and the board are created, while we only see the game unfold itself, even more so indicates what we describe with the concept of blind spot. Similarly, in order to properly function within a language game we must (at least partially or temporally) be blind to a lot of its possibilities. To adequately drive a car in traffic, we immediately need to grasp the signalization on the street instead of contemplating the color of a particular signpost, questioning the material of the car in front, or focusing on the license plates of the cars passing by. This exclusion is helpful and necessary, and insight into these other possibilities is not necessarily problematic. However, the blind spots may also include the "hinge propositions" (Wittgenstein, 1969, §342) on which a whole language game turns and which are excluded from doubt, like the self-referential spiral that is inherent in human self-consciousness (Byers, 2011).

As we now know, these blind spots are seldom perceived or acknowledged in our self-evident and commonsense relation to the world. In fact, it is impossible to remain within a particular language game and nevertheless perceive and describe these blind spots. Furthermore, approaching a blind spot, or suddenly becoming aware of one, leads to resistance or even anxiety, urging one to ignore or forget it. William Byers (Byers, 2011) described this as "shocking and disturbing." In psychosis, the dialectical process of aha and anti-aha experiences and the groundlessness resulting therefrom can lead to a realization of blind spots. This is an experience which is described to be disorienting and it implies a particular loosening of the ties with others and with the everyday world. What used to give direction to one's life can get lost in the psychotic process. In the earlier example, the groundlessness of words, concepts, and morality which R.S. experienced urged an existential crisis, devaluating his personal convictions and paralyzing him to make concrete decisions in everyday life.

The experience of blind spots is thus not some mystical insight into the absolute truth. It rather concerns essential structures of the language game, the world picture, and the background. The psychotic process entails a particular step out of the closed language game. The blind spots show how a personal familiarity one has acquired with the world may be based on only one perspective, but that this particular perspective equally excludes other ways of seeing, living, being, and thinking. The being-at-home in the world, or the life form, suddenly changes through this realization. If this changes, the whole meaningful and personal life narrative one has constructed becomes questionable. Every process of growth into adulthood, and certainly further on, includes these changes as well, but it firstly does so in a less intense and less devastating way, and secondly it does so while offering a new framework that is shared

with others. In psychosis, however, the realization of certain blind spots through the experience of groundlessness leaves a person devastated and alone to deal with it.

One historical nonpathological example that may help to grasp this idea of the blind spot, and the impact its realization may have, is found in the famous letter Bertrand Russell wrote to Gottlob Frege on his discovery of the paradox which would show that the axioms Frege was using to formalize logic were, in fact, inconsistent (Russell, 1967; Bell, 1980). The whole system Frege had constructed as a foundation for mathematical and thus scientific knowledge collapsed. In a time when many considered logic and mathematics to be the only scientific way to knowledge and truth, the discovery of the blind spot in Frege's work led to pure consternation and Frege long after attempted in vain to undo the damage to his system of certainty (Dummett, 1981). Another example is solipsism, or the idea that only one's own mind or self is real, while the reality of others is questioned. This idea is reported to be often present in psychotic experiences (Sass, 1994; Parnas & Sass, 2001). It is difficult for anyone to defy solipsism purely on the basis of rational arguments instead of using one's "basic trust" that, in the end, the world and the others do exist independently. It becomes that much harder when this "insight" is accompanied by actual feelings of disconnection from others and the once undoubtable trust becomes fragile (Van Duppen, 2017). Our self-evident world picture, however, mostly ignores such ideas. These are insights which we would rather not have and which we may even deliberately attempt to forget.

The uncovering of the blind spots, urged by the aha- and anti-aha dialectic and driven by the tension of the delusional mood, may then give rise to the formation of delusional certainties. In a way, delusions may be ways of idiosyncratically making sense of the chaos that this predelusional state is causing (Gipps & Rhodes, 2008; Stanghellini, 2008; Fuchs, 2010). In this process, the alterations that shake the scaffolds of the language games and world picture serve as a matrix for the crystallization of delusional certainties – certainties that are, however, intrinsically unshareable.

Conclusion: Recovery and Covering the Blind Spots

By combining Wittgenstein's ideas with a first-person account of psychosis, it has become clear that the early psychotic process can break the "nest of propositions" (Wittgenstein, 1969, §225) that forms the background of our existential orientation (Ratcliffe, 2008) and motivates our actions, perceptions, and beliefs. We argued that the dialectic of aha- and anti-aha experiences transgresses the boundaries of language games, imposing a multiplicity of perspectives on reality which leads to the experience of groundlessness and blind spots. A consequence of this process is that it is an isolating experience, where one is left alone to face these devastating insights. While the doubts and uncertainties of other people generally remain within the commonsensical language game, the early psychotic uncertainty can question and undermine this commonsensical language game and the world picture in which it is embedded itself.

We consider the delusional mood, the dialectic of aha- and anti-aha experiences, and the uncovering of blind spots to be intertwined moments of the predelusional state. This means that we cannot distinguish a clear chronology or etiology and, consequentially, we find no arguments to support any of the prominent 2-step models of delusion formation that either

claim that perceptual disturbances lead to cognitive disturbances or the other way around. In our account the perceptual, the cognitive, the prereflective, and the reflective aspects of psychosis are tightly interwoven. What all of these alterations together entail is a radical reorientation in the lived world. We will now focus on possible consequences of this account for recovery.

The treatment of psychosis mainly focuses on the acute positive symptoms, like hallucinations and delusions (Kuipers et al., 2014), and thereby mostly overlooks possible preceding psychotic alterations that may outlast the positive symptoms. The experience of groundlessness and of blind spots is in our view, however, an essential aspect of the early psychotic process, which can remain present long after the delusions have dissolved. One reason why this may be the case is that these insights are often so idiosyncratic that they are experienced as unshareable, or that one fears these ideas to be incomprehensible, an attitude sometimes reflected in the lack of understanding by others. Therefore, from a therapeutic standpoint, acknowledging the blind spots and exploring the depth of the impact of the anti-aha experiences can be a first step to resolving the isolation. If recovery indeed implies social cover (Schlimme & Schwartz, 2012), "covering" the blind spots would be appropriate. Attempts to face and understand these insights can decrease their devastating impact (Vassiliou, 2016). Philosophy facilitates such an exploration, as it can offer a language for those experiences, thoughts, and insights.

Although philosophy may be helpful to some, it is plausible that it would not benefit others. Moreover, the shared explorations we assume to be helpful only explicitly target the propositional and reflective aspects of psychosis, while we consider the prereflective and non-propositional to play a significant role as well. Recovery, in our view, does not primarily imply "regaining insight" or "reality testing." We certainly agree with Rhodes and Gipps (2008, p. 308) and with Ghaemi (2008) who have argued that a Wittgensteinian understanding of psychosis indicates that only focusing on reflective or cognitive therapy is not expected to change much to the background alterations, nor will it enable the reestablishment of one's habitual ways of being. It seems crucial to renew the possibility of sharing the world with others and connecting to these others in a prereflective manner as well. They can offer structure and trust in the world, helping the patient to find solid ground in interpersonal relations. If we follow Wittgenstein's idea that the ground of our language games is our ungrounded way of acting, and if we consider the psychotic process able to break the "nest of propositions" that forms language games, then therapy for psychosis should focus in particular on shared, interpersonal activities – activities which Wittgenstein considers ungrounded but which themselves, through their interpersonal character, may rebuild basic trust in others, in the world, and in oneself through certainty in action and thereby offer at least some ground to recover on.

References

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). American Psychiatric Publishing.

Bell, D. (1980) Russell's Correspondence with Frege. Oxford, Blackwell.

Biletzki., A., Matar, A. (2008). Ludwig Wittgenstein. Stanford, Metaphysics Research Lab, Stanford University.

Blankenburg, W. (1969). Ansätze zu einer Psychopathologie des "Common Sense". *Confin Psychiatr*, 12, 144–163.

Blankenburg, W. (1971) Der Verlust der Natürlichen Selbstverständlichkeit: Ein Beitrag zur Psychopathologie symptomarmer Schizophrenien. Stuttgart, Enkel.

Blankenburg, W. (1991) Wahn und Perspektivität: Störungen im Realitätsbezug des Menschen und ihre Therapie. Stuttgart, Enke.

Broome, M. (2012). Reality, realness, and the natural attitude. *Philos Psychiatr Pschol,* 19, 115–118.

Byers, W. (2011) The Blind Spot: Science and the Crisis of Uncertainty. Princeton, Princeton University Press.

Conrad, K. (1958). Die beginnende Schizophrenie: Versuch einer Gestaltanalyse des Wahns. Stuttgart, Thieme.

Dummett, M. (1981). Frege: Philosophy of Language. Cambridge, Harvard University Press.

Feyerabend, P. (1993). Against Method. London, Verso.

Fuchs, T. (2005). Delusional mood and delusional perception: a phenomenological analysis. *Psychopathology*, 38, 133–139.

Fuchs, T. (2007). The temporal structure of intentionality and its disturbance in schizophrenia. *Psychopathology*, 40, 229–235.

Fuchs, T. (2010). Phenomenology and psychopathology; in: Gallagher, S., Schmicking, D. (eds.) Handbook of Phenomenology and the Cognitive Sciences. Dordrecht, Springer, pp 547–573.

Fuchs, T., Van Duppen, Z. (2017). Time and events: on the phenomenology of temporal experience in schizophreniac(ancillary article to EAWE Domain 2). *Psychopathology,* 50, 68–74.

Ghaemi, S.N. (2008). No one is psychotic in my presence. *Philos Psychiatr Psychol* , 15, 315–319.

Gilman, S.L. (1983). Why is schizophrenia "bizarre": an historical essay in the vocabulary of psychiatry. *J Hist Behav Sci*, 19, 127–135.

Gipps, R.G., Rhodes, J. (2008). The background theory of delusion and existential phenomenology. *Philos Psychiatr Psychol,* 15, 321–326.

Henriksen, M.G. (2013). On incomprehensibility in schizophrenia. *Phenomenol Cogn Sci,* 12, 105–129.

Jaspers, K. (1948). Allgemeine Psychopathologie, ed 4. Berlin, Springer.

Johns, L.C., van Os, J. (2001). The continuity of psychotic experiences in the general population. *Clin Psychol Rev*, 21, 1125–1141.

Kraepelin, E. (1904). Psychiatrie: Ein Lehrbuch für Studierende und Ärzte, 7. Vielfach umgearbeitete Auflage. Leipzig, Barth, 1904, vol 2.

Kuhn, T.S. (1962). The Structure of Scientific Revolutions. Chicago, The University of Chicago Press.

Kuipers, E., Yesufu-Udechuku, A., Taylor, C., Kendall, T. (2014). Management of psychosis and schizophrenia in adults: summary of updated NICE guidance. *BMJ*, 348:g1173.

Kusters, W. (2014). Filosofie van de waanzin. Rotterdam, Lemniscaat.

Kusters, W. (2016). Philosophy and madness: radical turns in the natural attitude to life. *Philos Psychiatr Psychol*, 23, 129–146.

Mishara, A.L. (2010). Klaus Conrad (1905–1961): delusional mood, psychosis, and beginning schizophrenia. *Schizophr Bull*, 36:9–13.

Moyal-Sharrock, D. (2003). Logic in action: Wittgenstein's logical pragmatism and the impotence of scepticism. *Philos Invest*, 26, 125–148.

Moyal-Sharrock, D. (2013). Wittgenstein's razor: the cutting edge of enactivism. Am *Philos Q,* 50, 263–279.

Müller-Suur, H. (1950). Das Gewissheitserlebnis beim schizophrenen und beim paranoischen Wahn. *Fortschr Neurol Psychiatr*, 18, 44–51.

Nuevo, R., Chatterji, S., Verdes, E., Naidoo, N., Arango, C., Ayuso-Mateos, J.L. (2012). The continuum of psychotic symptoms in the general population: a cross-national study. *Schizophr Bull*, 38, 475–485.

Parnas, J., Sass, L.A. (2001). Self, solipsism, and schizophrenic delusions. *Philos Psychiatr Psychol*, 8, 101–120.

Parnas, J., Henriksen, M.G. (2016). Mysticism and schizophrenia: a phenomenological exploration of the structure of consciousness in the schizophrenia spectrum disorders. *Conscious Cogn,* 43, 75–88.

Penn, D.L., Kommana S, Mansfield M, Link BG. (1999). Dispelling the stigma of schizophrenia. The impact of information on dangerousness. *Schizophr Bull* ,25, 437–446.

