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INTRODUCTION

INTRODUCTION

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INTRODUCTION

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Psychiatry and the sciences of mental health are currently in search of new methodological and conceptual foundations, and philosophy is actively involved in the quest, as the recent increase of interdisciplinary research initiatives and publications testifies (see eg. Fulford, *this volume* for a review). Among the different philosophical schools, phenomenology is a long-term ally for psychiatry. In the past, the work of authors such as Karl Jaspers have provided the very foundations of the discipline in Europe (Jaspers 1913). In recent years, the phenomenological approach to psychopathology has been proposing an alternative to, or a complement for, mainstream physicalist and third-person perspective accounts of mental disorders. As a method for thinking how things are present in experience, independently of their reality, phenomenology qualifies as a framework for understanding or redefining abnormal mental experiences and pathologies. Together with analytical philosophy of values and the hermeneutical tradition, it can shed light on the role of clinicians and on the place of psychiatry in society.

On the occasion of the publication of the *Oxford Handbook of Phenomenological Psychopathology* (Stanghellini *et al.,* 2019), San Raffaele University organized the International Conference and Spring School *Psychopathology and Phenomenology: Perspectives* (SRSSP 2019, Milan June 4th-6th 2019) with the support of its Research Centres CeSEP, Gender and PERSONA, its Ph.D. program in Philosophy, and the Psychology Department of Milano-Bicocca University. Most of the papers presented and discussed in that occasion are collected in the three sections of this issue, which contains a rich variety of different voices and approaches.

Kenneth W.M. Fulford's contribution opens the section *Philosophical frameworks for psychopathology* with a state of the art of contemporary philosophy of psychiatry. He describes the development of the new discipline, the recent increase in publications and initiatives, describing it as an international open society of ideas. Fulford also emphasizes the role of classical analytical philosophy in grounding a value-based approach to patients' care, both in psychiatry and in other branches of medicine. The article discusses two examples of value-based care, involving anorexia and knee surgery respectively.

The philosophical and psychological concept of affordance is the focus of Roy Ding's article. He reviews recent attempts within enactivist/embodied/ecological views to characterize mental disorders in terms of affordances, as well as criticisms against these attempts. He claims that criticisms are not conclusive and provides positive suggestions on how to refine the concept in order to respond to them.

Two contributions take a committed stance towards a more humanistic psychiatry and against contemporary third-person scientific approaches. In *Words matter. A hermeneutical-*

phenomenological account of mental health Francesca Brencio and Prisca Bauer emphasize the consequences of labeling people with the names of their diagnoses, and suggest philosophical training in phenomenology for clinicians. On the same line, Luka Janeš claims that diagnosis and treatment of psychotic disorders can benefit from insights from Merleau-Ponty's, R.D. Laing's and Paul Ricoeur's philosophical frameworks.

With a conciliatory attitude, Don Borrett, in *Naturalizing Phenomenological Psychopathology,* aims at paving the way for a mathematical model for phenomenology, focused on the notion of temporality and compatible with both Husserls' views and psychiatric science.

The last three articles in the section apply philosophical frameworks for clarifying specific disorders. In Anna Drożdżowicz's *The Difficult Case of Complicated Grief and the Role of Phenomenology in Psychiatry*, the phenomenological analyses of Thomas Fuchs and Matthew Ratcliffe are employed to draw a line between the two distressing conditions. Daria Baglieri describes hyperthymesia with existential concepts. Finally, in their essay *The Phenomenology of Depression*, Lorenzo Fregna and Cristina Colombo reflect on key themes of clinical depression, and on the construct of *typus melancholicus*, with insights from XXth century phenomenology and existentialism.

The contributions included in the section *Science in Progress. New Conceptual Frames for Empirical Psychopathology and for Psychiatry* illustrate new accounts of specific psychopathological conditions from three different philosophical or scientific viewpoints. Thomas Fuchs articulates an account of delusions based on an enactivist, embodied and ecological theory of perception. Rather than problems of faulty representation of reality, delusions are explained phenomenologically in terms of subjectivization of perception and reframing of the perceived world as persecutory.

The two articles by Giovanni Stanghellini and Milena Mancini are about Feeding and Eating Disorders, considered as epiphenomena of disorders of lived corporeality and identity. They apply J.P. Sartre's concept of 'lived body-for-others and propose that with feeding and eating disorders experience their own bodies mainly as 'objects to be seen'. In their second contribution, the focus is on emotions that characterize this family of disorders, in particular shame, disgust and the sense of alienation from oneself.

The new Research Domain Criteria (RDoC) framework, created a decade ago for integrating neuroscience and basic research with psychopathology (Insel *et al.,* 2010), is the focus of the next two articles. Elisa Melloni, Francesco Benedetti, Benedetta Vai and Elisabetta Lalumera present the main tenets of RdoC, exemplify its research approach by presenting research on brain dysfunctionalities in Schizophrenia, Borderline Personality Disorder and Mood Disorders, and touch the issue of biological reductionism raised against the project. The latter topic is discussed in detail in *Reductionism and the Biocognitive Approach to Psychiatric Classification,* by Marko Juriako and Luca Malatesti. Finally, Rasmus Rosenberg Larsen and Janna Hastings present the project of a standardized semantics for patients' phenomenology, with the tools of applied formal ontologies.

The third section of this volume is entitled *Society, Politics and the Bodies of Mental Disease.* In *Trauma Across Cultures: Cultural Dimensions of the Phenomenology of Post-Traumatic Experiences,* Lillian Wilde explores the influence of culture on the experience of trauma and suggests that the phenomenology of trauma is too multifaceted to be reduced to just one diagnostic category. In his contribution, Domonkos Sik frames anxiety disorders in terms of Bourdieu's and Habermas' social theories, connecting them with unfair competition and distorted communication.

Renata Bazzo and Christian Ingo Lenz Dunker focus on hypomania and bipolar disorder and investigate the explanatory role of the concept of Stimmung in the clinical and social perception of these conditions. Finally, Bernice Brijan's contribution, *The Existential Dimension*

of Loss. Further Developing Views on personal recovery in mental health care, explores the issue of recovery from an anthropological and existential point of view, and presents an idea of recovery as restoration of relationships with the world, oneself and the others.

