

Phenomenological Neuropsychiatry

How Patient Experience
Bridges the Clinic with Clinical
Neuroscience

Aaron L. Mishara
Marcin Moskalewicz
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Editors

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Foreword

Phenomenological Neuropsychiatry

To anyone starting out on a career in Psychiatry in the last quarter of the twentieth century there were two seminal texts, *Allgemeine Psychopathologie* (General Psychopathology) by Karl Jaspers (1963 in English) and Eliot Slater and William Sargent's *Physical Methods of Treatment in Psychiatry* (1944).¹ Freudian attachments were bygone, but there were contrasts between the empirical approach of Anglo-Saxon philosophers who looked askance at the role of the unconscious in the conscious and idealistic Continental approaches linked to phenomenology, much derived from the philosophy of Immanuel Kant. His distinction between the noumenon and the phenomenon, in other words what is in the world outside us (*Ding an sich*), in contrast to that which is experienced by us, led to the conundrum of how the two are united. The distinctions between to “understand” (*Verstehen*) and to “explain” (*Erklären*) are especially relevant to neuropsychiatry, central to the theories of Jaspers.

Jaspers considered his approach as phenomenological, seeking authentic experiences, and describing psychopathological states with no bias to any particular theory. Yet *Allgemeine Psychopathologie* is not only a philosophical treatise, but contains descriptions and definitions of various mental states, so valuable still yet often ignored.

His dual approach is central to *phainómenon* (Gr), things appearing, the importance was to capture the psychology of meaning:

When the contents of thoughts emerge one from another in accordance with the rules of logic, we understand the connections rationally. But if we understand the contents of thoughts as they have arisen out of moods, wishes and fears of the person who thought them, we understand the connections psychologically or empathetically. Only the latter can be called psychological understanding...Whereas rational understanding is only an aid to psychology, empathic understanding is psychology itself—(Jaspers)².

Meaningful connections, how one psychic event merges with and emerges from another, what he called *genetic* understanding, the longitudinal

¹Jaspers K, *Allgemeine Psychopathologie* (*General Psychopathology*) (1963 in English) trans: Hoenig J and Hamilton MW, Manchester, Manchester University Press: Slater E, Sargent W *Physical Methods of Treatment in Psychiatry* (1944), Edinburgh Livingstone.

²Jaspers K, *ibid* p 83.

dissection of the psyche, was central to this process. Causal explanations are different. Psychic processes alter psychic life without destroying it, while organic processes despoil it.

Psychiatry, as it developed in the twentieth century, became more and more divorced from neurology, having little connection with neuroscience, and even attempts to retain finesse with psychopathology have, in various settings, been either downgraded or obliterated. The use of rating scales and computerised profiling of responses to committee-determined questions in the search for a spurious diagnostic purity has sacrificed validity and reliability, the latter having a fragile subsoil, quite dependent on the agreement of like-minded people to agree. For example, the interest in memory which pre-occupied earlier nineteenth and twentieth century theorists such as Théodule-Armand Ribot, William James, and Henri Bergson, and which was central to Marcel Proust, became addled and degraded by standardised neuropsychological tests and scales. The “involuntary” unconscious remembrances of Proust, along with the “affective” memories of Ribot, embodied and embedded, have been forgotten and which no rating scale has been able to capture. Notions of the “self” as a coherent identity were brushed aside: Behaviouralist psychologies even eschewed the patients’ inner world.

An interest in phenomenology for psychiatry, especially for neuropsychiatry, re-emerged in the last part of the last century. There has been a serious attempt to break the subject-object split, but this is still undermined by Cartesian ideology. The sensorimotor underpinning of intentionality and a re-evaluation of the association between consciousness and perception, in which perception follows consciousness (i.e. the perceptual object and the physical object are not the same and not vice versa), have reversed much of the empirically bound earlier thinking. The brain is *intentional*, not a passive sponge for sensory information³.

Several philosophers, all with some interest in medical science, are important such as Bergson, Max Scheler, and Maurice Merleau-Ponty. Bergson thought that modern science had become divorced from our ordinary experiences and emotions, in which time is the central vessel of reality—time not space being the important feature of life. Merleau-Ponty took a scientific approach to philosophy, and his most celebrated work is *The Phenomenology of Perception* (1945 English translation 1962). Taking a theme raised by Bergson that “there is no perception which is not full of memories”⁴, Merleau-Ponty’s philosophy emphasised the body and its engagement with the world: he was after the nature of the body-world dialogue. The body was for him the intermediary between mind and matter, with the “body subject” being anchored in a pre-cognitive, pre-objective, pre-reflexive disposition. He followed Bergson’s maxim that “The essential process of recognition is not centripetal, but centrifugal”⁵. For Merleau-Ponty, the importance of perception was not to be found in the perceived object but in our experience of it. He was

³Trimble M R, *The Intentional Brain: Motion, Emotion and the Development of Modern Neuropsychiatry*. Baltimore Johns Hopkins Press, 2016.

⁴Bergson H *Creative Evolution*. 1911, New York, Dover Publications, p 24,

⁵Bergson, H 1911, *ibid*, p 168.

concerned with the phenomenal field, that which is presented to the perceiver, which is ontological and not ontic (to do with “becoming” as opposed to “being” and permanence, the phenomenological as opposed to the empirical). Bergson and Merleau-Ponty placed human experience firmly back into the temporal flux, along with the human mind’s necessity to seize the meaning of the lived-in world.