Pihlström, S., (2012) A new look at Wittgenstein and pragmatism. *Eur J Pragmat Am Philos*, p 4.

Ratcliffe, M. (2008). Feelings of Being: Phenomenology, Psychiatry and the Sense of Reality. Oxford, Oxford University Press.

Ratcliffe, M. (2012). Phenomenology as a form of empathy. *Inquiry*, 55, 473–495.

Ratcliffe, M. (2013) Delusional atmosphere and the sense of unreality; in: Stanghellini, G., Fuchs, T. (eds): One Century of Karl Jaspers' General Psychopathology. Oxford, Oxford University Press, pp 229–244.

Rhees, R. (2008). Wittgenstein's On Certainty: There – Like Our Life. Wiley.

Rhodes., J., Gipps, G.T. (2008). Delusions, certainty, and the background. *Philos Psychiatr Psychol*, 14, 295–310.

Rössler W., Riecher-Rössler A., Angst, J., Murray, R., Gamma, A., Eich, D., van Os, J., Gross, VA. (2007) Psychotic experiences in the general population: a twenty- year prospective community study. *Schizophr Res,* 92, 1–14.

Russell, B. (1967). Letter to Frege; in van Heijenoort, J. (ed.): From Frege to Gödel. Cambridge, Harvard University Press, pp. 124–125.

Sass, L.A. (1994). The Paradoxes of Delusion: Wittgenstein, Schreber, and the Schizophrenic Mind. New York, Cornell University Press.

Schlimme, J.E., Schwartz, M.A. (2012). In recovery from schizophrenia: regaining social cover: a phenomenological investigation. *Psychopathology*, 46, 102–110.

Schwartz, M.A., Wiggins, O.P., Spitzer, M. (1997). Psychotic experience and disordered thinking: a reappraisal from new perspectives. *J Nerv Ment Dis,* 185, 176–187.

Schwartz, M,. Wiggins, O., Naudin, J., Spitzer, M. (2005). Rebuilding reality: a phenomenology of aspects of chronic schizophrenia. *Phenomenol Cogn Sci* 4, 91–115.

Seikkula, J., Olson, M.E. (2003) The open dialogue approach to acute psychosis: its poetics and micropolitics. *Fam Process,* 42, 403–418.

Sips, R. (2018). Psychosis as a dialectic of Aha- and Anti-Aha-experiences. *Schizophr Bull,* DOI: 10.1093/schbul/sby072.

Stanghellini, G. (2008). Schizophrenic delusions, embodiment, and the background. *Philos Psychiatr Psychol*, 15, 311–314.

Stanghellini, G., Langer, Á.I., Ambrosini, A., Cangas, A.J. (2012). Quality of hallucinatory experiences: differences between a clinical and a non-clinical sample. *World Psychiatry*, 11, 110–113.

Stanghellini, G. (2013). The ethics of incomprehensibility; in Stanghellini, G., Fuchs, T. (eds). One Century of Karl Jaspers' General Psychopathology. Oxford, Oxford University Press, pp 166–181.

Strauss, J.S.. (1969). Hallucinations and delusions as points on continua function: rating scale evidence. *Arch Gen Psychiatry*, 21, 581– 586.

Stroll., A. (1994). Moore and Wittgenstein on Certainty. Oxford, Oxford University Press.

Van Duppen, Z. (2016). The phenomenology of hypo- and hyperreality in psychopathology. *Phenomenol Cogn Sci*, 15, 423–441.

Van Duppen, Z. (2017). The intersubjective dimension of schizophrenia. *Philos Psychiatr Psychol.*, 24(4), 399-418.

van Nierop, M., van Os, J., Gunther, N., Myin-Germeys, I., de Graaf, R., ten Have, M., van Dorsselaer, S., Bak, M., van Winkel, R. (2012). Phenotypically continuous with clinical psychosis, discontinuous in need for care: evidence for an extended psychosis phenotype. *Schizophr Bull,* 38, 231–238.

van Os, J., Hanssen M., Bijl, RV., Ravelli, A. (2000). Strauss (1969) revisited: a psychosis continuum in the general population? *Schizophr Res* 45, 11–20.

Varga, S. (2012). Depersonalization and the sense of realness. *Philos Psychiatr Psychol,* 19, 103–113.

Vassiliou, A. (2016) The Intersubjective Arena of the Psychotherapy for Psychosis: A Phenomenological Account of Therapists' Experiences. London, Middlesex University London, 2016.

Wittgenstein, L. (1922). Tractatus Logico-Philosophicus. London, Kegan Paul, Trench, Trubner, 1922.

Wittgenstein, L. (1953). Philosophical Investigations. Oxford, Blackwell.

Wittgenstein, L. (1960). The Blue and Brown Books: Preliminary Studies for the "Philosophical Investigations." New York, Harper Perennial.

Wittgenstein, L. (1969). On Certainty. Oxford: Blackwell.

Yung, A.R., Nelson, B., Baker, K., Buckby, J.A., Baksheev, G., Cosgrave, E.M. (2009). Psychotic-like experiences in a community sample of adolescents: implications for the continuum model of psychosis and prediction of schizophrenia. *Aust NZ J Psychiatry,* 43, 118–128.

Chapter 6: Psychosis and intersubjectivity: Alterations in social relations throughout psychotic crises

Published as:

Sips, R., (2020), Psychosis and intersubjectivity: Alterations in social relations throughout psychotic crises, In: Kusters, W., Pienkos, E., Sips, R., Feyaerts, J., *Beyond adaptation, beyond the negative. Phenomenological reflections on schizophrenic existence.*, Utrecht: Stichting Psychiatrie en Filosofie. *(paper based on a conference presentation at ISPS 2019)*

Psychosis and intersubjectivity:
Alterations in social relations throughout psychotic crises

Introduction

There remains a tension between the conception of psychosis as a disorder of intersubjectivity and psychosis as a self-disorder, in regards to the questions of how these different levels determine one another. Should we regard psychosis as the result of a disposition "in the individual" that causes disturbances in different dimensions of the intersubjective atmosphere, that in turn leads to a self-disorder? Or *is* the so called "ipseity disorder" (Sass, 2014) a disposition underlying a disturbed intersubjectivity? I argue in this paper that we should go beyond this dichotomy and consider that psychosis as an ipseity disorder, or a disturbance of an open subjectivity can often be better understood from the actual context and life situations of individuals, where their relations with others and alterations in these relations can be driving factors towards a radical disconnection with a sense of self and psychotic breakdowns. If this turns out to be the case, this might beg the question if instead of phenomenological analyses, we actually need empirical research that really captures the intersubjective and social life of individuals to answer this question.

Psychosis as a disorder of intersubjectivity

In his doctoral dissertation on the phenomenology of intersubjectivity and its application to schizophrenia, Van Duppen argued that the phenomenological tradition has relatively neglected intersubjectivity disturbances in schizophrenia, with a few exceptions (Van Duppen, 2016). Van Duppen's analysis offers a starting point from which our reflection on psychotic disorders in regards to the intersubjective dimension can take off. Van Duppen described schizophrenia, making use of Husserlian phenomenology, as a disturbance of open subjectivity. For Van Duppen, the self-disorder hypothesis of psychosis as an "ipseity disorder" is unable to fully integrate intersubjectivity disturbances. Van Duppen argues that the concept of "open subjectivity" can help us better describe essential alterations in schizophrenia and understand the "normal" relation between the self and others.

On the one hand, open subjectivity is argued to refer to the alterity of the other, while on the other hand, for Van Duppen, it refers to the fact that we remain "other", a spatio-temporal distinct self, despite our attempts at understanding and despite the mutual reciprocal influence on our experience. Van Duppen defines open subjectivity essentially as the attitude, capacity or orientation of each subject in relation to others. This relation, he characterizes as the openness of a subjective primordial sphere. For Van Duppen, this openness is what allows for the integration of intersubjective elements into our own individual subjectivity, without our sense of self (or alterity) dissolving.

Disturbances of an open subjectivity, following Van Duppen, can lead to three components of the self-disorder: diminished self-affection, hyper-reflexitivy and a loss of grip. Van Duppen convincingly argues for an intersubjective approach to schizophrenia in addition

to schizophrenia as a self-disorder. There, however, remain questions on the role these intersubjective elements play in the genesis of psychosis.

Pre-psychotic disconnection and alienation (1): Minkowski's *trouble générateur*

Eugène Minkowski argued that the goal for a phenomenological investigation in psychopathology consists in a search for in depth factors that permeate a disorder. These factors and their coherence, he called a "trouble générateur". Hereby, he meant to refer to a kernel underlying manifest symptoms in all their diversity, that keeps these interconnected or united and is generative for a disorder (Urfer, 2001). For Minkowski, like for Van Duppen, schizophrenia is fundamentally characterized by a disturbance in intersubjectivity.

For Minkowski, a *loss of vital contact with reality* is the most fundamental characteristic of schizophrenia (Minkowski, 1921; Parnas & Bovet, 1991; Urfer, 2001). This vital contact with reality (VCR) refers to a certain mode of relatedness of a person and his inner and outer world, and is modelled on Bergson's concept of *élan vital* (Urfer, 2001). With the concept of élan vital, Bergson referred to the ability of a core self or personality to enter into harmonious relations with a constantly changing world. Both poles of this relation, the ambient world and the subjective dynamism, are in a continuous flux of becoming, with a mutual intertwining "interface" that creates a space of a dynamic and reciprocal exchange (Bergson, 1907). VCR, for Minkowski, enables us to adjust and modify our behavior by providing a pre-reflective sense of limits and proportions, in a contextually relevant manner. VCR furthermore fuels our individual future directed orientation that serves as a structuring dimension of human existence.

For Minkowski it is the loss of vital contact with reality that is the general *trouble générateur* in schizophrenia. Briefly summarized, this loss of VCR for Minkowski refers to a process of desynchronization, where individuals no longer take part in a collective or ambient becoming. As a consequence of the so-called *trouble générateur*, individuals no longer are able to "resonate with" or "attune to" others, a process Minkowski denoted in its normal functioning as "synchronism".

To clarify how this VCR or élan vital is disturbed in schizophrenia, Minkowski made use of Bleuler's dichotomy between *schizoidia* versus *syntonia*. With these concepts, Bleuler wanted to describe vital principles of life. Schizoidia, on the one hand, was described by Bleuler as the principle of withdrawal or turning back to oneself (Van Duppen, 2016). With the concept of syntonia, Bleuler wanted to emphasize the openness to remain in contact with the environment and taking part in social life (Urfer, 2001). For Minkowski, schizophrenia is characterized by the schizoid existential pattern as the fundamental mode underlying the loss of VCR. From this perspective, schizophrenia is a consequence of a specific schizoid or autistic *vulnerability* or *disposition*, not seen as a sufficient but as a necessary condition. For Minkowski, it is thus the dominance of the schizoid existential pattern that is disruptive of the élan vital or healthy movement, disturbing an attunement between a "private rhythm" and a "shared rhythm". Minkowski thereby places the *trouble générateur* in the schizoid existential pattern brought forth by "autistic defects" (Urfer, 2001). In other words, with Minkowski we

find the problem underlying schizophrenia characterized as a disposition "in the individual", not as sufficient but as a *necessary* condition.

Pre-psychotic disconnection and alienation (2): Blankenburg's loss of "natural self-evidence"

With the German phenomenologist Wolfgang Blankenburg, we find an approach that focusses on disturbed capacities but that places a different emphasis then Minkowski. Blankenburg characterized psychosis, and particularly schizophrenia, as a loss of certainty with regards to common sense or a loss of natural self-evidence (Blankenburg, 1971). Blankenburg argued that this loss frequently begins with a barely observable decline in the ability to "take things in their right light". Based on interviews, Blankenburg observed with his patients a withering away of a sense of tact, a feeling of what the proper sense to do is in a certain situation, a loss of awareness of current fashions and a general indifference towards what is disturbing for others (Blankenburg, 1971).

For Blankenburg, this general indifference towards others is crucial. Although his emphasis clearly differs from that of Minkowski, we can find a clear resemblance. Like Minkowski, Blankenburg argues that an underlying deficit, expressed later in life as opposed to from childhood, is the generating deficit of psychosis. For Blankenburg the capacity withering away is that underlying common sense and the loss thereof, in contrast to a schizophrenic autism.