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SECTION

SECTION 1

PHILOSOPHICAL FRAMEWORKS FOR PSYCHOPATHOLOGY

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THE STATE OF THE ART IN PHILOSOPHY AND PSYCHIATRY: AN INTERNATIONAL OPEN SOCIETY OF IDEAS SUPPORTING BEST PRACTICE IN SHARED DECISION-MAKING AS THE BASIS OF CONTEMPORARY PERSON-CENTRED CLINICAL CARE[1]

abstract

The state of the art of contemporary philosophy and psychiatry is reviewed. Section 1 *describes the new field as an international open society of ideas.* Section 2 *introduces values-based practice. Although originally a philosophy-into-practice initiative, values-based practice is now developing more strongly in areas of bodily medicine such as surgery. An example from surgery illustrates how values-based practice has been implemented as a partner to evidence-based practice in supporting shared clinical decision-making as the basis of best practice in contemporary person-centered clinical care.* Section 3 *explores the difficulties presented by implementing values-based practice in mental health as illustrated by a case example of anorexia. This shows that these difficulties derive from the particularly intense challenges of values pluralism presented by anorexia. The resources of phenomenology provide the basis for an effective response to these challenges. Section 4 generalizes the argument of Section 3 showing that an effective response to the wider range of challenges of values pluralism arising across the board in mental health is available from the resources of the international open society of ideas of contemporary philosophy and psychiatry. The article concludes with a promissory note on values and a cautionary note on science.*

keywords

philosophy and psychiatry, values-based practice, evidence-based practice, shared decision-making, person-centred care, values pluralism, recovery practice, open society

1 **Acknowledgements**: The story of Mrs Jones' Knee is adapted from Handa *et al.*, 2016 and Anna's story from Stanghellini and Fulford, forthcoming.

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1. Introduction

Recent decades have witnessed a dramatic resurgence of cross-disciplinary work between philosophy and psychiatry. The state of the art of this dynamic new field is that of an international open society of ideas. This article explores the significance of the open society of ideas represented by contemporary philosophy and psychiatry for best practice in person-centred mental health care.

The article is in four main sections. *Section 1, Philosophy and Psychiatry,* describes the open society of ideas established by developments in the new field particularly as represented by its collegial organizing body, The International Network for Philosophy and Psychiatry (INPP). *Section 2, Values-based Practice,* provides a brief introduction to a novel skills-based way of working with values in health care called values-based practice. Although derived originally from analytic philosophy of values within philosophy and psychiatry, the implementation of values-based practice has recently been mainly in bodily medicine.

The story of 'Mrs Jones' Knee' illustrates the role of values-based practice as a partner to evidence-based practice in supporting shared decision-making as the basis of contemporary person-centered surgical care. Shared decision-making is noted to be equally important in person-centered mental health (particularly in recovery practice). Yet values-based practice is proving harder to implement in mental health than in bodily medicine.

Section 3, Values Pluralism in Anorexia, explores the difficulties of implementing values-based practice in mental health as illustrated by anorexia. A second clinical example, 'Anna's Story', shows that at least in anorexia the difficulties implementing values-based practice are a consequence of the challenges of values pluralism presented by this condition. An enriched model of values-based practice combining the resources of analytic philosophy with those of phenomenology provides the basis for an effective response to the challenges of values pluralism presented by anorexia.

Section 4, Values Pluralism in Mental Health, generalizes the argument of Section 3. Drawing on background work in philosophical value theory, it shows that across mental health as a whole there is a wider range of challenges of values pluralism of the kind illustrated by anorexia. Meeting this wider range of challenges will require extending the resources of values-based practice to embrace not only phenomenology but the full range of resources available from the international open society of ideas that is the state of the art of contemporary philosophy and psychiatry.

The article as a whole is concerned with the role of the international open society of ideas represented by contemporary philosophy and psychiatry in working alongside science in supporting best practice in mental health. It concludes with a promissory note on a second article to be written about the role of the international open society of ideas in preventing bad practice. This in turn leads to a cautionary note on science. In both its roles, in supporting good practice and in preventing bad practice, the international open society of ideas of contemporary philosophy and psychiatry is in effect bringing mental health into line with the new medical sciences of the Twenty-first Century. As such we should be mindful of what one of the founders of what the new science of quantum mechanics, Max Plank, said about the birth of new sciences generally having to wait for old scientists to die.

2. Section 1, Philosophy and Psychiatry

Contemporary cross-disciplinary work between philosophy and psychiatry is not unprecedented. The recent centenary of Karl Jaspers' *General Psychopathology* (Jaspers, 1913) is a sufficient reminder of the seminal role of philosophy in the origins of contemporary psychopathology (Stanghellini and Fuchs, 2013). Another less widely recognized though no less significant precedent is the (*de facto*) partnership between the psychiatrist Aubrey Lewis and philosopher of science Carl Hempel in the origins of our current symptom-based diagnostic classifications (Fulford and Sartorius, 2009). Aside however from continuing work in phenomenology it was not until the last decade of the twentieth century that philosophy and psychiatry took off as a significant and sustained international research-led discipline (Fulford *et al.*, 2003).

- New Groups Around the World
- Sections in WPA and AEP
- Annual Conferences of the International Network for Philosophy and Psychiatry (launched Cape Town, 2002)
- New 'Chairs' (UK, Netherlands, Italy, South Africa)
- Training Programmes and Research
- PPP (Philosophy, Psychiatry, & Psychology)
  - Oxford philosophy
  - DPhil scholarship
  - Post-doc Fellows in Philosophy of Psychiatry
  - Summer Schools (2013/15)
  - IPPP book series over 50 volumes
  - Endowed tutorial fellowship (£2m endowment)
- Philosophy into practice
  - Phenomenology, psychopathology and neuroscience
  - Responsibility without blame
  - Values-based practice