The phenomenologist places consciousness and experience at the heart of mental life. The upshot of this is that the role of emotion and the fundamental principle of embodiment are now respectable subjects of study in neuroscience with interest in “the social brain”, Theory of Mind (that other people have minds like one’s own), empathy, mirror neurons, and mental time travel (how we see the possibility of future events based on past experiences). Merleau-Ponty opined that “Sensations, ‘sensible qualities’ are then far away from being reducible to a certain indescribable state or *quale*; they present themselves with a motor physiognomy and are enveloped in a living significance”.⁶ Such ideas place the body’s physiological processes and anatomical structures as fundamental, not only for the rise of consciousness but also for knowledge, reasoning, and creativity:

The incontestable truth of (the everyday realist) becomes invalid when empirical reality is presumed to be wholly and conclusively known and when it claims to determine alone what is at issue. Against this must be maintained that the real world by no means is so simply present—(Jaspers⁷).

Neuropsychiatry is a special way of exploring the brain and its disorders, the modern era began in the 1980s, along with Behavioural Neurology: the discipline has undergone a renaissance, which arose from a clinical need. The growing awareness is that mind and movement share the brain, that emotion is represented in the brain by extensive cortical and sub-cortical circuits, and that many patients presenting to neurological clinics with neurological symptoms do not have an underlying pathology to account for them.

The preference which has emerged in psychiatry is for assessing people to be reduced to mathematical formulae and rating scale instruments, many unsophisticated which have overtaken the importance of clinical skills in patient evaluation. Wire and box diagrams are used to explain how the brain works. The subtleties of careful clinical explorations of patients’ history, signs, and symptoms come after laboratory testing and brain imaging if adopted.

The importance for a neuropsychiatrist to have a secure basis in neuroanatomy is under-emphasised, and the links to other social neuropsychological and philosophical disciplines referred to above can be considered of marginal relevance. *Phenomenological Neuropsychiatry* has a broad approach to the state of a most important discipline in the clinical and theoretical neurosciences. Critical thinking and the sophistication and knowledge of the work of pioneers such as Jaspers are acknowledged.

⁶Merleau-Ponty, M. *Phenomenology of Perception*, 2002, London, Routledge, p 243.

⁷Jaspers K, *ibid* pp 25/26).

The eminent neuropsychiatrist Eliot Slater said “As for neurologists I have no hope for them at all. I think the neurologists could only advance if they really became neuropsychiatrists”.⁸ The same might be said to apply to psychiatry.

London, UK

Michael Trimble

⁸In conversation with Eliot Slater, Part 2. *The bulletin of the Royal College of Psychiatrists*. 5, 1981 p. 178.

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Introduction: Themes and Perspectives

1

Aaron L. Mishara, Marcin Moskalewicz,
Michael A. Schwartz, and Alexander Kranjec

First-Person Perspective in Psychiatric Research and the Role of Phenomenology

This book originates from the need to integrate a first-person perspective into mainstream academic research in psychiatry and its relation to neurology. First and foremost, it recognizes that psychiatric patients can offer unique viewpoints and insights, not only into their own pathology but into the broader and basic categories of being

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a person—the kinds of experiences associated with perception, emotion, action, selfhood, embodiment and communication—that may be disordered during mental illness. While conventional psychiatric paradigms predominantly emphasize empirical quantification and pathological categorization, the intricate weaving of human mental states presented by patient experience suggests the presence of a larger ontological tapestry than what is represented currently. For now, the complex patterns in this tapestry can only be imagined, but we know that whatever image they make must afford a more expansive view. An approach that incorporates the subtle variations of embodied lived experiences and emotional landscapes, in addition to neurocognitive processes. But how do we find this place? This is where philosophy, and phenomenology in particular, come in handy, as a bridge.

The interaction between philosophy and psychiatry is both new and old. Its novelty is evidenced by the recent surge in interest, as demonstrated by the proliferation of specialized publications and conferences focusing on their collaborative efforts. It is old because the ancients did not see the practice of medicine and the pursuit of basic human questions as separate. Phenomenology, on the other hand, began around the same time as modern psychiatry, namely, during the last decades of the nineteenth century, and psychiatrists schooled in phenomenology have learned to explore the subtleties and nuances of

their patients' experiences. In research and theoretical domains, such training aids in conceptualizing invariant features of the concrete situatedness of persons, encompassing physical embodiment, cultural influences, and historical context. Psychiatrists have therefore integrated various phenomenological methods, paralleling phenomenologists' investigations in psychiatric topics. Yet, the history of this relationship is marked by ambiguity. Often, there is a discernible disconnect between broad theoretical ideas derived from phenomenology and the practical demands of clinical psychiatry. Psychiatrists, typically educated in biological and natural sciences, have sometimes been hesitant to engage deeply with subjectivity, for these inquiries appear overly abstract and metaphysical. Conversely, phenomenologists have often been reluctant to appreciate biological and naturalistic viewpoints. More recently, this relationship has become more complicated, yet these complexities offer hope of a revitalized cross-fertilization between psychiatry and phenomenology. While advances in empirical psychiatric research have equipped physicians with potent psychopharmacological treatments, there is growing recognition of their limitations, inadequacies, and potential negative impacts, both among medical professionals and patients. This awareness highlights the need for a more balanced approach that could rejuvenate the interplay between psychiatry and phenomenology.