The loss of common sense that Blankenburg describes is not only a loss in regards to what is suitable, but is also a loss of the ability to estimate what others may think (c.f. Frith's TOM or mentalizing) or what the situation asks of them. At first, patients become unable to follow (the often essentially uncertain and context dependent) "rules of the game of interpersonal behavior" (Blankenburg, 2001). In this stage, according to Blankenburg, *"judgements, emotions, reactions and actions, which thereby result, no longer have any relation to social reality."* (Blankenburg, 2001). Furthermore, he adds, it is not uncommon that relatives of patients report that at the beginning of their psychotic disorder, patients begin raising questions about the most ordinary self-evident things (Blankenburg, 2001). To the common sense of the healthy person, Blankenburg argues, these questions are the most natural, obvious and well understood aspects of life.

In regards to the intersubjective dimension, however, Blankenburgs' analysis begs the question if this perspective really holds. While the "material" world appears self-evident in its possibilities of action that it affords, the intersubjective dimension is inherently ambiguous, fragile and uncertain[1] and extremely diverse.

With Blankenburg, the intersubjective dimension of psychosis is described from the perspective of common sense, or the capacity underlying natural-self evidence and making possible our interactions in a world we share with others. This capacity enables us to see things "in the right light", and is a necessary condition for a process of intersubjective attunement.

[1] Formulation based on comments of Jasper Feyaerts, who clearly pointed out this problematic aspect of Blankenburg's interpretation.

Like Minkowski, Blankenburg searched for an underlying essential alteration, or *trouble générateur*, which he sees as a disturbance of an underlying capacity or disposition, detectable from the early stages of onset.

Similar to the view of Minkowski, Blankenburg considered self-being to be a dialectical process, which he relates to intersubjectivity and natural self-evidence (Van Duppen, 2016). This dialectic resonates with Minkowski use of the dialectical notion of *élan vital* and the rhythm dynamism between schizoidia and syntonia, that in a healthy balance moves between a private and a shared rhythm, while in psychotic disorders in this view this balance tends to the schizoidic retreat. For Blankenburg, like for Minkowski, self-manifestation is a matter of stabilization or “fitting in” on the one hand, while it is also a matter of breaking free or differentiating oneself from the other (Van Duppen, 2016). Self-evidence is for Blankenburg a pre-predicative, pre-reflective “basic trust” underlying a stable self-manifestation.

Although the analysis of Blankenburg might be an accurate phenomenological representation of the psychotic process in the subject, one might again argue that we lack a “real” intersubjective context in which these experiences arise, for these concepts to be interpreted meaningfully.

“Loss of vital contact” as intersubjective process in an existential context

The phenomenological approaches on intersubjectivity described in this paper have in common that, although they describe an aspect of the intersubjective dimension in psychosis, we lack a framework for adequately contextualizing these processes and applying them in a *genetic* (in the sense of originating) understanding that we can apply to particular cases. As in the view of psychosis as a self-disorder or ipseity disorder, a disturbance “in the subject” – a disposition (e.g. autistic schizophrenia), a capacity (e.g. that underlies common sense) or an orientation (e.g. open subjectivity) - is argued to be the *trouble générateur* or grouping kernel of symptoms in schizophrenia. This should not come as a surprise, given the fact that phenomenology originally has as its study object the *eidetic* (or invariable) structure of consciousness (or the ontological dimension) as experienced from the first-person view. Disturbances of the intersubjective atmosphere appear to be regarded as primary factors, preceding disturbances in the subject. A tendency towards a retreat from the intersubjective world (cf. Minkoswky), a loss of the capacity to engage with the intersubjective world (cf. Blankenburg) or a closure of the subjective sphere (cf. Van Duppen) are argued to be generated by an underlying disturbance of the subjective sphere, impacting the intersubjective sphere.

In line with these phenomenological approaches, modern empirical research likewise speaks of dispositions (e.g. schizotypy) or sensitivities (e.g. stress sensitivity, psychosis sensitivity) that are argued to be triggered by contextual and situational factors. Many empirical studies have found contextual and situational factors, like child abuse, trauma, city life or migration to be risk factors for psychosis and have argued that it is the combination of these risk factors with individual predispositions or genetic setup to psychosis that trigger psychosis (Barrantes-Vidal, Grant, & Kwapil, 2015; Morgan, Charalambides, Hutchinson, & Murray, 2010; Myin-Germeys & van Os, 2007; Read, Van Os, Morrison, & Ross, 2005). Although contextual and situational factors are taken into account as acting on the person with

the disposition, psychotic disorder remains something already "in the individual", triggered by environmental factors.

These approaches, however, appear to offer us a rather linear way of understanding the development of psychotic disorders. Pienkos (2015) argued in her analysis of intersubjectivity in schizophrenic experience (Pienkos, 2015) that it is highly plausible that interpersonal disruptions play an important role in the genesis of anomalous experiences – like derealization, solipsism and paranoia. In the case descriptions that follow, I follow Pienkos (2015*)* and argue that the intersubjective dimension of psychosis may very likely play an important role psychotic experiences like derealization or paranoia (Pienkos, 2015). In the first place, the direction of the linearity is thereby reversed, and the existential intersubjective dimensions in which the subject is embedded is argued to play an important role as *trouble générateur*. Specifically, I argue that it might be worthwhile to consider the *development* or genesis of psychotic disorders from the perspective of social, intersubjective and existential in contrast to a priory emphasizing the primacy of an "underlying" biological, social or subjective problem.

Breakdown of atmosphere of trust

Basic trust appears to be a necessary condition underlying a common-sense orientation to the world shared with others. This basic trust is necessary for every intersubjective encounter and can, as I will further on argue, be radically undermined through alterations in dynamically changing relations between people. In his doctoral dissertation, Earnshaw (2011) argues that a basic trusting attitude enables common sense interactions with others and reality (Earnshaw, 2011). Earnshaw argues that any human activity requires an openness to vulnerability (cf. open subjectivity or élan vital) or an "atmosphere" of trust as a necessary background. A social practice of trust, for Earnshaw, underlies and enables everyday activities. This "atmosphere of trust" is meant as an epistemic frame or a frame of practical knowledge in our everyday interactions. According to Earnshaw, "*the practice of trusting 'frames' the interaction and keeps certain possibilities out of consideration"*(Earnshaw, 2011).

To borrow an example from Earnschaw's thesis, if we take a taxi we need to trust in the expectation that the taxi driver will deliver us to the point we need to be or that a restaurant does not poison our food (Earnshaw, 2011). Implicitly, he argues, we rely on feelings that tell us if we should act in a manner that does or does not make us vulnerable to others, or enables others to permeate the boundaries of our subjective sphere. Earnshaw argues that in paranoid delusions we see an exponential growth of possibilities due to a breakdown of this atmosphere of trust, and like Blankenburg, that this atmosphere of trust as well underlies and anchors the self-evidence of common sense.

In the cases that follow, based on interviews we conducted in a qualitative study at the Center for Contextual Psychiatry (CCP), we use the conception of a breakdown of fundamental trust to show effects on a sense of self, others and reality as such. We offer concrete individual cases and concrete situations that show how this fundamental trust can be affected, to bring to life the preceding philosophical and theoretical analyses. These examples present us, compared to the notion of an underlying disposition, with glances on different perspectives whereby the intersubjective atmosphere and alterations therein appear to affirm to be driving factors in

different aspects of psychotic breakdowns – as Pienkos (2015) has suggested. Intersubjectivity is thus approached in regards to how this dimension, in concrete life circumstances, influences and determines the subjective sphere of concrete existing individuals. The three cases discussed demonstrate different aspects of the role of intersubjectivity in relation to a fundamental, basic trust. Participants were ascribed an alias to guarantee anonymity.

CASE DESCIPTIONS

(1) Preceding psychosis: Patti

In interviews, participants were asked to sketch the context in which their first psychotic episode took place, and then to proceed from these experiences. Quite often, as is the case with Patti, individuals pointed to a very specific context or to certain situations that they felt where crucial to understand the development of their psychotic experiences. Patti, a woman in her fifties, in detail described the context in which her first psychotic episode took place. At first, she gives a more phenomenological subjective rendition of how her experiences changed and explains how she is unable to point to any moment as the moment she was really psychotic. She explains how she felt "*being driven from the inside*" by something, and described how she lived on the streets. Then, her narrative starts shifting to how she was completely isolated from others.

> "But it is mostly my thinking and my behavior that changed very much. I retreated from others, uhm… in myself. Almost nobody had contact… was able to make contact with me." (Patti)

When discussing further her life situation and context, the attention shifts to the romantic relationship she was in at the time. She describes how her partner soon turned out to be an abusive, controlling and manipulative person that isolated her from her friends and family. She explains how she had a lot of fears for him and his brother and how she tried to leave him 5 or 6 times. At every attempt, she ends back with her partner that promises change and continues her unhealthy relation. She explains how this leads her to desperation and eventually her reality completely falling apart.

> "Uhm… How can I get out of this? What can I do? How can I organize my life differently? But within the psychosis, I became more and more chaotic and chaotic. Reality fell completely apart. As if it were a thousand pieces. It was a constant looking for something to hold on to. Like, how do I relate here? What is this? And then, yes, everything had meaning and nothing had meaning." (Patti)

Continuing the interview, Patti described more in detail the situation and relation she was in. She explained how she met a man 17 year older then her at that time. In her account, this man had sort of "framed her" by telling her to come live with him, so she would not have to pay rent anymore. She could live with him for free. At that moment, she still had an interpersonal live with social contacts and had only recently left her parents' home, with whom she still was in contact. When she moved in with her partner, he demanded her to go to the welfare office and

lie about her housing situation so the man would receive the money the welfare office would offer her.

> "I was forced to live according to rules and norms that were not mine, and had to adapt to someone with a narcistic personality that determined everything for me. (...) I started with the determination: "I am living a lie. No one knows we have a relationship, or it cannot be known, we allegedly live separate." (Patti)

Thereby, she was forced to act against rules and norms and became afraid to speak about this to friends and family, not able to invite them or speak to them about her situation. This isolated her more and more. Her partner determined and controlled every aspect of her life, she explains.

> "And it was really looking for... who am I and what is... mine? He bought my clothes, he bought my soap, he determined... uhm... the books I read, uhm... all of it he determined. And then I started to look around and realize: "but that is all him, that is not me!"" (Patti)

Apart from isolating her from friends and family, the control of her partner over her material environment started to estrange her from her sense of autonomy, freedom and self-determination.

Social isolation, cut off from ambient becoming

This lie she feels she is forced to live and in which she feels to be stuck leads to a complete isolation from her friends and family. She explains no longer *"to be in accordance with nothing or no one anymore"*.

> "I had no friends, no contact with my family. All these points of reference, and all that support that... when you are feeling bad, you always have someone to call, to which to say... "I am feeling really... bad... (...) The complete loneliness as well. It started to take its toll... I had no contact with nothing or no one anymore. There was no accordance with nothing or no one anymore." (Patti)

The experiences Patti describes point towards the social conditions and specific intersubjective situation preceding her psychotic breakdown. Patti discussed retreating from the intersubjective world, but clearly indicated this to be a consequence of the lie she was forced to live. She felt she could not share her life situation with her friends and family, did not see them or speak with them anymore and as a result these contacts diminished.

Sense of self, common sense and vital contact with reality

From her descriptions, it became clear that the longer she remained in this situation, the worse her situation became. After 20 years, she explained, it had become an unbearable weight on her sense of being. Eventually, a very basic and fundamental (ontological) trust appeared to completely vanish, affecting her sense of self, and how she related to others, objects and even reality as such.

> "It actually went so far as… Uhm…: "Ok, if my life is a lie, then my identity now is also a lie. And if my identity is a lie, on what can I still trust then? That the identity card that I am holding is real?" (Patti)

Patti described how she started throwing away all of her belongings, that she felt were not a part of who she really was, but were forced on her by her abusive partner. These objects, she described, where for her a material representation of the situation she was desperately stuck in.

> "And more and more… it got quite extreme, from throwing away books, clothes… The only thing I still had after was the clothes I had on. And that, for example, was the only thing I had bought myself." (Patti)

Patti described how her psychosis was something that arose over and resulted from a long period of abuse, social deprivation, loss of autonomy and self-determination and so on. Further in the interview she described what she considered to be a tipping point where all grip was lost completely. She explained how she desperately started to wander barefoot on long walks, through forests and to churches, hoping to find some meaning or sense to hold on to. As described earlier, she felt something was driving her from the inside, in search for answers and very likely a way out of her desperate situation.