Table 1 – International Developments in Philosophy and Psychiatry

Developments in as it has come to be called the 'new' philosophy and psychiatry are summarized in Table 1. As this indicates these developments are distinctively international in nature. There are new organizations concerned in one way or another with the new field in many parts of the world. These include sections in major international psychiatric organizations such as the *World Psychiatric Association* and the *European Psychiatric Association*. Annual conferences of the umbrella organization for the field, the *International Network for Philosophy and Psychiatry (INPP),* have been held in every major continent. The INPP was

established at a conference in Florence in the millennial year, 2000, and launched from Cape Town in 2002. A vigorous international programme of publications has developed with both peer-reviewed journals and book series from major international publishers. The book series from Oxford University Press, for example, *International Perspectives in Philosophy and Psychiatry (INPP)*, has published over fifty volumes since its launch in 2003, including major Oxford Handbooks on *Philosophy and Psychiatry* (Fulford *et al.*, 2013), *Psychiatric Ethics* (Sadler *et al.*, 2015) and *Phenomenological Psychopathology* (Stanghellini *et al.*, 2019). New academic programs in philosophy and psychiatry include Professorial Chairs in many parts of the world (including South Africa) and a recently endowed tutorial post at St Catherine's College in Oxford (the *Fulford-Clarendon Fellowship* held by the UK/USA educated German philosopher, Philip Koralus).

Emblematic of the internationalism of the new field is the quarterly peer-reviewed journal published by The Johns Hopkins University Press, *Philosophy, Psychiatry and Psychology (PPP)*. Recently celebrating its twenty-first year as a joint venture between the USA-based *Association for the Advancement of Philosophy and Psychiatry* and the UK-based *Philosophy Special Interest Group in the Royal College of Psychiatrists*, PPP has now become the official journal of the *INPP*. As such PPP has ambitious plans for extending and developing its representation of traditions of thought and practice in mental health beyond those of Europe and North America.

This resurgence of philosophy and psychiatry has seemed to many in psychiatry the more remarkable for the fact that it should have started in the 1990s, celebrated as this period was as the 'decade of the brain'. In this however history is repeating itself. Just as Karl Jasper's work in philosophy and psychiatry coincided with psychiatry's 'first biological phase' at the turn of the twentieth century (marked by such discoveries as Alzheimer's disease and neurosyphilis), so the 'new' philosophy and psychiatry coincides with psychiatry's second biological phase at the turn of the Twenty-first century. There are good reasons for these parallel developments. Jaspers' General Psychopathology was written in response to what he regarded as the deficiencies of the neurosciences of his time. His aim in writing General Psychopathology was not to undermine neuroscience (he was a trained neuroscientist as well as a philosopher) but rather to balance their empirical methods for studying the brain with a correspondingly powerful phenomenological method for studying subjectivity. This balancing up agenda continues in today's philosophy and psychiatry with innovative work across a range of psychopathologies drawing on a variety of phenomenological approaches from both established and up-and-coming figures in the new field (Stanghellini *et al.*, 2019).

But there are also important differences between psychiatry's first philosophical phase in the work of Karl Jaspers and contemporary developments in the field. First, with Jaspers the relationship between philosophy and psychiatry was mainly one way; in General Psychopathology, philosophy is employed as a resource for psychiatry. In the contemporary field the relationship is instead *two*-way: this is why the field is philosophy *and* psychiatry not philosophy *of* psychiatry; philosophy continues as a resource for psychiatry and mental health but psychiatry and mental health are also resources for philosophy. This two-way relationship is reflected in the publications from the field: the contents of the *Oxford Handbook of Philosophy and Psychiatry* (Fulford *et al.*, 2013), for example, although a *philosophy* handbook, are organized around the stages of the *clinical* encounter (its sections run from 'staying well' through 'diagnosis' to 'treatment, cure and care').

This two-way relationship may be one reason why thirty years on contemporary philosophy and psychiatry continues to expand vigorously where, by contrast, Jaspers' work in the field more or less finished with General Psychopathology[1]. But a second and perhaps more powerful reason has been that whereas Jaspers worked in isolation, contemporary philosophy and psychiatry has from the start been a strongly collegial international discipline. As is evident from Table 1, the contemporary field encompasses an extensive group of researchers from every part of the world representing very diverse areas of both philosophical and practical expertise. As in both its parent disciplines those working in philosophy and psychiatry often have very different views on their respective areas of specialism. But the field has developed thus far without major factional splits and guided by a principle of mutual respect for differences of view. The collegiality of the field notwithstanding its diversity - its ethos of collaboration within a shared enterprise - is as we will see key to its importance clinically.

The state of the art of contemporary philosophy and psychiatry thus amounts to what is best described as an international open society of ideas. To understand the importance of this open society in supporting best practice in person-centered clinical care, we need to look first at one of the philosophy-into-practice outputs from contemporary philosophy and psychiatry, values-based practice.

3. Section 2, Values-based Practice

Values-based practice is a new skills-based approach to working with complex and conflicting values in health care. It is one of a number of philosophy-into-practice initiatives arising from the new interdisciplinary field of philosophy and psychiatry including the rapidly expanding field of contemporary phenomenological psychopathology (Stanghellini *et al.*, 2019).

Values-based practice, although it has links with phenomenological psychopathology (see below), is derived principally from work in analytic philosophy of values. As an abstract or formal area of philosophy, analytic philosophy of values is concerned not with solving substantive practical problems involving values, but with the logic (the meanings and implications) of the value terms within which such problems are couched (Fulford, 1989). Consistently with its formal origins values-based practice offers no 'solutions' as such. It offers instead a process made up of a number of elements that together support clinicians, patients and others concerned in clinical care, to come to decisions for themselves where (as is so often the case in health care) complex and conflicting values are in play. Also consistently with its formal origins, values-based practice is concerned not just with ethical values but values of all kinds as they impact on health care. This full range of values can be summed up as the full range of *what matters or is important to* those concerned in a given clinical situation.

Premise of Mutual Respect for Differences of Values

Ten Key Process Elements	**Together these support**	**Balanced** decisions made within **frameworks of shared values**
4 Clinical Skills 2 Aspects of clinical relationships 3 Principles linking VBP and EBP 4 Partnership based on dissensus		

Figure – A Flow Diagram of Values-based Practice

1 Aside from a number of new editions of his General Psychopathology, Jaspers went on to work essentially as a philosopher rather than as a philosopher and psychiatrist.