In this context, cognitive neuroscience is often described as a bridging discipline. As a kind of basic science, it seeks to relate models of cognitive processes or computations with physiological ones to ask, "How does the brain give rise to the mind?" Cognitive neuroscience certainly offers new hope in our understanding of mental disorders, but it does not yield a complete picture, and its precise relationship to subjectivity needs to be elaborated by more philosophic approaches. Thus, the metaphorical "bridge" in the subtitle of this book points to a remaining gap between the disparate realms of lived experience and its neurocognitive instantiation. It also suggests that a deeper understanding of neural and mental processing can serve to provide richer

descriptions of human experience, and vice versa. Hopefully, in ways that can ultimately *improve* patient experiences.

Although Diagnostic and Statistical Manuals of Mental Disorders III to V (DSM) primarily focus on patients' symptom reports and clinicians' observations and interpretations of their meaningful content, there is little or no effort in DSM to formalize and operationalize subjective experience itself. The diagnosing process often involves ticking off symptoms and assessing if the patient's responses meet specific diagnostic criteria, leading to a diminished inquiry into their personal experiences. The clinician's interest in the patient's responses is mostly limited to the extent that each aligns with a number of pre-established, operationalized diagnostic criteria. This approach overlooks the DSM's initial caution that its categories are provisional and lack a solid conceptual foundation. Essentially, the DSM methodology does not engage in a phenomenological examination of the patient's subjective experience; rather, it often bypasses it. In contrast, phenomenology suspends judgment on the ontological reality of nosological entities while exploring the meanings that shape their formation. This method necessitates a more thorough understanding of what an operational construct represents in the patient's symptom experience and the clinician's meaningful interpretation of the contents of their disorder. Only after this understanding is achieved can these experiences be operationalized and quantified in terms of a more rigorous scientific analysis.

The lack of systematic integration of patient subjectivity and collaboration in clinical research also hinders psychiatry's advancement in correlating neuropsychiatric symptoms with neural pathways and mechanisms. This apprehension—which also involves a broader reluctance to adopt an understanding of cognition and experience as an embodied intersubjective phenomenon—impedes both basic science exploration and the accuracy of diagnostic classification. A fundamental issue lies in the unexplored notion of subjectivity, which is molded by prevailing common sense assumptions. Frequently, subjectivity is

misconceived as the opposite of objectivity—hidden and unreliable. This misunderstanding is then paired with the belief that phenomenology merely uncovers the unique circumstances of an individual. Overall, a more general understanding of subjectivity and how it systematically changes across various mental disorders becomes neglected.

This negative understanding of subjectivity as something solely private or elusive stems from adherence to methodological traditions inherited from behaviorism in psychology and psychiatry that focus on quantifiable observations. This means that subjectivity, which extends beyond the impenetrable “black-box” of behaviorism, is not a suitable object for empirical study. Moreover, this tradition also assumes that a healthy consciousness depends on an attachment to common sense, which, while varying among individuals, shares certain characteristics and functions that can be modeled computationally in a straightforward manner. Yet, viewing psychotic experiences as deviations from a “normal” consciousness that supposedly represents the world accurately is problematic. Indeed, research in social and cognitive neuroscience shows that our perceptions of reality are not direct representations. As Husserl pointed out, our default attitude typically encompasses a habitual and somewhat limited comprehension of reality. For example, if common sense plays a protective role, maintaining an unchallenged, “natural” alignment between internal experience and external reality, then mental health is preserved partly by resisting the loss of common sense. This may distort certain features of “reality.” Conversely, this means that altered states of consciousness involving the disruption of this natural attitude, even while misaligned with common, species-specific goals, are not necessarily less accurate in representing the outside world. Sometimes, they may even be more sensitive to some of its aspects.

Phenomenological methods in studying consciousness acknowledge it as a process that subjectively constructs its own reality. They also allow for the possibility that systematic inaccuracies in our experiences may serve an adaptive function to maintain meaningful engagement

with the world. Nevertheless, what we call healthy and unhealthy forms of consciousness may have unique phenomenological structures and associated neural pathways. The neurophenomenological approach in psychiatry seeks to explore interacting dimensions like spatial and temporal experience, embodiment, self, and social interactions, assuming that each may be correlated with brain function. A nuanced phenomenological analysis can generate specific hypotheses about neural circuits involved in different neuropsychiatric disorders. This approach transcends traditional dichotomies, such as mind–body, inner–outer, and self–other, anticipating evolving interrelations and redefining boundaries across various disciplines, including psychopathology, nosology, social psychiatry, psychotherapy, cognitive neuroscience, and general psychiatry.

Overview of the Chapters

Part I of the book titled *Reflections from Within* opens up with a chapter titled “Phenomenology, Psychoanalysis and Schizophrenia” by Elyn R. Saks, a scholar who suffered from schizophrenia for decades. Speaking about her experiences, Saks posits that psychotic symptoms have meaning and that the voice of consumers with lived experience of mental illness should be included in all psychiatric research. In the next expansive chapter, titled “Three Stories from Inside Psychosis,” the authors, Robert Miller, Frederick J. Frese III, and Peter K. Chadwick, present and discuss their personal reflections on their lived experience of psychosis and its aftermath. The authors reflect on their own journey through medical challenges, professional life, and intellectual pursuits, ultimately for a more nuanced approach to diagnosis and treatment of mental illness enriched by incorporating the subjective experiences of those who have lived with the condition. They argue for a more inclusive, multidimensional approach to understanding and treating mental health issues. As peer professionals, they believe they can guide others through their personal journeys with mental illness. The

final conversation between the authors exemplifies an interdisciplinary exchange, weaving together elements of psychology, psychiatry, cognitive science, and philosophy, elucidating the complexities of studying mind, brain, and subjectivity.