> "I visited hundreds of churches, just to see like… okay… "What….? What do You want to tell me? What is behind all this symbolism? The cross…? I mean… All these meanings, trying to find out what they can mean. What does the suffering of Christ mean? Uhm… What is ecce homo? (…) My feet were completely open because I was constantly walking. I got anger attacks. … There just wasn't any structure in my life anymore. Nothing… Everything was… coincidence almost… depending on what I encountered on my path." (Patti)

Further in the interview, we went more in depth into the phenomenology, or the experiential changes of her lived experience in her psychotic and delusional experiences. These descriptions where very similar as many descriptions in literature of paranoid delusions, associations, derealization, perceptual distortions, and so on. None of these, however, are of interest for the purpose of this paper. If we focus on these experiences as isolated from the social, intersubjective and existential contexts we would face the pitfalls I described earlier as arguably present in many phenomenological and empirical psychiatric research.

Patti: summary and reflection

This short description of Patti's narrative shows us several plausible perspectives in regards to intersubjectivity and psychosis. While at first, she speaks of her behavior altering, a retreat in herself and a loss of contact with others, her descriptions arguably show that it would be a hasty and very reductive conclusion to be accounted for simply as the result of an underlying disposition, a capacity withering away or an open orientation towards others closing. Her

descriptions plausibly show how it is in the course of the enduring conditions that resulted from her changing life context, conditions and alterations in social relations that precede what is conceived as a psychotic breakdown. With Van Duppen, we can agree that what is severely disturbed in this specific case might indeed be characterized as a disturbance of open subjectivity – the complete disconnection of others and her being cut off from the ambient becoming of her former friends and family.

It begs the question, however, if what is disturbed in the openness in relation to others is a capacity or orientation, and not a context or situation – a conceptualization worked out clearly by Pienkos (2019). A characterization of her attitude as resulting from an underlying disposition, disturbed capacity or orientation towards others without considering her actual circumstances would seem to be strongly misguided and would furthermore not do justice to the experiences of abuse, suffering and social isolation described by Patti. Understanding her psychotic breakdown as an *expression* of a situation and a context[2], seems to offer us another way of looking at the formation of disturbances in intersubjective reality and not play down the subjective, existential truth as lived and experience by Patti.

From Minkowski, we can take the notion of a loss of vital contact with intersubjective reality, by adding, that this loss might not in essence stem from a predisposition – even though a predisposition might be present. It should at least be considered plausible to conceive that psychosis resulted from the enduring difficult conditions of living that Patti found herself in. In Minkowski's terms, we can say that Patti no longer was able to take part in a collective becoming. In her description, we find a gravely disturbed élan vital and a retreat into a private world. This retreat, however, appears more an expression of the despair and inability to escape her situation. As we saw in her descriptions, this gradual more and more loosening of the ties with others and social isolation eventually gravely impacts common sensical meanings of things, people, her sense of self and reality as such and would be seen to have impact on what Blankenburg considered to be dependent on a capacity in the individual. Basic certainties, as the reality of an identity card, no longer could be trusted upon.

(2) Psychosis as a breakdown of intersubjective reality: Robert

Robert, another participant in the qualitative study at CCP, described not to have pathological psychotic symptoms up until very briefly before his first psychotic episode. Unlike the earlier descriptions, Robert did not feel himself isolated or cut off from others, and he described that he was quite successfully working while living abroad with his girlfriend. As a sidenote, however, his life conditions indeed did physically isolate him from his friends and family, putting a great distance between them. The point addressed here with the case description of Robert focusses on how the experience of psychosis in relation to forced hospitalization can be seen to have a serious effect on the basic trust underlying the intersubjective dimension or social atmosphere.

[2] For the way the notion of situation or context is used here I am indebted to the work of Elizabeth Pienkos and her paper based on her presentation at the ISPS conference august 31st 2019.

Robert described how some of his most fearful moments of psychosis for him first strongly arose during hospitalization, when he first felt the complete loss of trust in others and reality itself. He was voluntarily brought to the hospital by an ambulance, called by a housemate, after a preceding chaotic and eventful psychotic breakdown, of which he was able to give very lively descriptions. After a short period of time on the ward, he realized he was not allowed to leave. Important to note here is that he voluntarily came with the ambulance and did retain a basic trust in the hospital staff, before in a confrontation with them they made clear to him that he was not allowed to leave. After this confrontation, he tried to escape by climbing a garden wall and as a consequence thereof was taken down by a great number of hospital staff.

> "But suddenly, they grab me everywhere. With twenty people… yes… Each part: my feet, my legs, my arms, my belly, my head, my neck… They grab everything. And in the meanwhile… "What is happening??". And yes, you are completely panicking… (…) And they tie me to a bed, with tick letter straps. You become a primal man, a primal man… All you want is to break loose." (Robert)

Robert was then forced by a doctor to choose between a pill or an injection. At that moment, Robert describes, he perceived the psychiatrist injecting him with a sedative or anti-psychotic to be a witch that tried to poison him. The fear behind this experience, Robert described, was terrifying. The more these events unfold, the less he felt he could any longer trust anyone or even anything in reality as such. It is an example that without modification fit's Earnshaw's earlier described conceptualization of basic trust.

> "You're really in a movie then. It is as if you are really kidnapped by aliens, or by… that they are going to steal your kidneys… they are going to inject you with something. (…) I was completely cancelled. Yes, you don't exist anymore. You can't move. You have no saying whatsoever in what is happening. And then you even have to allow something in your body that you do not trust, and you can't refuse, since something worse will happen then…" (Robert)

This extreme fear (or perhaps better described as ontological anxiety) he explained, brought forth a complete collapse or *implosion* of his world.

> "But the fear behind that… Just terrified. Really terrified. And afraid, but I think, if you would put me in that corner here right now, and you would put ten lions in the room… Then you would be able to grasp this… then you would understand… But that… Yes, you are afraid, but that is much bigger than fear… yes. Nothing is right anymore. The entire world… appears to implode upon you… Everything is no longer the way you thought it was…" (Robert)

Robert continued by explaining how these experiences of psychosis themselves lead to the breakdown of trust, while his delusional state preceding these events surprisingly did leave an openness and connection with others. In his case, the complete breakdown of (ontological) trust appeared afterwards, he stated.

"But that comes afterwards. (...) You can't trust anything anymore. Is this a table? Yes, it seems so, but is this really the case? Probably not (laughs jokingly)."

"These people are sitting here, but are they people or is it all my imagination, or...? Pfft, anything is possible, anything is possible." (Robert)

The descriptions of Robert make it appear that the loss of self-evidence is part of an unfolding process whereby fundamental certainties of the taken-for-granted reality implode. It seems, from his description, it is not merely a capacity withering away, but an unfolding situation in relation to alterations in the first person perception of reality, taking on bigger and bigger proportions. Following his experiences in the hospital, as soon as the next day he was already taken home by his parents. Robert described, however, he no longer trusted them. A basic and fundamental trust in the perception of reality and in interaction with others, even his parents, was completely undermined.

"Then I went home, to my parents. I did not trust these people even a bit. It was all a conspiracy against me. I did not trust my parents a single bit. Okay, they fed me and all, but where they really my parents? I mean, you stand there, and you trust nothing, nothing, nothing, nothing."

Robert: summary and reflection

In the descriptions of Robert, we see a different aspect of alterations in the intersubjective dimension. Robert claimed his experience of a loss of self-evidence and of a basic trust where at least in part the result of his experiences in the hospital, where people he did not know abruptly took away his freedom and autonomy, strapped him to a bed and injected him with a sedative or anti-psychotics after his attempted escape.

Based on his descriptions, we can link back to the views of Minkowski, Blankenburg and Earnshaw. Unlike the previous example, in the descriptions of Robert a loss of self-evidence did not appear to precede psychosis, but followed after a process characterized by delusional states of fear and anxiety, in relation to the situation as it unfolded. He described the complete loss of trust in self-evident reality, in things and people. As Robert explained:

"nothing is right anymore", "the entire world appears to implode upon you", and "Everything no longer appears to be what you thought it was." (Robert)

In the descriptions of Robert when going home with his parents it becomes clear that this complete loss of trust in others at that point even severely impacted his perception of and fundamental trust of his parents. The natural self-evident manner in which objects and other people were before perceived as well appeared to have been gravely disturbed through these events and experiences. As Robert explained: "*You can't trust anything anymore.".*

In his descriptions, psychosis formed a fundamental rupture in his life. Robert was moreover for a long time unstable and unable to really share his experiences with others, since the things he now struggled with, he felt appeared self-evident for others. As a result, he

described how he felt very lonely, isolated and socially deprived. His connection to the lives of others, friends and family and their shared rhythm, through work, hobbies and events was completely at a minimum for at least a year. He wondered why someone wouldn't just come and sit with him, to share his loneliness at home. Someone "being with" him might have at least made him feel less alone in his recovery process, at that period in his life.

(3) Intersubjectivity and recovery, an important role for the other: Ellen

To conclude, I briefly touch upon a last example that offers a glimpse on the aftermath of psychosis to exemplify a sense of recovery of the intersubjective dimension, described by this participant as crucial in regaining meaning and a sense of identity in her life after psychosis. From the previous case descriptions I made the argument that a breakdown of a fundamental atmosphere of trust might at least in some cases result from the experiences of psychosis and not underly or precede them. This atmosphere of trust, I argued from Earnshaw, is what underlies and enables our everyday interactions with others and even the capacity underlying common sense (Earnshaw, 2011). For recovery this means that a rehabilitation of this dimension of basic trust or this open subjectivity is in its essence a social and intersubjective active process, as we argued in our earlier work (Van Duppen & Sips, 2018).

A very clear, and from personal experience with psychosis relatable example thereof I found in an interview with Ellen, a woman at the moment of the interview in her beginning forties. She explained what made her stand back on her feet after psychosis.

> "Afterwards… there was a friend of mine, that… had given birth to twins, on top of her first two children. So suddenly, she had four children. And then I got the chance of helping her out… Then, I wasn't really able to… really work… But I took those chances. These are really things that… It makes you stand up again, to pull yourself trough.. I think it is really important to… to… just to mean something…. That you somewhere want or need to find that drive… but that you get that chance from others.. (Ellen)
>
> "To be able to fulfill that role, or…?" (R.S., interviewer)
>
> "And that you are still able to take up roles. That your identity… You can't just be… psychologically vulnerable…." (Ellen)

This last example illustrates how the openness of the other, here in the person of her friend asking her to help out, allowed her to recover a sense of identity, belonging and meaning "in" relation. Ellen is given the chance to take up a role and to be someone again, no longer being fixed on the role of patient recovering from psychosis. In this role of helping out her friend with the care for her children, she could rebuild trust with her capacities and orientation towards others. With this concluding example, we tried to illustrate that even in recovery a focus on an underlying disposition or capacity might be misguided or even unhelpful, in the sense that it would not show us how Ellen can again take part again in a process of becoming or is able to restore a shared rhythm or élan vital. It is through the world of others, so she described, through the ambient becoming in relation, that her personal sense of identity and drive can

regain meaning. Her friend reaches out in the form of a person in need herself. Ellen described this was very important in her process of recovery and to regain a sense of self and meaning by helping out and taking up this meaningful role.

Conclusion

In this paper, we attempted to present a perspective on intersubjectivity that broadens the current scope in phenomenological approaches. What is lacking in phenomenological approaches to psychopathology, so we argued, is a focus on what happens in the relations between people in their actual context and life situations. Phenomenological approaches to psychosis, so we suggested, appear to undervalue the subjective life experience and social and intersubjective life conditions in favor of a focus on structural alterations in the first person experience and the way it is structured or maintained.

As we touched upon earlier in this paper, traditionally phenomenology has as it study object the structure of consciousness as experienced from the first-person view. From this perspective it is thus not strange that we find phenomenological approaches to intersubjectivity studying psychosis to start from there: the subjective sphere and its eidetic underpinnings. The frameworks from Minkowski and Blankenburg, building on classical phenomenology, pointed towards a underlying disposition or disturbed capacity in subjects with psychosis or schizophrenia. While they do offer us very useful frameworks and concepts, we suggest that these frameworks are in need of revision and modification, so they can actually be applied in connection to the social and intersubjective atmosphere. We tried to show that to understand essential alterations in the intersubjective atmosphere, existential descriptions of concrete cases are highly necessary. We furthermore suggest to be very cautious with applying theoretical hypotheses about essential *underlying* alterations in the formation of psychiatric theory and in clinical practice.

We also attempted to make plausible that a linear connection, from the subjective to the intersubjective atmosphere is most likely unable to account for a great heterogeneity in psychotic disorders and the alterations in the intersubjective atmosphere. These alterations, we argued from concrete examples of lived experience, may plausibly often have their roots in the social conditions and result from a certain intersubjective atmosphere, thereby affecting individuals in different pathways towards psychosis. We thereby in a way reversed the discussed models in claiming that a loss of vital contact with reality or a disturbed capacity or orientation might in reality as well often be a *consequence* of the impact of the social conditions and situations, which is a different way of looking at reality then when we look for an *underlying* essential disposition or capacity that is the driving factor.