Values-based Practice	Brief definition
PREMISE	
Respect	Mutual respect for differences of values
TEN PROCESS ELEMENTS	
Four areas of Clinical Skill	
1) Awareness	Awareness of values and of differences of values
2) Knowledge	Knowledge retrieval and its limitations
3) Reasoning	Used to explore the values in play rather than to close down on ' right answers'
4) Communication	Especially for eliciting values and of conflict resolution
Two Aspects of the Service Model	
5) Person-*values*-centered care	Care centered on the actual rather than assumed values of the patient
6) The *ex*tended Multidisciplinary Team	MDT role extended to include values as well as knowledge and skills
Three Principles linking values and evidence	
7) Two feet principle	All decisions are based on the two feet of values and evidence
8) Squeaky wheel principle	We notice values when they cause difficulties (like the squeaky wheel) but (like the wheel that doesn't squeak) they are always there and operative
9) Science-driven principle	Advances in medical science drive the need for VBP (as well as EBP) because they open up choices and with choices go values
Partnership in decision-making	
10) Shared decision making based on dissensus	Shared decision-making based on evidence (clinician) and values (patient or service user) – dissensus means the values of those concerned remain in play to be balanced sometimes one way and sometimes in other ways according to the circumstances of a given case
OUTPUTS	
Frameworks of shared values	Values shared by those concerned in a given decision making context (eg a GP Practice) and within which balanced decisions can be made on individual cases as the basis of shared decision making
Balanced decisions within frameworks of shared values	Decisions made by balancing the relevant shared values according to the circumstances presented by the case in question

Table 2 – Brief Definitions of the Elements of Values-based Practice

As its name suggests values-based practice is a partner to the more familiar evidence-based practice. Evidence-based practice provides a process that supports clinical decision-making where complex and conflicting evidence is in play. Values-based practice provides a process that supports clinical decision-making where complex and conflicting values are in play. The processes on which they rely are of course very different. The process of evidence-based practice involves computer-based meta-analyses of high-quality research findings. The corresponding process of values-based practice is more clinically focused. Its component elements are summarized in the Flow Diagram in the Figure and defined briefly in Table 2. As these indicate, at the top of the list of elements making up the process of values-based practice are a number of learnable clinical skills. It is on these that the training programmes described later in this article have focused. Together with the other elements of values-based practice their aim is to support those concerned in coming to balanced decisions within locally agreed frameworks of shared values according to the particular circumstances presented by the situation in question[2].

The importance of the partnership between values-based practice and evidence-based practice has come to particular prominence in contemporary health care with the development of shared decision-making as the basis of person-centered clinical care. This is illustrated by following story of 'Mrs Jones' Knee'. The story is based on that of a real person but with biographical details changed. As the title of her story suggests, 'Mrs Jones' had a bodily not mental health problem, and the consultation described is with an orthopedic surgeon not a psychiatrist. This is because as will be described in the next section although shared decision-making is in principle the same in all areas of health care it is considerably more challenging in mental health than in bodily medicine. It is the additional challenges presented by shared decision-making in mental that will bring us back in the final section of the article to the need for the open society of ideas represented by contemporary philosophy and psychiatry.

3.1 Mrs Jones' Knee – Shared Clinical Decision-Making in Surgery[3]

Mrs. Jones was referred to an orthopedic surgeon, Mr. Patel (not his real name), with a painful arthritic knee for assessment for knee replacement surgery. After the usual 'work up' Mr. Patel confirmed to Mrs. Jones that they could go ahead with giving her an artificial knee joint – yes, she would need about eighteen months physiotherapy post-op; but the end result was that she would very likely end up pain free.

Looking pleased Mrs. Jones got up to leave. As she reached to door she turned to thank Mr Patel saying 'I'm so pleased, doctor, I'll be able to garden again'. Hearing this Mr Patel invited Mrs Jones to sit down again. 'Tell me about your gardening', he said. Mrs. Jones explained that the reason she was concerned about her knee was that she could not bend down well enough to weed her garden. It was true as everyone kept saying that her knee was painful. She found this unpleasant but what really mattered to her was that it stopped her doing her gardening.

'I understand' Mr Patel replied, and then went on to explain to Mrs Jones that while she would in all probability be pain free after her operation, unfortunately with the artificial joints currently available, she would end up post-op no more mobile and possibly less so. So after some further discussion they agreed to go for conservative management (anti-inflammatory medication and physiotherapy) in the first instance. This was successful. A few months later Mrs. Jones still had a painful knee but her mobility was restored sufficiently that she could manage her garden again.

2 The process of values-based practice is described in detail elsewhere (see for example, Fulford, Peile and Carroll, 2012) and further sources including free-to-download training materials are available from the website of the Collaborating Centre for Values-based Practice at St Catherine's College in Oxford (valuesbasedpractice.org).

3 This story is based on a version published in Handa *et al.*, 2016.

The story of Mrs Jones' knee and the way Mr Patel worked with her in deciding what to do illustrates many of the key features of values-based practice and its role in shared clinical decision-making. First, it shows the importance of the individuality of personal values in clinical decision-making. For most people like Mrs. Jones with arthritis of the knee what matters is to be free of pain. But as a keen gardener Mrs. Jones was more concerned about being able to garden again than about being free from pain. This meant regaining mobility. Her story shows, second, the importance of the clinical skills supporting values-based practice. In this instance the key skill shown by Mr Patel was listening. This sounds simple but really listening is all too rare in practice. It was because Mr Patel really listened to Mrs Jones and picked up on the significance of her parting comment about gardening that he was able to offer her the person-*values*-centered care of values-based practice.