Part II of the book, titled *History and Foundations*, consists of nine chapters that address the critical conceptual and methodological challenges for the holistic understanding of mental health.

In “The Epistemology of Psychiatry and of Mental Symptoms: The Cambridge View” German E. Berrios and Ivana S. Marková argue that psychiatry has traditionally thrived when equitably fusing empirical and theoretical inquiry, a balance that is now lost and that the current shift emphasizing empirical research undermines the discipline’s capacity to provide a comprehensive approach to patient care. This bias against theory may be attributed to the resurgence of a positivist stance that privileges empirical methods as the sole avenue for psychiatric understanding, thereby relegating the philosophy of psychiatry to a subservient role; that of a mere “rationalizer” of the natural sciences. Thus, the chapter contends that such a perspective not only misconstrues the nature of psychiatry but also compromises the efficacy of clinical practice.

In “Stage Theory and the Kraepelinian Straightjacket” Edward Shorter elucidates the notion of “stage theory” as imported into psychiatry for the purpose of indicating severity of mental illness. Stage theory is here redefined to picture a linear transition from one clinical presentation to another and thus challenge the present mainstream “phenomenological” method of diagnosis. The chapter argues that while the Diagnostic and Statistical Manual of Mental Disorders sorts patient experiences into distinct, non-overlapping categories, antiquated theories of stages may identify a latent structure constituting the actual pathology, for which diagnostic categories, such as “depression” and “psychosis,” are mere epiphenomena.

The next chapter by Heinz Häfner and Marcin Moskalewicz, “Karl Jaspers’ *Allgemeine Psychopathologie*. The Theory of Abnormal

Perceptions and Its Methodological and Conceptual Basis” presents Jaspers’ seminal work from 1913 contextualized with his philosophical inspirations and personal academic trajectory. As utilized by Jaspers, phenomenology mandates an unbiased and theory-free reproduction of mental phenomena as they manifest in consciousness. *Allgemeine Psychopathologie* is a foundational compendium for descriptive psychopathology that still offers invaluable insights for neuropsychiatric research, facilitating the formation of empirically testable hypotheses concerning the interplay between psychopathological phenomena and biological substrates. Jaspers’ philosophy is also the main theme of the subsequent chapter by Anthony Vincent Fernandez and Giovanni Stanghellini titled “Comprehending the Whole Person: On Expanding Jaspers’ Notion of Empathy.” It elucidates how Jaspers’ understanding of empathy can be enriched by engaging with the corpus of philosophical phenomenology. The chapter provides an explication of Jaspers’ notions of empathy and incomprehensibility, an overview of contemporary scholarship on overcoming Jaspers’ notion of incomprehensibility, and expands his concept of empathy; thus delineating several levels of investigation for any phenomenological investigation into psychopathology. The chapter concludes with the contention that in order to achieve a comprehensive empathic understanding of patients afflicted with schizophrenia and other mental disorders, it is imperative to recognize the potential for modifications across all levels of human existence.

The next chapter on “Embodied Cognition in the Clinic” by Shaun Gallagher and Daniel D. Hutto elucidates the idea of embodied cognition along with embedded, enactive, and extended approaches, and an associated perspective on social cognition known as interaction theory. Subsequently, by scrutinizing the methodologies employed at three distinct clinics (Neurological Physiotherapy Clinic in Tromsø, Norway, Psychiatric Clinic at the University of Heidelberg, Germany, and Adult Mental Health Clinic in Newham/London) it demonstrates the significance of these theoretical constructs when applied to diverse clinical environments. The

chapter also explores models of embodied psychotherapeutic practice that incorporate intersubjective group engagement and novel implementations of virtual and mixed-reality technologies. These innovative approaches have relevance for investigating the intricate interrelations of body, brain, and environment in the clinical neuroscience of neuropsychiatric conditions.

The next chapter by Georg Northoff titled “How Are the Brain’s Neural Changes Related to Experience and Symptoms? Spatiotemporal Psychopathology” takes as its point of departure the contention that despite extensive neurobiological research into psychiatric disorders, the basic disturbances underlying psychopathological symptoms remain enigmatic. Based on resting-state Functional Magnetic Resonance Imaging (fMRI) findings that link ruminations in depression and thought disorder and auditory hallucinations in schizophrenia to abnormalities in the spatial and temporal organization of neural activity across the whole brain, Northoff conceives of psychiatric symptoms as pertaining to a number of generalizable spatiotemporal aberrations. Crucially, this posits a novel form of psychopathology—spatiotemporal psychopathology—which forges a direct nexus between neural and psychological phenomena.

In “Synchronization and Functional Connectivity Dynamics Across TC-CC-CT Networks: Implications for Clinical Symptoms and Consciousness,” Urs Ribary and Lawrence M. Ward argue that functional connectivity, both within the human cerebral cortex and between cortical and subcortical structures, is critical for instantiating consciousness and the correlated phenomenology of subjective experience. The chapter lays out the details of MEG (magnetoencephalography) and EEG (electroencephalography) work on the dynamics of functional connectivity in thalamocortical (TC), cortico-cortical (CC), and cortico-thalamic (CT) circuits, with a particular focus on synchronization across diverse frequency ranges. The authors then describe the consequences of various perturbations to these dynamic neurocognitive processes, ranging from minor decelerations in connectivity, through severe slowing, to the total disintegration

of functional network dynamics which can occur after traumatic brain injury.