This view offers a helpful way to engage with individuals going through psychosis or recovering from their experiences, and to actually listen, beyond the sometimes spectacular stories of delusions and beyond structural alterations in their conscious experience, to what is going on in their relational life. It adds a perspective towards approaches for recovery, as the example of Ellen illustrates. Since we are not a self in isolation, but on the contrary a fundamental relational being, the creation or restoration of a relational intersubjective atmosphere in which this disturbed sense of self can become someone in relation to others

might be a crucial target in accommodating recovery. This requires in the first place a reconnection with the world of others, and places "in society" where individuals recover, instead of recovery as something preceding reintegration in that society.

Lastly, this brief description incorporating the intersubjective into a phenomenological investigation might plausibly tell us something about the conception of psychosis as an ipseity disorder, although these suggestions and their plausibility require further investigation. From the ipseity disorder perspective it is argued that in schizophrenia the minimal self and the self-world structure are unstable, constantly challenged and oscillating, thereby causing anomalous self-experiences (Sass & Parnas, 2003). These approaches argue that schizophrenic symptoms have their roots in disturbances of selfhood or self-experience. While that may be the case, these disturbances might in many cases, as especially the example of Patti makes plausible, already be the result of social and intersubjective conditions. Alterations therein, sustained by an unresolved instability and disconnection in the intersubjective dimension, could be a driving factor for disorders of the self. We therefore suggest this to be a further focus of future research.

References

Barrantes-Vidal, N., Grant, P., & Kwapil, T. R. (2015). The role of schizotypy in the study of the etiology of schizophrenia spectrum disorders. In *Schizophrenia Bulletin*. https://doi.org/10.1093/schbul/sbu191

Bergson, H. (1911). *L ' Evolution créatrice*, New York; Henry Holt And Company.

Blankenburg, W. (1971). *Der Verlust der natürlichen Selbstverständlichkeit*. Berlin: Springer.

Blankenburg, W. (2001). First Steps Toward a Psychopathology of Common Sense. *Philosophy, Psychiatry, & Psychology*, *8*(4), 303–315. https://doi.org/10.1353/ppp.2002.0014

Earnshaw, O. (2011). *Recovering the voice of insanity: a phenomenology of delusions*. Durham University. Retrieved from http://etheses.dur.ac.uk/3225/

Gallagher, S., & Varga, S. (2015). Social cognition and psychopathology: A critical overview. *World Psychiatry*, *14*(1), 5–14. https://doi.org/10.1002/wps.20173

Glass, G., (2012). "Wat is een psychiatrische ziekte?", in: D. Denys – G. Meynen (red.), *Handboek Psychiatrie en filosofie*, Utrecht: De Tijdstroom, 2012, 31-53

Hacking, I. (1996) "The Looping Effects of Human Kinds", in: Sperber, D., Premack, D. & Premack, A.J. (eds.), *Causal Cognition: a Multidisciplinary Debate*, Oxford: Oxford University Press, 1996.

Jaspers, K. (1997). *General Psychopathology*. (J. Hoenig and Marian W. Hamilton, Trans.) (Vol. I). Baltimore and London: Johns Hopkins University Press.

Jones, N., Shattell, M. (2016). Not What the Textbooks Describe: Challenging Clinical Conventions About Psychosis. Issues in Mental Health Nursing 37(10), 769-772.

Minkowski, E. (1921). La Schizophrénie et la notion de maladie mentale (sa conception dans l'oeuvre de Bleuler). *L'Encéphale*, *16*(5), 247–257.

Morgan, C., Charalambides, M., Hutchinson, G., & Murray, R. M. (2010). Migration, Ethnicity, and Psychosis: Toward a Sociodevelopmental Model. *Schizophrenia Bulletin*, *36*(4), 655–664. https://doi.org/10.1093/schbul/sbq051

Myin-Germeys, I., & van Os, J. (2007). Stress-reactivity in psychosis: Evidence for an affective pathway to psychosis. *Clinical Psychology Review*, *27*(4), 409–424. https://doi.org/10.1016/j.cpr.2006.09.005

Myin-Germeys, I., Krabbendam, L., Delespaul P. van Os, J. (2003). Do life events have their effect on psychosis by influencing the emotional reactivity to daily stress?, *Psychological Medicine*, 33(2), pp. 327-333.

Parnas, J., & Bovet, P. (1991). Autism in schizophrenia revisited. *Comprehensive Psychiatry*, *32*(1), 7–21. https://doi.org/10.1016/0010-440X(91)90065-K

Pienkos, E. (2015). Intersubjectivity and its role in schizophrenic experience. *The Humanistic Psychologist*, *43*(2), 194–209. https://doi.org/10.1080/08873267.2014.990459

Read, J., Van Os, J., Morrison, A. P., & Ross, C. A. (2005). Childhood trauma, psychosis and schizophrenia: A literature review with theoretical and clinical implications. *Acta Psychiatrica Scandinavica*. https://doi.org/10.1111/j.1600-0447.2005.00634.x

Saks, E.R., The Center Cannot Hold, New York: Hyperion, 340 p.

Sass, L. A. (2014). Self-disturbance and schizophrenia: Structure, specificity, pathogenesis (Current issues, New directions). *Schizophrenia Research*. https://doi.org/10.1016/j.schres.2013.05.017

Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, *29*(3), 427–444. https://doi.org/10.1093/oxfordjournals.schbul.a007017

Seikkula, Birgitta Alakare, Jukka A, J. (2001). Open Dialogue in Psychosis I: an Introduction and Case Illustration. *Journal of Constructivist Psychology*, *14*(4), 247–265. https://doi.org/10.1080/10720530125965

Urfer, A. (2001). Phenomenology and Psychopathology of Schizophrenia: The Views of Eugene Minkowski. *Philosophy, Psychiatry, & Psychology*, *8*(4), 279–289. https://doi.org/10.1353/ppp.2002.0029

Van Duppen, Z. (2016). *Schizophrenia: a disorder of intersubjectivity : a phenomenological analysis*. Heidelberg University. http://doi.org/10.11588/heidok.00022553

Van Duppen, Z., & Sips, R. (2018). Understanding the blind Spots of Psychosis: A Wittgensteinian and first-person approach. *Psychopathology*, *51*(4), 276–284. https://doi.org/10.1159/000490257

Chapter 7: Conclusions and suggestions for further research

7.1 Overview of main findings

In this section, we give an overview of the main findings from our published research. Findings not described in published works will find their place in overarching discussion points, suggestions for future research and in the general conclusions.

The first paper was written and published as a so-called first-person account and published in the first-person-perspectives section of *Schizophrenia Bulletin*. As described earlier on, we hereby made use of my personal experience with psychosis. One of the things that was clear to me early on, was that the way psychosis – and some of its core features like hallucinations and delusions – is very often described and conceived, does not correspond to what it actually is like. Therefore, in the first paper we attempted to bring a first-person description, whereby, as a philosopher, my aim was to give both a phenomenological rendition of altered experience and make this description empathically understandable. I focused here on the idea of psychosis as a dialectic of aha, and anti-aha-experiences that I first worked out in my masters thesis in philosophy.

In this first paper I described the aha-experience in psychosis and introduced the notion of the anti-aha experience. The aha-experience, so I argued, can be both a cognitive, perceptual and existential experience. It can alter how one perceives roles, time, situations, one's sense of self and identity, and so on. The anti-aha-experience, as I defined it, is likewise an experience of sudden insight, but one that is not conciliable with how one perceived reality and everything in it before. While the aha-experience can connect things, and be an experience of insight, beauty, relief or positive affect, the anti-aha-experience brings forth shock, anxiety or disbelief. It can shatter the way one perceived things before, without offering solid ground. They undermine one's existential position in and perspective on the world and can bring forth a fundamental ontological anxiety or Angst, a fear of the very manner in which the world appears. The anti-aha-experience thereby expresses a fundamental loss of trust with respect to the continuity of experience, a trust that is built up through life experience.

From personal experience, I described recovery as a process with many aspects, as a hitchhiker taken on tow, being challenged through work, studies, and activities and the getting up again and again. Lastly, one of the crucial points I attempted to make here was that there is no clear differentiation between hallucinations and delusions, as they are an intertwining of perception, cognition, beliefs, memory, imagination that can come in many forms, in relation to context, existential and developmental phases, through different perceptual modalities, and so on.

In the second paper, which chronologically in our publications was the third, we described our findings from our qualitative research. In this study, we provided preliminary evidence supporting the idea worked out in the first paper, that insight experiences may play an important role in psychosis, both in the early stages as well during the aftermath. Even though we did not explicitly ask participants about these types of experiences to avoid bias, we found many descriptions of experiences that can indeed be characterized as aha- and anti-aha-experience and a dialectical tension. We argued that this process pierces through an everyday

sense of understanding of oneself, of others and reality – through perception and beliefs, leaving a visible impact on such forms of understanding, with a strong ungrounding, derealizing and undermining effect. A crucial finding throughout our study, I believe, is that these experiences can severely affect how individuals perceive relations between past, present and future. Many participants spoke of a before and an after first episode psychosis, and some explicitly described the effect on their sense of self. "*It is a strange feeling… A sort of void… a total void… As if who you were was wiped away… really wiped away…",* as Simon explained.

One third of our participants described experiences that can be categorized as anti-aha-experiences. In interviews and focus groups, participants described these experiences metaphorically as a fundamental uncertainty undermining their thoughts, perception and often their sense of identity and self-awareness. In contrast to psychosis as a discrete process of false perceptions and false beliefs, so we argued, our conception of insight experiences in psychosis as a process of re-structuring of a pre-reflective and embodied understanding might help to further increase our understanding of experiences of "derealization", "unworlding", "unbuilding" or even of psychosis as an "ipseity disorder", that have been described in qualitative and phenomenological psychiatry (Raballo & Nelson, 2010; Sass & Parnas, 2003; L. Sass & Ratcliffe, 2017; Schwartz et al., 2005).

We further described a dialectical tension between insight and shock, or a shift from what could be possible (or is merely thought) to what is real, how one perceives reality and what is reported to be devastating and frightening. This experience now seems to me very relatable to what we all could see recently in our shared reality as well, when the beginning of the war in Ukraine elicited in politicians and others rapid shifting emotional states, from shock, to insight, to problem solving – driven by a fundamental uncertainty, visible in real time live on tv for all to see. This phenomenon perhaps comes close to one aspect of the reality of those experiencing psychosis, described in the paper – where for these individuals, like myself, their delusional truths can feel just as real. For some, the world *is* ending in their experience, or they find themselves on a strange and unknown planet. Lastly, as we will pick up on in the next section, we zoomed in on the aberrant salience theory and on literature from insight experiences, arguing that the aberrant salience theory might be misconceiving the role and structure of insight experiences in psychosis.

In the third paper, we used Wittgenstein's philosophy to describe psychosis as a process shaking the scaffolds of language games and altering world pictures. We used Wittgenstein's notion of hinges and blind spots to philosophically explore the idea of psychosis further as a dialectics of aha- and anti-aha experiences. There, we explicitly argued that the perceptual, cognitive, pre-reflective and reflective are tightly interwoven, unlike what prominent 2 step models of delusion formation argue. Since our publication, this view has been substantiated through the work of others, as for instance the works of Feyaerts et al. (2021) and Pienkos (2019), discussed in the introduction. A crucial role was ascribed to so-called "blind spots" in our language games, or to perceive elements that serve as "hinges" for our practical, existential and linguistic connection to reality. Blind spots, the way we conceptualized them, carry language games and presuppositions, beliefs, and so on. Insights through experiences of blind spots becoming visible, so we argued, are often experienced as unshareable or deemed too

incomprehensible to communicate to others. We further shed light on the aha- and anti-aha-experiences dialectical descriptions through these concepts.

In the last paper on the intersubjective dimension of psychosis, we attempted to broaden the scope of phenomenological psychiatric approaches. To understand structural alterations in subjective (or transcendental) experience, so we argue, we need real life case descriptions of social and intersubjective life conditions. With this view, we go back to a very basic and well researched view: that life experiences and social conditions stand in strong relation to experiences of psychosis. It is however a wide gap to bridge life context and psychopathological experience, to go from real circumstances to plausible hypotheses on how these affect fundamental structures of self, other and world experience. Therefore, we first described theories from phenomenological psychiatry and through the lens of these theories shined a light on real life case descriptions, as described by participants in our interviews and focus groups.