Mr Patel's ability to offer Mrs Jones person-values-centered care was however also dependent on his knowledge of the evidence as an experienced orthopedic surgeon. It was because Mr Patel understood the advantages and disadvantages of the currently available prosthetic knee joints that he was able to offer Mrs Jones an approach to management that was likely to be consistent with the values driving her request for treatment for her arthritic knee (with what mattered or was important to her about the outcomes of the treatment). It was this same expertise that allowed Mr Patel to pick up in the first place on the significance of Mrs Jones' passing comment about gardening.
Mrs Jones' story thus illustrates the essential partnership between values-based practice and evidence-based practice in the shared decision-making that is the basis of contemporary person-centered clinical care. Mr Patel came through dialogue with Mrs Jones to a shared decision about how to manage her arthritic knee. The decision was based on his knowledge of the advantages and disadvantages of the reasonable options available. But it was based on the advantages and disadvantages of these options as judged not from the perspective of most patients but specifically from the perspective of Mrs Jones' (ie not from the perspective of what matters or is important to most people with arthritis of the knee, but from the perspective of what mattered or was important about arthritis of the knee specifically to Mrs Jones).

Shared decision-making as this story illustrates offers a 'win' for everyone involved. It was a 'win' for Mrs Jones in that she avoided an unnecessary operation and instead got the outcome for which she had sought help in the first place; it was a 'win' for the funding body (the UK National Health service in this instance) who avoided the considerable cost of an operation that was at best unnecessary and at worst mismatched to the patient's real needs; and it was a 'win' for the surgical team that had avoided a disappointed patient while at the same time freeing up scarce resources to reduce their waiting list for knee replacement surgery. This is why shared decision-making has become widely adopted as the norm for best practice in contemporary person-centered clinical care. In the UK it has for some time been the basis of both regulatory[4] and evidence-based practice guidelines[5]; and this guidance has recently (2015) been incorporated into law by a ruling from the UK's Supreme Court called the *Montgomery* judgement (Herring *et al.*, 2017)[6].

4 See General Medical Council, 2008.
5 See for example, National Institute for Health and Care Excellence (2015/2017).
6 Although a UK ruling the Montgomery judgement reflects in part international law precedents including aspect of European Human Rights legislation.

3.2 From Surgery to Mental Health

Consistently with the growing regulatory and legal priority afforded shared decision-making, the role of values-based practice as a partner to evidence-based practice in delivering shared decision-making is becoming increasingly widely recognized. In the UK this is reflected in the rapid growth of the Collaborating Centre for Values-based Practice at St Catherine's College in the University of Oxford. Supported by senior figures in the UK Health Service (including the Chief Executives of both the PFA and NICE[7]), the Centre has since its launch in 2014, developed a range of training materials in a number of areas of bodily care, including surgery, radiography, occupational therapy, pharmacy and emergency medicine[8].

Mental health has not been neglected. Indeed, the Centre's programmes in bodily medicine have been built on foundations laid by earlier work on values-based practice in mental health supported by the UK's Department of Health[9]. The Collaborating Centre has follow-on programmes from this earlier work in mental health for example on Child and Adolescent Mental Health, on addiction, and on first episode psychosis[10]. This work is important not least because shared decision-making in mental health is important to recovery practice[11]. But in these and other areas of mental health, implementing values-based practice in the context of shared decision-making has turned out to be far more challenging than in areas of bodily medicine such as surgery[12]. The next section explores through the example of anorexia why this should be so.

4. Section 3, Values Pluralism in Anorexia

This section starts with an example from mental health, the story of 'Anna'. As with the story of Mrs Jones' knee, Anna's story is not a philosophical invention but derived in biographically disguised form from clinical practice ('Anna' is a composite character based on a number of clinical stories).

Anna's story as retold here focuses on the features she presented on referral. As you read the description of these features you may find it helpful to compare them with the corresponding

7 The PFA (Professional Standards Authority) is the 'regulator of regulators' in the UK with oversight responsibility for discipline-based regulators including the General Medical Council (whose guidance on shared decision-making as the basis of consent is cited at Footnote 3); NICE (National Institutes for Health and Care Excellence) is responsible for issuing evidence-based guidelines for the UK National Health Service.

8 This work has been led by the College of Paramedics – paramedics' responsibilities in the UK include ambulance services.

9 The work of the Department of Health programme built on a training programme produced in a joint venture between Warwick Medical School and a mental health NGO, the Sainsbury Centre for Mental Health (Woodbridge and Fulford, 2004). Besides a range of policy initiatives, outputs from the programme included best practice guidance on contentious areas such as involuntary psychiatric treatment and assessment in mental health.

10 Collaborating Centre Advisory Board member, Professor Dame Sue Bailey, during her time as President of the Royal College of Psychiatrists, launched a national Commission for Values-based CAHMS (child and adolescent mental health services). Its co-produced report, *What Really Matters in Child and Mental Health Services* (The Royal College of Psychiatrists, 2016), is available to download from the Collaborating Centre website and the work of the Commission continues through a Network for Values-based CAHMS supported by the Centre. The training programme on prescribing in first episode psychosis was developed by pharmacist, Camilla Sowerby, and is given at: valuesbasedparctice.org.

11 The aim of 'recovery practice' is recovery of a good quality of life as defined by reference to the values of the individual concerned (Slade *et al.*, 2014). Hence without shared decision-making of the kind illustrated by Mrs Jones' story (ie based on the individual's values as well as the clinicians knowledge) recovery so defined cannot even get started.

12 The Department of Health programme included for example training programme respectively on values-based implementation of the UK's new Mental Health Act and on shared decision-making in mental health assessment. Both were well received in principle but failed to gain traction in practice (see respectively Fulford *et al.*, 2015a and 2015b).

features presented by Mrs Jones to the orthopedic surgeon, Mr Patel. With the challenges for clinical decision-making in mind, think about three related questions: In what ways are the two stories similar and in what ways are they different? How might the differences result in shared decision-making presenting more acute challenges in Anna's story than in that of Mrs Jones' Knee? On what resources might we draw in responding to these more acute challenges? The section that follows will examine the extent to which our answers to these questions may be generalized from Anna's story to mental health as a whole.