The next chapter by Edmund T. Rolls, “Cortical Neurodynamics, Schizophrenia, Depression, and Obsessive-Compulsive Disorder,” seeks to understand the mechanisms and symptoms of schizophrenia and depression using a computational neuroscientific approach based on a stochastic neurodynamical framework. Regarding schizophrenia, the model points to reduced neural activity and decreased functional connectivity between brain regions, contributing to cognitive and emotional symptoms. It also highlights the role of reduced GABA neurotransmission in manifesting positive symptoms. In the context of depression, the model identifies an over-responsive attractor system in the lateral orbitofrontal cortex, linking it with symptoms like low self-esteem and rumination. The approach aims to produce a neurally grounded mechanistic model to comprehensively account for the phenomenal experiences of these disorders.

The last chapter of Part II, “Interpersonal Neurobiology, the Mind, and Health In Its Flourishing and Compromised States” by Daniel J. Siegel, offers a succinct introduction to an interdisciplinary methodology. Here, several scientific disciplines are amalgamated into a unified framework for the purpose of both understanding the human mind and increasing well-being. Drawing upon E.O. Wilson’s concept of “consilience,” the field of interpersonal neurobiology seeks to understand the nature of reality by integrating independent discoveries from diverse fields including, but not limited to, mathematics, physics, chemistry, biology (encompassing genetics, neuroscience, and medicine), psychology, linguistics, sociology, and anthropology.

Part III of the book, titled *Disorders of the Body, Memory, and Self-Awareness*, consists of seven chapters that explore the links between subjectivity, memory, and disturbances of corporeality in conditions characterized by anxiety, depression, and dementia.

The first chapter of this part, “Interoception and Psychopathology” by Nick Medford, Lisa Quadt, and Hugo Critchley, concerns the issue of

interoception, in particular the awareness of embodied processes like heart rate and breathing, or more broadly speaking, an organism's perception of its own internal state. Given that psychiatric conditions predominantly manifest as disturbances in emotional regulation, examining several interoceptive aspects may be imperative for furthering our understanding of their underlying cognitive and neurophysiological mechanisms. Concurrently, developing a nuanced phenomenology relating subjective emotional experiences to internal bodily states, or the physiological systems mediating emotional responses, stands as a crucial research focus for neuropsychological psychiatry.

The second chapter by Martin Davies, Caitlin L. McGill, and Anne M. Aimola Davies, titled "Anosognosia for Motor Impairments as a Delusion: Anomalies of Experience and Belief Evaluation" conceptualizes anosognosia as a delusion per the *DSM-5* definition. In the context of motor impairments, it refers to patients who maintain the conviction of functional mobility in limbs that are, in fact, paralyzed. The chapter proposes a two-factor account of anosognosia as a continued belief delusion. The first factor describes an experiential aberration characterized by the absence of immediate bodily experience of movement failure. The second factor suggests that patients may be incapable of utilizing empirical data to critically assess and subsequently discard erroneous beliefs, thereby preventing them from attaining awareness of their motor impairments.

A delusional belief regarding the body is also the subject of the subsequent chapter, Otto Doerr-Zegers' "Phenomenology of the Body in Cotard's Syndrome." The author scrutinizes the nihilistic delusion known as Cotard's syndrome where a patient may believe themselves to be dead or non-existent. The foundational experiences underlying this delusion, concerning both self-embodiment and interpersonal relations, are examined through the lens of Husserl's and Lévinas' philosophical frameworks on consciousness and corporeality. The conclusions suggest that current classification frameworks, including the *DSM-5* and *ICD-10*, accord minimal significance to the conspicuous alterations in

bodily experience observed in individuals with depression.

The next chapter in Part III by Charlène Aubinet, Audrey Vanhauzenhuysse, Steven Laureys, and Athena Demertzi is titled, "The Self in Disorders of Consciousness." It concerns a number of severely brain-damaged patients who cannot articulate their subjective experiences. Consequently, inferences must be made regarding their level of (self-) consciousness. It points to studies showing that the brain's responses to particularly salient stimuli vary between unconscious and minimally conscious patients and suggests that atypically high levels of neural activity in response to such stimuli may provide evidence for favorable clinical prognoses. These experimental inquiries into the "self" within pathological unconsciousness extend beyond the mere functional localization of self-related cognitive activities and suggest a system-level approach to understanding the phenomenal aspects of subjectivity.

The next chapter, "Psychological Disorders and Autobiographical Memories: Examining Memory Specificity, Affective Content, and Meaning-Making" by Colin McKay, Emma Storm, Peter Castagna, Jefferson A. Singer, and Martin A. Conway, defines healthy autobiographical memory within a larger framework of narrative identity. The chapter argues that healthy memory encompasses three core components: (1) specificity, (2) predilection for positive emotional content, and (3) the ability to engage in meaning-making. The chapter reviews research on several major psychological disorders for evidence of impairments in these essential components. The findings demonstrate how a number of psychological pathologies compromise the foundational elements of narrative identity concerning experiential awareness, emotion regulation, and a coherent sense of self. By considering the subjective experiences associated with these disorders, it may be possible to achieve greater clarity concerning the roles that self and memory play in both scientific investigation and therapeutic intervention.