In the theories developed by phenomenologically oriented psychiatrists referred to in this paper, psychosis was described as resulting from a disturbed capacity, a disturbed open subjectivity or a disturbed orientation as an underlying "trouble generator", as Minkowski put it. As the example of Patti showed, phenomenological frameworks may be in need of revision and modification as to be applied in connection to the social and intersubjective atmosphere. While alterations in the structure of experience, self and identity have been mainly described as fueled by a disturbed capacity or orientation, I follow Pienkos (2015*)* and argue that the intersubjective dimension of psychosis may very likely in many cases be at the root of core disturbances – of a basic self, an open orientation, or a capacity underlying common sense. Patti's descriptions offer a plausible, clear, and empathically understandable case that illustrates how a sense of self might become instable. Social isolation should not merely be perceived as the result of psychosis but could play a crucial role in cases in its genesis as well. Furthermore, we showed examples of alterations in intersubjective trust during acute psychosis and described a case whereby the intersubjective dimension played a crucial role in recovery. Throughout psychosis, a fundamental and basic (epistemic) trust can be damaged, whereby intersubjective reconnection may help to re-establish this trust.

7.2 Insight experiences beyond aberrant salience

In this doctoral thesis, we gave a prominent place to insight experiences and argued that we need to rethink the phenomenology of psychosis by revising how we view insight experiences, or aha- and anti-aha-experiences, in psychosis. In the introduction, we showed that the phenomenological evidence Kapur used to substantiate the aberrant salience and move it from status of hypothesis to theory does not live up to its ambitious goal, since phenomenological descriptions of the descriptive phenomena are in fact lacking. Ergo, the descriptive to be defined, is only defined through its final conclusion, and hence does not escape circularity. We pointed out in the introduction that the main explananda the aberrant salience hypothesis intends to explain and describe; altered experiences, changes in overall subjective experience and the self in relation to others (intersubjectivity) and to the world (intentionality) does not

suffice in its presented form. This is likely due to the underestimation of the possibility of phenomenal experiential investigation and the lack of insight in what qualitative studies are and can do.

We have focused on specific elements of psychosis, in particular, insight experiences, which Kapur (2003) (and others before him) found relevant in light of psychosis, but that we presumed to be possibly misconstrued – or at the least under researched – in psychosis. This presumption arose from direct experience with psychosis, and the experience that the same "final words" are often heard both in the clinical world as in the research community: "psychosis is a brain disorder, it is caused and fueled by dopamine, it is "in the brain", lifelong medication is key", and so on. One of the problems hereby was that for many people, professionals did not seem to be listening any more to what patients where actually saying, and what it was that they actually struggled with.

We used the "insight experience" to demonstrate that the view on cognition that appears to underly the aberrant salience hypothesis does not match the experiences it intended to describe, on both the level of experience (or phenomenology), and the behavioral level. We furthermore described how there is more to insight experiences and the relation of such experiences to psychosis. While this was not an explicit theme of the thesis, this ascertainment is connected to shifting views and progress made in the field of philosophy, as the continuous exploration and re-discovering of knowledge, on the nature and workings of cognition, being contextualized, embedded through its bodily, social, existential, and physical relations to the world – embodied, enacted, embedded and extended.

Although this relation is complex, it became clear that it is possible to bring together the constellation of psychotic disorders in a more coherent way: insight experiences impact (and, so we believe, are part of the formation of) belief systems and the process of structuring of world pictures, self-pictures, and relational views. Alterations in belief systems and world pictures can be a painful and devastating business, on both an existential level as on the interpersonal level. A possible psychopathological organizer for these different levels of disorganization and restructuring we found plausibly in the conception of so called onto-logical formulations of existential experiences, hereby following recent phenomenological psychiatric research. By this we refer to experiences of "unworlding", "unbuilding", of the loss of a self or disorder of ipseity. When, through experiences of insights and shifting perspectives, we come to see ourselves, others, our relation to the world, the way the world appears in new manners, such experiences can painfully confront us with our "ungrounded" ways of being.

7.3 Strengths and limitations

Our study had several strengths in light of the research question on the phenomenology of psychosis. As a start and motivation of this doctoral study we established a gap in research on psychosis: a lack of first-person perspectives on experiences of psychosis. The starting question here was whether the way psychosis in research is being studied and interpreted actually corresponds to what it is like and adequately captures the range of phenomena grouped under psychotic experiences. A strength of our study, although this could also be considered a bias and thus a limitation, was that as a researcher I have personal experience with psychosis. From

my experience, I identified a phenomenon already being studied, although not extensively, and argued that this phenomenon is misrepresented and misunderstood. Although some might question whether my perspective is not biased and subjective, one might also question how and why somebody would bother to raise this issue at all, if not concerned personally. This can be seen as a strength, since so-called service user involvement in conceptual and clinical studies was very limited when we started this study. It now constitutes a growing field of research.

A second strength of our study lay in the diversity of our participants and their willingness to speak on their experiences. Not only were they willing to speak, they very often expressed their gratitude that someone was actually listening to their experiences themselves. Some of them felt that these complex, often overwhelming and ungrounding experiences were regarded as mere symptoms, as would seem logical when regarding hallucinations as aberrant perceptions and delusions as faulty inferences. The focus would then be on "fixing" perception and setting the faulty inferences straight following from these aberrant perceptions. In line with other work, our study, we hope, convincingly showed, that the reality of psychotic experiences is far more complex than that. While the "output" of our gathered data in research papers is relatively small, our interviews and focus groups have much more that future researchers can work with to enhance our knowledge on experiences of psychosis.

A third strength of our study, we believe, is the philosophical education of the researcher. This has allowed us, on the one hand, to make use of insights from phenomenological psychiatry and to again raise the question on what it exactly is in experience that makes it different in its self-world-other structure in psychosis in regard to normal experience. Our philosophical approaches furthermore allowed us to think in less conventional ways that bring to light many different dimensions of experience, perception, beliefs, intersubjectivity, and so on.

A fourth strength worth mentioning is that this arguably small-scale qualitative study allowed me as a researcher to better understand the different aspects of a study: from writing a proposal, to ethical approvals, to making flyers, presenting the study in psychiatric hospitals and through a patient organization, recruiting individuals, learning about interview techniques and focus groups, from practical to technical aspects, and conducting them. Following these, the (sometimes too) intense learning process and in detail transcribing and listening helped me learn much on language, expression, narrative structure and so on. Following this, I transcribed the transcripts, formulated ideas and wrote them up. This is worth mentioning, I feel, since this process makes it so that the data gathered is not mere "objective data". The process in which the data-gathering and analysis occurred has taught me much about the data and about scientific research itself.

Our study naturally has its limitations as well. While we see the researcher's personal experience with psychosis as a strength, this can also be seen as a biased and subjective position. As mentioned earlier, we were very aware of this fact and tried to incorporate a critical hermeneutical attitude that acknowledges this position.

Secondly, the scale of our study, including 21 individuals, can be seen as a limitation. While it may be argued that a study of this scale cannot be taken to be representative to adequately grasp a phenomenon like psychosis, this is in general not the purpose of qualitative

research. Through in-depth research on the experiential dimension, qualitative research can bring to light phenomena that other research methods attempt to dismiss or empirically verify. It furthermore has the potential to bring to light the existential and intersubjective dimension of psychosis supplementing aspects of experience that are out of the scope of other research methods.

A third limitation can be the fact that we only interviewed participants once, not taking in account those participants that took part in the focus groups later. It might offer advantages if researchers would include less participants but took more time and more sessions to explore the experiences of psychosis of individuals with lived experience. This might offer researchers the chance to further explore in co-operation with participants very specific questions on which very specific cases might help shed light.

A fourth and last limitation we touch upon here is that the phenomena we focused on in this thesis do not come near to properly covering the full scope of experiences of psychosis, nor do they conclude certain vital aspects of research out of the scope of this thesis. This is the natural consequence of any study, we believe, that both choices regarding the research question as on the method constraint what can be studied and how it is presented. We do however believe this does not undermine the quality of our study, since this study does appear to integrate well within ongoing research on psychosis that goes beyond our research group.

7.4 Suggestions for future research

7.4.1 Implicit bias, pre-judgment, stress reactivity and development

Recently, there has been much research in the way implicit bias shapes and structures social reality through roles and institutions. This has mostly been studied in regard to disadvantaged and underrepresented populations, in the field of psychiatry, but going far beyond that to address questions of race, gender, disability and so on.

In the field of philosophy, 20th century philosopher Hans-Georg Gadamer in depth studied the phenomenon of pre-judgement in his hermeneutical project, most notably worked out in his magnus opus *Truth and Method (2014)*. Gadamer there worked out how underlying every human experience lies a pre-judgement (*Vorurteil)*, necessary for any judgement and form of truth to appear. Gadamer hereby showed that understanding operates through anticipatory structures, through what he denotes as "anticipation of completeness."

We feel that the phenomenon of pre-judgement is highly relevant in regards to different aspects of psychotic phenomena. A relation between stress sensitivity and development in psychosis might for one be a relevant element for further research. If we look at understanding and pre-judgment as a skill we acquire and develop through life experience, through work, studies, and social interaction, we can isolate this skill underlying perception and action and study it. From experience, we all know that not understanding a situation properly or lacking a correct understanding of situations, actions, emotions, skills and so on can lead to much stress and misguided responses, actions, and interactions. Life can be much harder when one is unable to attune properly to others and situations, does not overcome an ego-dystonic phase and experience constant reactivity in situations through this lack of attunement. As there is

research pointing to stress-reactivity as an important endophenotype for psychosis, we feel it might be a fruitful path for further research to focus on the pre-judgmental development and bias, on a fundamental transcendental layer of structuring self-world relations.

Focusing on hermeneutical pre-judgment could potentially also connect to another phenomena to which psychotic experiences have often been described to have an impact on: reading. A text, as is often described, can gain a whole new meaning, certain sentences suddenly light up as special or meaningful in a new way. In a very fundamental manner, our capacity to read a text is very similar to our capacity to "read" an environment, to "read" another person's bodily language, to "read" the weather, to "read" a map, and so on. All these reading capacities are formed partly reflectively, through schooling, activities and social relations, while they also keep forming pre-reflectively throughout our lives. One need not to reflectively "learn" to better read bodily language better. Or one can, for example, suddenly re-interpret very basic and fundamentally structuring social roles, that open new ways of "reading" reality and family life. Both life experience, knowledge but even mere attentive focusing on things can bring to light the complexities of things that are right before one's eyes. This can be a "revelatory" experience, as well as a highly ungrounding experience if one is alone to deal with these experiences.

For further research, we suggest thus an in depth research of the capacity underlying perception and cognition that "reads" reality, in particular the pre-judgement and its development or lack thereof that can plausibly make some aspects of psychotic experience better understandable. Although this seems a complex phenomenon to research, clear and distinct empirical research questions can be formulated. I have heard quite often from individuals with experience with psychosis on antipsychotics, and from periods I used such medication myself, that they have many difficulties with reading. One might hypothesize that anti-psychotics un-able our capacity to see and explore detail and depth in a certain manner. One could in fact empirically verify whether this is indeed the case.

7.4.2 Intersubjectivity, psychotic reactivity and commentary voices

One aspect that in this thesis we only briefly touched upon but that we now feel is a crucial target for future research is the intersubjective dimension of psychosis. From personal experience and knowledge gained throughout this study we found that this intersubjective dimension might be highly relevant for a better understanding of psychosis in the research.

We found, although this is merely a hypothesis, that one of the reasons psychotic experiences often seem so difficult to share intersubjectively is that they invoke reactivity in others. They bring to light underlying and implicit aspects of experience and (social) reality that can unwillingly threaten others' sense of self and views on reality. Hereby we refer to the implicit pre-reflective structuring in reality underlying perception, belief systems or structures in reality. One can find similar experiences in the field of philosophy, if one uncarefully tries to explain insights of Gadamer, Kierkegaard, Nietzsche, and many others.

As our last paper arguably showed, a further in-depth study of the intersubjective existential dimension might offer new ways of understanding the genesis of psychotic experiences. If psychosis, in some of its forms, is fundamentally a self-disorder, it might be

worthwhile to further examine how the relation with others or social isolation impacts a sense of self and openness to the world and to others, essential in growing and in navigating life.