4.1 Anna's story[13]

Anna was a young woman whose clinical picture satisfied DSM[14] *criteria for anorexia nervosa. She showed: A) significantly low body weight for her age due to 'restriction of energy intake'; B) 'Intense fear of gaining weight or of becoming fat'; and C) 'Disturbance in the way (she experienced her) body weight or shape, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of (her) current low body weight.' Anna also showed a number of associated features highlighted by DSM: her 'self-esteem ... (was) highly dependent on (her) perceptions of body weight and shape.' Also, 'weight loss (was) ... viewed (by her) as an impressive achievement and a sign of extraordinary self-discipline, whereas weight gain (was) perceived as an unacceptable failure of self-control.' Like many others she 'lacked insight' into her condition and was brought to 'professional attention by family members'.*

4.2 The challenges of values pluralism in anorexia

Anna's story is similar to that of Mrs Jones in that the respective clinical decision about what to do should in both cases be (at least in the UK) shared between clinician and patient (or service user). 'Should' because throughout the UK the regulatory and legal provisions noted above make consent to treatment dependent on shared decision-making based on evidence and values. As already noted shared decision-making is no less important in mental health than in bodily medicine if only because of its role in recovery. Yet in Anna's story both sides of the shared decision-making process – both the evidence side and the values side - will be more challenging than in the situation presented by Mrs Jones. As to the evidence side of shared decision-making, there is more uncertainty about the interventions available (their advantages and disadvantages, even which interventions are appropriate at all) for anorexia than there is for arthritis of the knee. So the evidence-base for shared decision-making in anorexia is more challenging because it is less certain than the corresponding evidence-base for arthritis of knee. But the challenges for the evidence-base of shared decision-making in anorexia pale into insignificance compared with the corresponding challenges for its values-base. These challenges can be understood as various aspects of the greater degree of values pluralism presented by anorexia compared with arthritis of the knee.

In the first place the values operative in Anna's story are more complex. In Mrs Jones' story her values (in so far as they related to her presenting issue) were relatively simple and straightforward. What mattered to Mrs Jones was, simply and straightforwardly, to recover mobility so that she could return to her gardening. This was the outcome that mattered most or was of most importance to her. If she could have become pain free as well she would have welcomed that. To this limited extent her values were pluralistic. But given the limitations of

13 Anna's story is based on a version published in Stanghellini and Fulford, forthcoming.

14 The DSM (the Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association, 2013) is the American Psychiatric Association's diagnostic classification. It is one of two symptom-based classifications widely adopted internationally, the other being the World Health Organisation's ICD (International Classification of Diseases). Symptom-based classifications have been much criticised particularly by neuroscience researchers but remain in general use for clinical and epidemiological purposes.

the interventions available, she had to choose – and her choice (of mobility over pain relief) was unambiguous. Anna's values, by contrast, are more complex and considerably less transparent. True, she had an overwhelming wish to lose weight. But that the values involved in this were far from transparent becomes evident if we ask to what end Anna wanted to lose weight. If her desired outcome was to look good or to get fit the extent of her self-starvation was self-defeating.

The complexity of the values involved in Anna's story moreover extended to the way her condition was understood. In Mrs Jones' story the operative values (even to the extent of pain versus mobility) were confined to outcomes. In Anna's story by contrast the operative values extended to the way her what would be called in medicine her 'diagnosis'. To be clear, 'diagnostic' values are present in Mrs Jones' story too. Mrs Jones' had arthritis of the knee: as a *dis*ease this is (arguably[15]) defined in part but essentially by negative value judgements - a *dis*ease so this line of argument goes, is a *bad* condition. The value judgements in question, furthermore, marking as they do what is bad about arthritis of the knee, are operative in Mrs Jones' story to the extent that they motivated her request for help and corresponding the responses of Mr Patel and the surgical team. But because the diagnostic values in Mrs Jones' story were *shared* among all those concerned (everyone shared the negative value judgements about pain and loss of mobility associated with arthritis of the knee) they presented no challenges of pluralism to the shared decision-making process and indeed went unnoticed.

In Anna's story by contrast the operative diagnostic values were highly contested. This is evident in the way she came to the attention of services. Mrs Jones came to see Mr Patel of her own volition requesting help. Anna by contrast '*was brought to professional attention by family members'*. So it was her family's values by which the consultation was motivated. Anna was in consequence said to 'lack insight'. But what this means is that she valued her anorexia very differently from her family. So this adds a whole new dimension to the additional plurality of the values operative in Anna's story. Compared with those operative in Mrs Jones' story, Anna's values are complex and far from straightforward. But not only that, they are also in conflict with the values of others. This conflict of values is indeed such that if Anna were to refuse treatment she could well end up being treated on an involuntary basis under the relevant mental health legislation. A far cry then from the recovery practice based on the values of the person concerned that as noted above is the aim of shared decision-making as the basis of contemporary person-centred care in mental health.

4.3 A phenomenological response to the challenges of values pluralism in anorexia

One way of responding to the challenges of values pluralism presented by Anna's story is to add to the analytic resources of values-based practice insights into psychopathology from contemporary phenomenology. This is the basis of the work of the Italian psychiatrist and phenomenologist, Giovanni Stanghellini and colleagues, on anorexia and related disorders.

The essence of Stanghellini's insight is that the presenting features of anorexia reflect a deeper underlying disturbance in how the person concerned experiences their body. Stanghellini captures this underlying disturbance using the French phenomenologist Jean Paul Sartre's phenomenology of the body. Anorexia, Stanghellini has argued reflects a disturbance in what Sartre characterised as the lived-body-for-others. Sartre recognised that in addition to the body-as-object (the body that for example we study in anatomy) and the body-as-subject (the body that we experience) there is a body that we experience through the gaze of others. It is

15 See footnote 16.

a failure to establish a stable sense of this third aspect of our bodily experience, of the lived-body-for-others, that Stanghellini has identified as being at the core of anorexia.

Stanghellini has supported this insight into the nature of anorexia with an impressive range of clinical observations of individual cases of anorexia together with a qualitative study using a standardised interview schedule (Stanghellini and Mancini, 2017). The result is a growing understanding of the relevant evidence base. Equally, though, and more to the point for present purposes, the theory allows treatment to be informed by a growing understanding of the relevant values base.