Autobiographical memory is also a subject of the next chapter, titled "Self in Dementia," by

Eric Salmon, Dorothee Feyers, Christine Bastin, Sarah Genon, Haroun Jedidi, Mohamed Ali Bahri, Steven Laureys, and Fabienne Collette. Episodic autobiographical memory is impaired in the early stages of Alzheimer's disease. Patients are prone to experiencing deficits in their autobiographical sense of self and often lack full awareness of their dysfunction. While the specific executive dysfunctions contributing to diminished self-reflective capacities in Alzheimer's disease await further elucidation, nonetheless, even in advanced stages of the condition, abstract generalizations retained in personal semantic memory may enable patients to sustain a 'core' self. This sense of a personal self may endure even in severe dementia and can be augmented through the supportive actions of caregivers who contribute to shaping the patient's social identity. Exploring patients' subjective experiences relating to self, memory, and executive functions can offer substantial insights into understanding and clinical management of Alzheimer's disease.

Another severe manifestation of pathological memory distortion, namely confabulation, is the theme of the final chapter in Part III, "What is it like to be Confabulating?" by Sahba Besharati, Aikaterini Fotopoulou, and Michael D. Kopelman. The chapter initially delineates conceptual differences between spontaneous and momentary confabulations and distinguishes these from other categories of false memories. Special attention is given to a comprehensive model of confabulation that concurrently examines cognitive impairments in memory and executive functions alongside social and emotional determinants. The argument posits that a phenomenologically robust characterization of confabulation necessitates the consideration of all these dimensions. Finally, the chapter presents a case example to elucidate how seemingly meaningless false memories acquire significance when contextualized within personal perspective and autobiographical memory.

Part IV of the book consists of five chapters that present a phenomenological exploration of *Disorders of Mood and Anxiety*, including issues related to affectivity, depression, anxiety, obsessions, and depersonalization.

Joel Paris in "Distinguishing Between Affective Instability, Bipolar Disorder, and Borderline Personality Disorder: Diagnosis and Treatment in an Age of Neuroscience" argues for careful phenomenological study of symptoms instead of presumptions concerning diagnostic spectra based on superficial resemblances. Despite the contemporary move toward a neurobiological model of psychopathology, diagnosis continues to be based on observable phenomena. Our knowledge for the purpose of developing a classification of mental disorders based purely on neuroscientific description is still not sufficient. The occurrence of affective instability exemplifies the issue. While this particular symptom has traditionally been situated within the bipolar spectrum, it is more accurately associated with the complex and multidimensional diagnosis of borderline personality disorder.

The question of how we assess our experiences in real time has attracted renewed attention in the field of neuroscience. Yet, the subjective mechanisms through which these evaluations are automatically generated and experienced have been largely overlooked. The chapter "Evaluative and Habitual Behavior in Depression" by Jann E. Schlimme and Martin Voss focuses on the biases present in the pre-reflective assessment of ongoing experiences, particularly in the context of depression, and its significance for comprehending the disorder's pathophysiology and associated neural pathways. The chapter elaborates on how phenomenological methods enrich the neuroscience underlying the evaluation of depression. A nuanced phenomenological analysis of automatic evaluation furnishes a pioneering methodology for investigating the neuroscience of bias and evaluation in depression.

Dan J. Stein's and Damiaan Denys' "Phenomenological and Neuroscientific Perspectives on Anxiety Disorders" focuses on the experience of anxiety and attempts to link this to clinical neuroscience. The core thesis here suggests that anxiety is a heterogeneous construct, with varying subjective experiences potentially corresponding to distinct neural circuits. Variations in the experience of anxiety could indicate the distance to the fear-inducing

stimulus, ranging from anticipatory concerns, through fear, and culminating in imminent panic. Other variations may signify different types of fear stimuli, such as agoraphobia, generalized anxiety, specific anxiety, social anxiety, and posttraumatic anxiety. The phenomenological analysis of anxiety disorders indicates a potentially significant distinction between disorders typified by phobic symptoms and those marked by obsessions and compulsions. In addition, emerging evidence suggests that these phenomenological variations in the experience of anxiety are linked to differing underlying neuronal pathways.

The following chapter by Damiaan Denys, Reinier Prosée, and Dan J. Stein, “Obsessive-compulsive Disorder and Certainty”, is focused on the loss of a ‘natural’ sense of certainty. It argues that individuals with OCD commonly strive to restore this sense through hyperconscious thinking, ritualistic acts, and repetitive behaviors. While these symptoms may offer temporary relief, paradoxically they often exacerbate the erosion of certainty in the long run. Studies indicate that the sensations of certainty and uncertainty are likely encoded by unique firing patterns of dopaminergic neurons within the brain’s reward system. Given that OCD frequently involves dopamine imbalances in the striatum, the altered phenomenology of certainty in the condition may have a physiological basis. Furthermore, the application of deep brain stimulation in treating OCD demonstrates that patients experience more “confidence” as a first sign of improvement.

The final chapter of Part IV is “Depersonalization Disorder, Emotion Regulation, and Existential Feelings” by Henrik Walter and Matthias Michal. It concerns Depersonalization-Derealization Disorder, a prevalent condition that has, nonetheless, been largely overlooked. The chapter explores its phenomenology, epidemiology, and etiology, drawing upon recent advances in neuroscience as well as the notion of existential feelings. The chapter argues that emotion regulation through detachment or distancing employed by healthy individuals bears significant resemblances to the

emotional detachment observed in DDD. Consequently, the cognitive neuroscience of emotional regulation can offer valuable empirical insights for neurophenomenological investigations into DDD, thereby enriching our understanding of existential feelings.

Last, Part V of the book is devoted to *Psychotic Disorders*. It consists of five chapters that focus on schizophrenia and related aspects of temporality, intentionality, predictive processing, and self-monitoring of action.