Although this is again speculative, we find it worthwhile to further investigate the phenomenon of hearing voices in relation to the intersubjective dimension. Although this is a mere reflection, on the surface it appeared to be the case that what people hearing voices described often came in the form of an incorporated social norm or judgement and seemed to stand in relation to decision making processes. It might be of interest to further explore if and how voice hearing stands in relation to the social dimension of reality, particularly in relation to experiences of social exclusion and bullying, whereby there is effectively a "commentary voice" coming from the outside world. There did seem to be a distinction in the nature of pathology in experiences of voice hearing in contrast to what has been described as an ipseity disorder or self-disorder.

7.4.3 Psychosis as existential detemporalization

Although there has been research on the altered temporal dimension of experience in psychosis, we want to suggest possibilities for further research by introducing the conceptualization of psychosis as "existential de-temporalization". This conceptualization can be better understood starting from the idea worked out in this thesis, of psychosis as a dialectic of aha- and anti-aha-experiences and from the suggestion for future research regarding implicit bias or pre-judgment. We suggest that the process of psychosis fundamentally alters and affects subjective existential experience in regard to how a subject situates herself in relation to past, present and future, whereby fundamental grounding meanings can shift and alter the manner in which reality is perceived. This process, so we suggest, can be experienced as if one's existential narrative is de-temporalized and ungrounded, in the narrative and existential sense.

A possible promising approach to further research this conceptualization we find, among others, with the French philosopher Henri Bergson's notion of durée, which, oversimplified, refers to "lived time", in contrast to "measured time". To understand for instance a scene in a movie or a piece of theatre, objective time is irrelevant (or less relevant) than the lived time or durée, for a viewer it is the durée that really matters to grasp a story. For Bergson, our past feelings, affect and memory influences and determines our experience of time. Studying psychosis from a Bergsonian perspective could potentially better help understand and connect levels of experience and on the surface unrelated psychotic experiences. While, as of yet, most phenomenological psychiatric research has focused on Husserl's account of the temporal dimension of experience, Bergson offers a view that can potentially better show links between altered perception and its relation to memory, changes in experiences of temporality and phenomena like the loss of sense of self, aberrant salience, Truman symptoms (without the temporal existential dimension, others can appear as mere actors), and so on. Based on Bergson's (2004) and Merleau-Ponty's (2009) works, we might understand psychosis better if we would conceptualize memory as the navigational structure through which / with which we shape (or constitute) our sense of reality. As navigating familiar places, we navigate familiar faces, roles, actions, and so on.

7.4.4 Aha- and anti-aha-experiences: formation, sustaining and altering of belief systems and world pictures

Lastly, we suggest it would be interesting to further investigate if and how what we described as a dialectics of aha- and-anti-aha-experiences stands in relation to the formation, sustaining and altering of belief systems and world pictures. Furthermore, it would be of interest to examine how this stands in relation to perceptual acts and to the acts of imagining, remembering and reasoning.

We would hypothesize that there are potentially interesting links to be found, as the anti-aha-experience was originally described as the feeling accompanying an experience whereby a former deeply held belief, closely connected to one's sense of identity and self, is contradicted. One possible pathway to further investigate could be a further exploration through the growing field of so called Wittgensteinian psychiatry, starting with defining concepts and mapping relations between these phenomena, of beliefs and beliefs systems, it's relation to a sense of self and identity, and so on.

7.5 Clinical implications

In what follows we discuss possible clinical implications of our findings. We believe a first and crucial implication of our study is that clinicians learn or re-learn to listen to what individuals experiencing psychosis are actually suffering from. As we argued, this goes far beyond aberrant saliences or misconstrued logical inferences. Within the field of psychology and psychiatry, it apparently has, for quite some time, been common practice to focus on "the symptoms", conceptualized as hallucinations and delusions and target the "underlying" neurological process. From this thesis, and through the work of many others, the case is being made that viewing psychosis in this manner does not do justice to what it is actually like, misconstrues the process and reifies it by materializing it as a physical or chemical process. This fundamentally misses not only the subjective and existential dimension, but also cannot be reconciled with recent views on consciousness, cognition, and behavior from the fields of philosophy and psychology.

A second clinical implication would be that psychotic crises might actually serve as an occasion from which patients can grow and learn – an implication I firmly believe in. Instead of speaking of "stimuli", "aberrant saliences", "hallucinations" and "delusions", clinicians could actually work with patients on perceptual development – helping them understand the nature and structure of beliefs and belief systems, there being such a thing as a "common" sense – and most fundamentally on the existential and temporal dimension of being or having a sense of self. When everything changes so fast, I believe it does help if a clinician is able to stand "with" the patient and let him or her know a better understanding is possible, as it is possible to better deal with these experiences. Although this might not work for everyone, it might help to further explore what philosophical approaches regarding a sense of self, as for instance Kierkegaard worked out, can offer patients.

We therefore recommend that the very basic narrative that has had an enormous influence on clinical practice makes room for a more open, dialogical, and hermeneutical practice whereby clinicians learn to deal with and work in uncertainty. From experience, I know that depending on the physician where one ends up in a psychotic crisis, the words of "psychosis sensitivity", "salient stimuli", "dopamine"; followed by suggestions of "anti"-psychotics and depots are still possible outcomes. While, again from experience, some good nights of sleep, a holiday of a week or two, hiking in nature, seeing good friends, running, climbing, enjoying a good beer can do miracles.

A further clinical recommendation would be to make clinicians aware that the social and intersubjective reality of patients might be a crucial aspect to understand the genesis of psychotic experiences. If patients are socially isolated, lack structured activities, are slower due to their medication and experience stigma from their psychiatric label, one might wonder how their sense of self, a fundamental relation self, could be reconnected to a healing social environment. Recovery from psychosis is not something, so we believe, one does in isolation or in the brain. Recovery is possible through things that are actually fun: going on holiday, having dinner with friends, watching a concert, taking up a social hobby, and so on. As we argued in the first paper and as was also further acknowledged by our participants in the qualitative study, recovery is not something that happens overnight nor without falling and getting up again and again. Patients need a supportive network and good professional help that can help them through what can be most horrible, painful and ungrounding experiences.

Lastly, an interesting way forward might be clinical therapeutic interventions that explicitly target the changed temporal dimension of experience in psychosis. This, as other interventions, could be addressed through a broad range of activities in which an awareness and better understanding thereof could be developed. It might however be argued that this should not be standard practice, neither for clinicians nor for patients, since for some, both clinicians as patients, tackling the temporal dimension of experience might be an ungrounding experience and while for some unavoidable, for others irrelevant in function of recovery.

7.6 Summary and general conclusion

In this doctoral thesis, we studied the phenomenology of psychosis. Our starting point was that in research there is a lack in first-person descriptions of psychosis. Thereby, we questioned whether concepts and hypotheses actually correspond to the experience or phenomenology of psychosis and argued that we need to study experiences of psychosis as they are described and lived through by individuals that can give firsthand descriptions from their personal experience. To achieve this goal, we developed a qualitative research project from the ground up, from writing the preliminary plan, to gaining ethical approval, recruiting participants, interviewing them, and conducting focus group, transcribing and coding the material and writing research papers based hereon.

We took the unusual route of conceptualizing psychosis based on the lived experience of the doctoral researcher and investigated this conceptualization based on the interviews and focus groups conducted by the researcher, with the help of research assistants and the CCP

team. Hereby we found that in the accounts of participants insight experiences indeed play a crucial role in their experiences of psychosis and we described examples of aha- and anti-aha-experiences as described by our participants. We showed different aspects thereof, supported by examples our participants applied us with through the interviews and focus groups.

Through our philosophical approaches, we shed light on the experience of psychosis offering alternatives for 2-step models of delusion formations, that consider hallucinations as “aberrant saliences” or “aberrant perceptions” that lead to faulty and misguided inferences. We argued that a clear distinction between cognition and perception is problematic and hence so is a clear distinction between delusions and hallucinations. By focusing on the insight experience, we demonstrated that perceptual shifts, insight experiences and differences in what is salient for whom might offer us a new way of looking at psychotic experiences. With the introduction of the anti-aha-experience, we intended to create a potential bridging principle between the existential dimension, the dimension of belief systems and delusions, ungrounding experiences and perceptual alterations (e.g., the game of chess).

From a Wittgensteinian perspective we argued that experiences of perplexity and of a loss of common sense can be interpreted fruitfully with the concept of “blind spots” and “hinge propositions”, which offers a starting point for a potential alternative for “aberrant saliences”, whereby it is argued that “irrelevant” stimuli come to the center of attention. We argue that the pre-reflective background, necessary for a natural interaction and healthy subjectivity, comes to the foreground and destabilizes a self – other – world relation.

Lastly, we used first-person descriptions to investigate from a philosophical phenomenological perspective the intersubjective dimension of psychosis. There, we gave preliminary evidence for the idea that psychosis as a disordered self can potentially have its roots in some cases in intersubjective alienation, isolation, and estrangement. We furthermore exemplified how intersubjective reconnection, taking up roles and tasks that help regain a sense of self and identity in relation to others, might be a crucial aspect in recovering from psychotic experiences.

References chapter 1, 2 & 7

American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorder Fourth Edition (DSM-IV). American Psychiatric Organization.

American Psychiatric Association. (2005). Global Assessment of Functioning (GAF) Scale. In Diagnostic and Statistical Manual of Mental Disorder Fourth Edition TR (DSM-IV-TR) .

American Psychiatric Association. (2013). DSM 5. American Journal of Psychiatry. https://doi.org/10.1176/appi.books.9780890425596.744053

Badcock, J. C. & Paulik, G. (eds). (2020). A clinical introduction to psychosis: Foundations for clinical psychologists and neuropsychologists. *A Clinical Introduction to Psychosis: Foundations for Clinical Psychologists and Neuropsychologists*.

Bergson, H. (2004). Matter and Memory (Margaret Paul N. & Scott Palmer W., Trans.)., New York: Dover Publications, Inc. (*original work published 1912)*

Bloor, M., Frankland, J., Thomas, M., & Robson, K. (2001). Focus Groups in Social Research. London: Sage publications Ltd.

Conrad, K. (1958). Die beginnende Schizophrenie. Versuch einer Gestaltanalyse des Wahns. Stuttgart: Thieme.

Cooper, R. (2014). Diagnosing the Diagnostic and Statistical Manual of Mental Disorders, London: Kanac Books td.

Delespaul, P. (1995). Assessing Schizophrenia in Daily Life. The experience sampling method.

Elizabeth Pienkos, Anne Giersch, Marie Hansen, Clara Humpston, Simon McCarthy-Jones, Aaron Mishara, Barnaby Nelson, Sohee Park, Andrea Raballo, Rajiv Sharma, Neil Thomas, Cherise Rosen. (2019). Hallucinations Beyond Voices: A Conceptual Review of the Phenomenology of Altered Perception in Psychosis, *Schizophrenia Bulletin*, Volume 45, Issue Supplement_1, pp. S67–S77.

Feyaerts, J., Henriksen, M. G., Vanheule, S., Myin-Germeys, I., & Sass, L. A. (2021). Delusions beyond beliefs: a critical overview of diagnostic, aetiological, and therapeutic schizophrenia research from a clinical-phenomenological perspective. *The Lancet Psychiatry*, *8*(3), 237–249.

Feyaerts, J., Kusters, W., Van Duppen, Z., Vanheule, S., Myin-Germeys, I., Sass, L. (2021). Uncovering the realities of delusional experience in schizophrenia: a qualitative phenomenological study in Belgium. *Lancet Psychiatry*, 8(9), 784-796, doi: 10.1016/S2215-0366(21)00196-6

Fuchs, T., & Van Duppen, Z. (2017). Time and Events: On the Phenomenology of Temporal Experience in Schizophrenia (Ancillary Article to EAWE Domain 2). *Psychopathology*. https://doi.org/10.1159/000452768

Fusar-Poli, P., Estradé, A., Stanghellini, G., Venables, J., Onwumere, J., Messas, G., Gilardi, L., Nelson, B., Patel, V., Bonoldi, I., Aragona, M., Cabrera, A., Rico, J., Hoque, A., Otaiku, J;, Hunter, N., Tamelini, M., Maschiao, L; Puchivailo, M., Piedade, V., Kéri, P., Kpodo, L., Sunkel, C., Bao, J., Shiers, D. Kuipers, E. Arango, C., Maj, M. (2022).

The lived experience of psychosis: a bottom-up review co-written by experts by experience and academics. *World Psychiatry*, 21(2), 168-88.