Thus, in Anna's story as recounted above, her values were complex notably in being (as expressed by her) inconsistent. Her values were also in conflict with those of her family (recall that it was at the insistence of her family that she 'came to the attention of services'). None of this is surprising once we adopt Stanghellini's insight that the values expressed by people like Anna reflect a deeper set of values connected with their disturbed lived-body-for-others. So long therefor as we engage with Anna only at the surface level of her values there will be no way of coming to a balanced understanding as the basis of a shared approach to clinical management. At this surface level, however well developed are our skills for values-based practice, they will be ineffective because they will be not be engaging with what really matters to Anna. These skills will still be important. Combined with evidence-based practice, the elements of values-based practice will still be required to support shared decision-making as the basis of a person-centred approach to working with Anna. Skills of conflict resolution for example will still be required. But without what Stanghellini and I have called elsewhere the 'depth dimension' of understanding provided by phenomenology (Stanghellini and Fulford, forthcoming), values-based practice will spin emptily because it will be disengaged from the reality of Anna's values.

With Anna then, and with other people with anorexia so understood, an extended model of values-based practice is required. The analytically derived form of values-based practice that has proven so effective in areas of bodily medicine (as illustrated by the story of Mrs Jones' knee) has to be extended to include the depth dimension provided by phenomenological understanding. Stanghellini has followed through on the implications of this extended model of values-based practice by developing (with colleague Milena Mancini) a values-based therapeutic interview built on phenomenological principles (Stanghellini and Mancini, 2017). Again, the aim here is not to displace but to extend the resources of the standard analytically derived form of values-based practice to include phenomenology.

Stanghellini' work thus provides an effective response to the challenge of pluralism presented by anorexia. The next section looks at how far this approach can be generalized to other areas of mental health. As will be seen this will brings us to the cutting edge of developments in values-based practice within the wider state of the art of contemporary philosophy and psychiatry.

5. Section 4, Values Pluralism in Mental Health

Once you start looking for them values are written all over mental disorders. We noted in the last section the value judgements by which the DSM's diagnostic criteria for anorexia are (in part) defined (American Psychiatric Association, 2013). An ordinary language study by the North American philosopher and psychiatrist, John Sadler, has shown the pervasiveness of such diagnostic values throughout DSM (Sadler, 2005). Similar if less explicit values are evident in the World Health Organisation's ICD (International Classification of Diseases, 1992/2003).

There has been much debate about how the presence of these values in psychiatric diagnostic classifications should be understood.[16] An early exponent of one side in this debate was the psychiatrist, Thomas Szasz, who famously dismissed mental disorders as a 'myth' on the grounds that they were defined by what he called 'psychosocial, ethical and legal norms' (Szasz, p. 114) rather than what he took to be the value-free norms of anatomy and physiology. One of Szasz' opponents, on the other hand, the psychiatrist and epidemiologist, Robert Kendell (1975), was among the first to argue that psychiatric diagnostic values were a sign, merely, of the underdeveloped status of psychiatric science that with future progress in the field would disappear. With a fully developed science of mental disorders, Kendell and others argued, psychiatric diagnostic classifications would end up looking no different from their counterparts for bodily disorders (ie value free).

Variations on the theme of these two positions have been adopted in the extensive (and unresolved) debate that has continued over subsequent decades. There is though a third and entirely different way of understanding the prominence of diagnostic values in mental health suggested by the work of RM Hare and others working in the analytic tradition of value philosophy. As noted above this tradition is foundational to contemporary values-based practice (see also footnote 16) and it was indeed Hare's 'third way' that led to the early development of values-based practice in mental health. The bottom line of this third way can be summed up in the aphorism that 'visible values = diverse values'. Values that is to say become visible (we notice them) when they are diverse and hence come to our notice because they cause trouble[17]. Values can be thought of in this respect as being like the air we breathe - they are around us all the time and essential but we notice them only when they cause difficulties.

This third way of understanding the significance of psychiatric diagnostic values - that 'visible values = diverse values' - is not specific to medicine but rather applies across the board to values of all kinds. Hare for example compared 'good strawberries' with 'good pictures' in his original work on the logic of values (Hare, 1952). Although he later went on to develop his ideas in medical ethics, at this stage in his career Hare was not directly interested in applying his ideas in particular contexts. His strategy was rather to determine the formal features of value terms thus developing a general logic that could be applied to any case framed in the language of values. I had the good fortune to be taught by Hare as one of my DPhil supervisors towards the end of this formal phase in the development of his work. This gave me the opportunity to apply his ideas and the ideas of my other supervisors (GJ Warnock and Mary Warnock) to the language of medicine in my *Moral Theory and Medical Practice* (1989). It was in this book that I pointed out the parallels between Hare's examples of 'visible values = diverse values' and the corresponding features of 'mental disorders' (more overtly value-laden) and 'bodily disorders' (less overtly value-laden).

16 The argument presented in summary form here is based on the theoretical work in analytic philosophy of values that as noted above underpins values-based practice (see in particular Fulford, 1989). Within philosophy of medicine there is considerable and on-going debate whether diagnostic concepts are or can be defined value-free – see Bortolotti, 2013) for a helpful review. This debate turns on the wider 'is-ought' debate in philosophy running back to the eighteenth century Scottish Enlightenment philosopher, David Hume's dictum 'no ought from an is' (Hume, 1972). Values-based practice is based on contemporary versions of this dictum as in the work for example of the Oxford philosophers, RM Hare (1952) and GJ Warnock (1971), and the American philosopher, Hilary Putnam (2002).

17 Diverse values 'cause trouble' because they are individually complex to deal with and (often) collectively conflicting.

5.1 Psychiatric diagnostic values as a signal of the challenges of values pluralism across mental disorders as a whole

As already noted there is on-going debate about the status of psychiatric diagnostic values. But Hare's third way of understanding them, besides being (at the very least) no less rigorous than any other way of understanding them, offers a number of *prima facie* advantages when it comes to practice. First, it puts mental health issues on an equal footing with their counterparts in bodily medicine: If 'visible values = diverse values' then diagnostic values are present in bodily medicine as they are in mental health, the difference being that they are remain largely invisible in bodily because they are largely unproblematic. Second, this leaves open the option of accruing to mental health the benefits of biology-based scientific medicine: there being no differences of principle between them there is no reason to exclude mental health from medical science as Szasz would have excluded it (as a myth). Which is not to say that the implementation of biological science in mental health should follow slavishly its implementation in bodily medicine: no more should the implementation of quantum mechanics follow slavishly the implementation of hydromechanics. Third, and most significantly, Hare's third way reverses the expectation of Kendell and others that with future advances in medical science and technology mental health will come increasingly to look like bodily medicine in being value free. The 'visible values = diverse values' way of understanding diagnostic values suggests to the contrary that with such advances bodily medicine will come increasingly to *look like mental health in being overtly value laden*. This is because the practical impact of advances in medical science and technology is to widen the choices available to stakeholders thus bringing an increasingly diverse range of values into play[18].