In the first chapter, titled “Neurobiologically Informed Phenomenology of the Schizophrenia Spectrum,” Sebastian Walther and Werner Strik propose a novel phenomenological framework of psychosis. It begins by noting that patients with schizophrenia display a wide variety of symptoms. Furthermore, neuroimaging studies show extensive but unspecific changes in brain structure and function. While dimensional approaches have been effective in describing schizophrenia’s diverse symptoms, and show correlations between specific symptoms like hallucinations or disorganized thinking and neural activity, the models they produce do not intuitively correspond with functional brain architecture. To address this gap, Walther and Strik propose three schizophrenia symptom dimensions organized according to the neurobiology of human communication broadly construed: namely, language, affectivity, and motor behavior. Their framework indicates that each communicative domain can not only be associated with particular brain circuitry but that identifying disturbances within each may offer empirical hypotheses about underlying biological processes contributing to schizophrenia.

The following chapter by Anne Giersch titled “Phenomenological Neuropsychiatry: Linking Timing Disorders and Clinical Symptoms in Schizophrenia” summarizes a series of studies exploring predictive temporal processing at the millisecond level. In the phenomenological tradition, abnormal temporality—as a kind of basic grounding experience—has long been linked to disorders of the self and related clinical symptoms. This chapter shows how neuropsychological and experimental approaches to time

perception may complement phenomenological ones by addressing the part that nonconscious timing mechanisms play in schizophrenia. For instance, individuals with schizophrenia have difficulties in consciously recognizing when two sensory stimuli are not synchronized at the hundreds of milliseconds level. This is in stark contrast to their heightened unconscious sensitivity to even briefer asynchronies. Such observations imply that even at the subsecond level time is not monolithic and that the struggle to connect diverse kinds of temporal events, could play a role in the disruption of patients' lived experiences at this most basic level of organization.

The third chapter by Scott A. Schobel titled, "Bridging the Phenomenology of Prodromal Psychosis with Its Underlying Neurobiological Mechanisms" describes the use of baseline structural and functional MRI together with phenomenology and intensive clinical follow-up on two cases of prodromal patients. People in the early stages of psychosis often cannot be clinically distinguished from those experiencing a number of other psychiatric issues. For many, symptoms often start subtly, with minor abnormalities in experience that gradually develop over weeks, months, or even years, until they meet the diagnostic criteria for a full-scale psychotic or affective psychotic disorder. Schobel suggests that integrating clinical assessments with imaging technology can produce individualized clinical interventions that enable predictions for long-term outcomes. Overall, the chapter demonstrates how combining the study of psychosis phenomenology with mechanistic biomarkers can aid in the early identification of the psychotic prodrome.

The following chapter by David L. Roberts, Donna S. Stutes, and Ralph E. Hoffman explores "Alien Intentionality in Schizophrenia" providing a novel hypothesis for a superordinate mechanism underlying all types of alien intentionality symptoms. This goes beyond the division into perceptual-motor alien intentionality (such as motor passivity and auditory verbal hallucinations) and cognitive alien intentionality (such as delusions of control and persecution). The authors suggest that symptoms of alien intention-

ality reflect the brain's attempt to create or discover meaning when preexisting meaning structures collapse; some stimulus suddenly becomes ambiguous and ungrounded, it is interpreted and understood as originating from the intentions, desires, and beliefs of an agent. The hypothesis posits that the intentional stance provides the basis for a default explanatory model capable of coherently combining otherwise disjointed information into a logically consistent narrative.

The development of neurocognitive hypotheses while treating the phenomenology of lived experience in schizophrenia similarly guides the following chapter by Katharine N. Thakkar, Sohee Park, and Jeffrey D. Schall, titled "Monitoring of Action in Schizophrenia." The authors begin by connecting ideas about the basic phenomenology of agency with cognitive processes common to every primate brain and note that people with schizophrenia often experience problems with feeling in control of their actions. Typically, when we move, a representation of these movement instructions is sent to areas of the brain that process sensory information, which allows us to anticipate what will happen next. When there is a match between the anticipated and the actual sensory consequences of an action, the feeling of being in control is strengthened. Here, the authors look at neuroscientific evidence that supports the idea that such quick monitoring of actions is disturbed in schizophrenia. They exemplify this with a case study that shows how such a disturbance can affect a profound change in the most basic sense of self, beyond feelings of ownership over one's actions.

Concluding Remarks

Phenomenological neuropsychiatry synthesizes subjective mental experiences with objective neuroscientific findings, forming an integrative and interdisciplinary structure that provides a bridge to lived experience. By delineating the complex relationship between personal experiences and their biological and computational foundations this approach holds the potential to

improve diagnostic accuracy and therapeutic results beyond scientific research. It fosters enhanced communication between individuals experiencing mental health issues and the clinicians and researchers focused on their treatment and study. Fundamentally, phenomenological neuropsychiatry acknowledges the crucial role of individuals with direct illness experience as key contributors to this field.

Contemporary neuroscience supports the view that the human brain is inherently a “social brain,” aligning with the philosophical phenomenological perspective that the human mind is not solitary like a Cartesian subject. If neuroscience, descriptive phenomenological psychopathology, and diagnostic classification systems collaborate effectively in the future, it may lead to a reframing of current diagnostic categories as conditions affecting an embodied, intersubjective human self embedded in social interactions. When applied meticulously and with detailed attention to patient experience, phenomenology

may challenge and reshape existing diagnostic approaches and lead to novel hypotheses and findings. Furthermore, phenomenology’s contributions to psychiatry can extend to in-depth explorations of the healthy human consciousness, providing a contrast to mainstream psychiatry’s focus primarily on illness. This book, by emphasizing the importance of phenomenology in unraveling the interplay between basic categories of human experience and the neurobiological processes advocates for a shift in both psychiatric research and clinical practice. It envisions a future where the collaboration between those who experience mental illness and the professionals who study and treat psychiatric conditions leads not only to more effective and compassionate approaches, but also to a place where explanations of human experience, neuroanatomical descriptions, and scientific methods for investigating their correspondence are both richer and more useful.