Gadamer, H.G. (2014), Waarheid en Methode. Hoofdlijnen van een filosofische hermeneutiek (Marc Wildschut, Trans.). Amsterdam & Nijmegen: Mark Wildschut & Uitgeverij Vantilt (*original work published 2010)*

Henriksen, M. G., Kodlar, B., Sass, L. A., & Parnas, J. (2010). Autism and perplexity: A qualitative and theoretical study of basic subjective experiences in schizophrenia. *Psychopathology*, 43(6), 357– 368. https://doi.org/10.1159/000320350

Howes, O. D., McCutcheon, R., Owen, M. J., & Murray, R. M. (2017). The role of genes, stress, and dopamine in the development of schizophrenia. Biological Psychiatry, 81(1), 9–20.

Howes, O. D., & Nour, M. M. (2016). Dopamine and the aberrant salience hypothesis of schizophrenia. World Psychiatry, 15(1), 3 – 4. https://doi.org/10.1002/wps.20276

Humpston, C.S., Jackson, H.J. (2020). Part two: Current Conceptualisation of psychosis – Clinical and Research Perspectives. In: Badcock, J. C. & Paulik, G. (eds). A clinical introduction to psychosis: Foundations for clinical psychologists and neuropsychologists. *A Clinical Introduction to Psychosis: Foundations for Clinical Psychologists and Neuropsychologists*.

Jaspers, K. (1997). General Psychopathology. (J. Hoenig and Marian W. Hamilton, Trans.) (Vol. I). Baltimore and London: Johns Hopkins University Press.

Jones, N., Atterbury, K., Byrne, L., Carras, M., Hansen, M., Phalen, P. (2021). Lived Experience, Research Leadership, and the Transformation of Mental Health Services: Building a Pipeline. *Psychiatric Services,* 72(5), 591-593

Jones, N., Shattell, M., Kelly, T., Brown, R., Robinson, L., Renfro, R., Harris, B. & Luhrmann, T.M. (2016). “Did I push myself over the edge?”: Complications of agency in psychosis onset and development. *Psychosis*, 8(4), 324-335.

Kapur, S. (2003). Psychosis as a state of aberrant salience: A framework linking biology, phenomenology, and pharmacology in schizophrenia. *American Journal of Psychiatry,* 160(1), 13–23. https://doi.org/10.1176/appi.ajp.160.1.13

Marder, S. R., & Galderisi, S. (2017). The current conceptualization of negative symptoms in schizophrenia. *World Psychiatry*. https://doi.org/10.1002/wps.20385

Merleau-Ponty, M. (2017), Fenomenologie van de waarneming (Tiemersma D. & Vlasblom R., Trans.), 2de druk (eerste druk 1997), Amsterdam: Boom, (*original work published 1945).*

McGrath, J. J., Saha, S., Al-Hamzawi, A., Alonso, J., Bromet, E. J., Bruffaerts, R., et al. (2015). Psychotic experiences in the general population: A cross-national analysis based on 31 261 respondents from 18 countries. *JAMA Psychiatry*, 72(7), 697–705.

Mishara, A. L., & Fusar-Poli, P. (2013). The phenomenology and neurobiology of delusion formation during psychosis onset: Jaspers, truman symptoms, and aberrant salience. Schizophrenia Bulletin, 39(2), 278–286. https://doi.org/10.1093/schbul/sbs155

Morgan, D. L. (1997). Focus groups as qualitative research / David L. Morgan. *Qualitative research methods series* (Vol. 16).

Myin-Germeys, I., Oorschot, M., Collip, D., Lataster, J., Delespaul, P., & van Os, J. (2009). Experience sampling research in psychopathology: opening the black box of daily life. *Psychological Medicine,* 39(9), https://doi.org/10.1017/S0033291708004947

National Institute of Mental Health, (2022, January 29th). Definitions of the RDoC Domains and Constructs. https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/definitions-of-the-rdoc-domains-and-constructs.

Parnas, J., Møller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of anomalous self-experience. Psychopathology, 38(5), 236–258. https://doi.org/10.1159/000088441

Pienkos, E., Giersch, A., Hansen, M., Humpston, C., McCarthy-Jones, S., Mishara, A., Nelson, B., Park, S., Raballo, A., Sharma, R., Thomas, N., Rosen, C. (2019). Hallucinations Beyond Voices: A Conceptual Review of the Phenomenology of Altered Perception in Psychosis. *Schizophrenia Bulletin,* 45(1), pp. s67-s77, https://doi.org/10.1093/schbul/sby057

Perälä, J., Suvisaari, J., Saarni, S. I., Kuoppasalmi, K., Isometsä, E., Pirkola, S., et al. (2007). Lifetime prevalence of psychotic and bipolar I disorders in a general population. *Archives of General Psychiatry*, 64, 19–28.

Regier, Darel A., Kuhl, Emily A., Kupfer, David J. and McNulty, James P. (2010). Commentary on “The need for patient-subjective data in the DSM and the ICD”. Patient Involvement in the Development of DSM-V. Psychiatry 73(4), pp. 308-310

Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived experience. *Psychologist*, 18(1), 20–23.

Reininghaus, U., Gayer-Anderson, C., Valmaggia, L., Kempton, M. J., Calem, M., Onyejiaka, A., et al. (2016).Psychological processes underlying the association between childhood trauma and psychosis in daily life: An experience sampling study. *Psychological Medicine,* 46(13), 2799–2813.

Roiser, J. P., Howes, D., Chaddock, C. A., Joyce, E. M., McGuire, P. (2012). Neural and Behavioral Correlates of Aberrant Salience in Individuals at Risk for Psychosis. *Schizophrenia Bulletin,* 39(6), 1328-1336

Sass L., Pienkos E. Skodlar B., Stanghellini G., Fuchs T., Parnas J. & Jones, N. (2017) EAWE: Examination of Anomalous World Experience. *Psychopathology,* 50(1), 10-54. https://doi.org/10.1159/000454928

Sass, L. (2022) Subjectivity, psychosis and the science of psychiatry. *World Psychiatry*, 21(2), https://doi.org/10.1002/wps.20986

Schwartz, M. A., Wiggins, O. P., Naudin, J., & Spitzer, M. (2005). Rebuilding reality: A phenomenology of aspects of chronic schizophrenia. *Phenomenology and the Cognitive Sciences*, 4(1), 91–115. https://doi.org/10.1007/s11097-005-4738-y

Sips, R. (2018a). Niveaus van herstel na psychose: Filosofie en ervaring. In D. Boertien, W. Kusters, & Leegsma Mark (Eds.), Filosofie bij Herstelondersteuning. Opnieuw denken

over geestelijke gezondheid (p. 160). Utrecht: Kenniscentrum Phrenos & Stichting Psychiatrie en Filosofie.

Sips, R. (2018b). Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences. *Schizophrenia Bulletin*. https://doi.org/10.1093/schbul/sby072

Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative Phenomenological Analysis. Theory, Method and Research (2012th ed.). London: Sage.

Smith, J. A., & Osborn, M. (2008). Interpretative Phenomenological Analysis. In: Doing Social Psychology Research. https://doi.org/10.1002/9780470776278.ch10

Tamminga, C.A., van Os, J., Reininghaus, U., Ivleva, E. (eds.). (2020). Psychotic Disorders: Comprehensive Conceptualization and Treatments, Oxford: Oxford University Press

Van Duppen, Z., & Sips, R. (2018). Understanding the blind spots of psychosis: A Wittgensteinian and first-person approach. *Psychopathology*. https://doi.org/https://doi.org/10.1159/000490257

van Os, J. (2016). “Schizophrenia” does not exist., *BMJ*. https://doi.org/10.1136/bmj.i375

van Os, J., Linscott, R.J., Myin-Germeys, I., Delespaul, P., Krabbendam, L. A. (2008). Systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis proneness- persistence-impairment model of psychotic disorder. *Psychological Medicine*, 39(2):179-95.

Winton-Brown, T.T., Kapur, S. (2020) Aberrant Salience attribution and psychosis. In: Tamminga, C.A., van Os, J., Reininghaus, U., Ivleva, E.(Eds.), Psychotic Disorders: Comprehensive Conceptualization and Treatments, Oxford: Oxford University Press, 442-450

Conflict of Interest Statement

The authors of all chapters of this manuscript (including the doctoral candidate) have no conflicts of interest to disclose.

Scientific Acknowledgments

I want to thank everyone who has contributed to the research in this doctoral study. For chapter three, I thank Inez Myin-Germeys, Zuzana Kasanova and Zeno van Duppen for their valuable discussion and constructive feedback. For chapter four, I first of all want to thank the participants of our study, who took the time and effort to have these conversations about their experiences with us and with each other in the focus groups, hereby providing us with valuable and rich qualitative data. I would like to thank the patient organization "Uilenspiegel", for helping us to find participants for our study. I furthermore want to thank the staff of UPC Kortenberg of the Sint-Joris and the Monica ward for letting us present our study in morning meetings, helping us to find participants and to let us make use of their facilities for interviewing participants. I thank Zuzana Kasanova for her role as daily supervisor, providing valuable constructive feedback and practical suggestions in the process of recruiting, promoting and executing the study. As important actors in practically supporting this study, I thank research assistants Davinia Verhoeven and Silke Apers for helping me recruit participants and for providing support during the interviews and focus groups. I furthermore want to thank Martien Wampers for her help with data storage, management and making the study comply with GDPR. I thank Kristien Hens who made time to help me better understand qualitative research methods like coding data in Nvivo. I acknowledge Zuzana Kasanova as well in the work put in the writing process of the paper of three and chapter four, as well as Inez Germeys and Zeno van Duppen. I furthermore would like to thank the other co-authors that have provided critical feedback to the paper of chapter four: Lena De Thura, Ana Teixeira and Jasper Feyaerts. I also want to thank the at that time master student Jade Coudré for her help with transcribing some interviews, and the other master students I helped supervise, Rafaël Bonnier, Ward Mertens and Benji Jame for their enthusiasm and interested discussions regarding the study.

For chapter five, I want to thank Zeno van Duppen for this insightful collaborational paper. Chapter six was the result of a symposium at the 2019 ISPS conference in Rotterdam, co-organized with Wouter Kusters and as other speakers Elizabeth Pienkos and Jasper Feyaerts. I thank the ISPS organization for giving us a platform to further explore and publicly engage in the phenomenological research and debates surrounding psychosis, as for their valuable work in general. I further thank Wouter, Elizabeth and Jaspers for being part of this inspiring symposium and for the valuable discussion and suggestions on the paper based on this conference.

I also express my gratitude to Martine van Nierop for the help provided to get this thesis through the necessary complex administrative mill. I would also like to thank the rest CCP team for their other input but mostly for their adding to the nice atmosphere of a daily

workplace which is an invaluable aspect of scientific research. Lastly a thank you to Aki Rintala, Güdrun Eisele and Wai Wong for the lovely atmosphere in our shared office.

Personal Contribution

This study was conducted with a core supervision team of promotor Inez Myin-Germeys and co-promotors, in daily supervision Zuzana Kasanova and Zeno van Duppen. Below, I describe my specific contributions to each chapter of the doctoral dissertation.

Chapter 3: Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences

This paper was fully written by the researcher, with critical feedback on drafts from the core supervision team and suggestive comments from Erik Myin at the beginning of the writing process.

Chapter 4: Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences: A Qualitative Study

The researcher developed the study in collaboration with the core supervision team. The researcher collected the data through interviews and focus group, supported by two research assistants, and transcribed these audio recordings - with a few exceptions that were transcribed by master student Jade Coudré, checked by the researcher. The researcher coded the data through Nvivo. The initial draft was written by the researcher, whereby in the first stages Zuzana Kasanova and Zeno van Duppen provided critical feedback, after which Inez Myin-Germeys provided feedback on a regular basis. In a later stage, the co-authors, Lena De Thura, Ana Teixeira and Jasper Feyaerts provided feedback.

Chapter 5: Understanding the blind spots of psychosis: A Wittgensteinian and first-person approach

This paper was a collaboration between the researcher and co-promotor Zeno van Duppen. Zeno wrote the introduction and Wittgensteinian framework for this paper, further building on his doctoral dissertation in philosophy on psychosis. The researcher wrote the part “First-Person Perspective on Psychosis” and “The Dialectic of Aha and Anti-Aha-Experiences”, in collaboration and discussion with Zeno, and co-wrote the part on “Blind spots” and the conclusion.

Chapter 6: Psychosis and Intersubjectivity: Alterations in social relations throughout psychotic crises

This paper is a based on the conference presentation of a symposium at the ISPS conference in 2019. The data used in this paper was collected from interviews and focus groups conducted by the research in function of this doctoral study. The paper was written by the researcher, with critical feedback from the other participants of the symposium: Jasper Feyaerts, Elizabeth Pienkos and Wouter Kusters.