Part I

Reflections from Within



Phenomenology, Psychoanalysis, and Schizophrenia

2

Elyn R. Saks

I am Elyn R. Saks, a mental health law professor at the University of Southern California Gould School of Law with joint appointments in various medical schools and on the faculty at a psychoanalytic institute as well.

I am also someone who has suffered from schizophrenia for over four decades. I was given at the time a “grave” prognosis—was expected to be unable to live independently, let alone work.

Obviously, that has not turned out to be my life. I attribute this to three things. First, I have had excellent intensive psychotherapy, still ongoing, for decades; as well as excellent medication, which, once I reconciled to being on it, has been very helpful. Second, I have had supportive friends and family members who both give my life richness and depth and, at times, serve as another set of eyes if I am starting to slip. I am also very fortunate to have a beloved husband after 18 years of not even dating. Third, I work in an environment that is both very stimulating and very caring.

Indeed, work fortifies me. When I am constructing an argument or counterargument, the crazy stuff recedes to the sidelines. As I have

come to say, my mind is both my best friend and my worst enemy.

I go into so much detail about myself because my topic today is learning about the subjective experience of schizophrenia to reduce stigma and increase empathy; and understanding subjectivity as fundamental to research concerning neuropsychiatric disorders.

So, the subjective experience of myself and other consumers is what is at issue today.

Doctors, family members, and friends see the outward manifestations of the illness, not what is going on inside. Indeed, a bipolar lawyer-turned-writer friend has basically spoken about “passing as normal.” Being able to do this is, in some ways, good. You can preserve your occupational and social reputation. It also means that you have a social understanding of what people think is crazy and don’t want to appear that way. This is also good.

It also underscores the importance of what psychoanalysts call an “observing ego.”

An observing ego will serve one well in many contexts. For example, as my husband likes to say, psychosis is not like an on-off switch but rather a dimmer, and at the far end, I can experience a delusional belief and have my observing ego identify it as such and dismiss it.

So we need thoughtful and observant people to tell us what is going on inside. Some people with psychosis are too confused to be able to express in an understandable way what is going

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on with them at the time. Others have amnesia for their experiences after the fact. (I have never been so lucky—I remember all the painful and scary details.)

It is of interest also that psychotic symptoms, as I believe, have meaning. This is controversial. Some think that psychotic symptoms are just random firings of neurons. Some think they tell the truth about your psychic reality, but the patient is not in a space to hear that, and some think some patients are in that space.

The last has been my experience. As an example, I was saying very violent things in therapy one day, and my doctor said, “Elyn, I think you are saying violent things because you are afraid. The violence is your defense against fear.”

Hearing that helped me to understand, and the symptoms dissipated.

Observing what is happening inside you, then, why, and why it is important—and being able to articulate all this, to put it in words—can be extremely helpful on many dimensions.

I believe that is why my memoir about my schizophrenia—“The Center Cannot Hold: My Journey Through Madness”—has been meaningful to people: I put my experiences into words. I write about my experiences as faithfully as I can. And indeed, I have described that I have written my book “to give hope to those who suffer with schizophrenia and understanding to those who don’t.”

Also, non-ill people understanding that the kinds of things they struggle with are very similar to those a psychotic person struggles with, only for the latter expressed in an archaic form—e.g. “I am the devil” versus “I feel I am a bad person”—should also increase understanding and empathy.

A very common email I get is words to the effect that the person now understands what his or her loved one has been going through, what it means, and how they might help.

So while “passing as normal” can help the person with schizophrenia navigate their social world, being able to describe one’s mental state can also help with treatment: if the doctor doesn’t know what her patient is experiencing, she is less well-able to help.

Being able to describe one’s condition is also important for research. One must understand what the person is experiencing in order to know what the important questions are.

Indeed, it could be argued that all research teams should have at least one consumer on them. The consumer can then help again by describing his experience and what it means. And he can identify what is important for him to know. And, to the extent he has social contact with other consumers, he can represent their experiences and wishes as well.

Recruiting consumers for research shows them dignity and respect and decreases their feelings of stigma or being in a demeaned position in society.

Along the same lines, ensuring there is a consumer voice on Institutional Review Boards evaluating the ethics of human subjects research projects is also important. Such a voice will make sure the perspective of someone whose life and experiences may be similar to the subjects in a study is heard.

As a small example, consumers may feel hurt or damaged by some language in a study, when it would never have occurred to the investigator that the language would be experienced in this way.

Finally, there is the issue of stigma. Research shows that people coming to see mental health disorders as brain disorders does not much reduce stigma, but putting a human face on does.

But putting a human face on requires consumers to self-disclose, and many fear doing this.

The worst part of stigma is that it deters people from getting care, and people shouldn’t have to suffer, but they likely will if they don’t get care.

There is also the problem of self-stigma. Actress Glenn Close, sister of a bipolar woman and aunt of a schizoaffective nephew, did a public service commercial on mental illness, and in connection with that gave me a T-shirt with Schizophrenia written across the front.

My first thought was, “I don’t wear T-shirts to work during the week, but I do wear them on weekends.”