Again, these implications of the third way of understanding the significance of psychiatric diagnostic values are nothing to do with the particular contingencies presented by this or that particular area of medicine, bodily or indeed mental. The implications are analytic. They are a consequence of the very logic of values.

Being derived in this way from the formal properties of value terms rather than the contingencies of this or that particular situation makes these implications heuristically helpful at a number of levels. This is why they are embodied in the three principles of values-based practice defining its relationship with evidence-based practice (see Table 2 above). Given their grounding in the logic of values, the three principles apply across the board in healthcare. They apply equally in surgery as in psychiatry. True, in the current state of the development of medical science the practical impact of these principles is felt more urgently in psychiatry. This is why as noted earlier values-based practice was developed first in psychiatry: it was in psychiatry that the diversity of human values impacting on health care decision-making was (and remains) most challenging for practice. But, to come to a second implication, this is not because of any deficiency in psychiatric science. It is because the challenges of values pluralism are greater in psychiatry than in most areas of bodily medicine. Thus, where surgery is concerned (at least in Mrs Jones' case) with areas of human experience and behaviour (such as pain and mobility) where our values are largely shared, psychiatry is concerned with areas of human experience and behaviour (such as emotion, desire, volition, belief and the like) where human values are highly diverse. It is for this reason then, to come to a third implication – it is because of the

18 The impact of advances in medical science in increasing the diversity of values in play in bodily medicine is evident for example in the ever more challenging ethical and other values issues arising in areas of rapid technological advance such as infertility treatment and genetic medicine.

greater challenges of values pluralism arising from the diversity of human values impacting on psychiatry - that values-based practice has turned out to be harder to implement in psychiatry than in surgery.

To repeat, all this follows not from anything inherent in the sciences respectively of mental and of bodily health, but from the logic of values, specifically Hare's observation that 'visible values = diverse values'. This is why consistently with Hare's argument the visibility of values in psychiatric diagnostic classification is a signal that the challenges of values pluralism illustrated by Anna's story in Secton3 are not confined to anorexia but a feature of mental disorders as a whole. No advance in neuroscience can forestall these challenges. Such advances according to the implications of Hare's observation will make them still more challenging. The challenges therefor must be addressed from the resources of the value theory underpinning values-based practice.

5.2 Responding to the challenges of values pluralism across mental disorders as a whole

An essential starting point for any response to the challenges of values pluralism presented by mental disorders is the recognition that these challenges are themselves highly diverse. The challenges vary widely across mental health issues. The challenges in anorexia are different from those presented for example by the differentiation of psychosis from religious experience (Jackson and Fulford, 1997); these challenges are different from those presented by affective disorders such as depression (Fulford, Crepaz-Keay and Stanghellini, forthcoming); the challenges of values pluralism are different again in voice hearing (Austin and Hopfenbeck, forthcoming); and so on. To these differences between groups furthermore must be added an even greater diversity of individual differences within each group.

Exactly how the resources of philosophical value theory can be harnessed in response to the challenges of pluralism presented by mental disorders will thus vary with the challenges in question. But a broad strategy for how this might be done is suggested by the approach developed by Stanghellini and set out in summary form in Section 3 in relation to anorexia. This strategy as we will see depends critically on the state of the art of contemporary philosophy and psychiatry as an international open society of ideas.

Stanghellini's approach as we saw in Section 3 was based on adding a depth dimension of phenomenological understanding to the analytic-philosophy-derived resources of the original model of values-based practice. This approach is impressive theoretically and significant practically. The theoretical significance of Stanghellini's approach is that it brings together two major philosophical traditions that had previously been separated into distinct (geographical and intellectual) traditions. Throughout much of the Twentieth Century the Anglo-American tradition of analytic philosophy and 'Continental' phenomenology had little contact one with the other.

There was no barrier of principle involved here. JL Austin (from whose work in the ordinary language tradition of Oxford analytic philosophy values-based practice is ultimately derived, once described his approach as 'a kind of linguistic phenomenology' (cited by Warnock, 1989, p25). There has indeed been something of a truce between the two traditions in the Twenty-first Century. Stanghellini's theoretical work in phenomenological psychopathology has made a significant contribution to building brides between the two traditions (Stanghellini and Fulford, forthcoming). The practical implications of his work, though, as summarised in Section 3, have been equally important to this bridge building. There has been similar bridge building between phenomenology and neuroscience (see below). There are other clinical

initiatives underway[19]. But Stanghellini's approach has led the way with translational research drawing on rigorous phenomenological theory to deliver potentially significant improvements in clinical care. As described in Section 3 an important further feature of the practical implications of Stanghellini's work on anorexia is that its potential clinical applications are fully open to empirical test[20].

All of which suggests that generalising from Stanghellini's approach offers a promising strategy for responding to the variety of challenges of values pluralism presented by mental disorders as a whole. Such generalisation, reflecting the variety of these challenges noted above, may proceed in a number of ways and at a number of levels. First, phenomenology itself offers many further resources (Stanghellini and Fulford, forthcoming). These resources as represented by different traditions of thought and practice from around the world are readily accessible from within the internationally distributed community of philosophy and psychiatry. The Oxford based philosopher, Katherine Morris, for example, has applied Sartre's phenomenology of the body to dysmorphophobia (Morris, 2003); a number of neuroscience programs – for example with Joseph Parnas in Denmark, Thomas Fuchs in Germany, and Matthew Broome in the UK - draw in part but importantly on phenomenology. Continental philosophy as a whole furthermore offers still further resources: the Dutch philosopher and clinician team, for example, respectively Widdershoven and Widdershoven-Heerding (2003) have used hermeneutics in their work on resolving conflicts on mental health wards. In Dutch philosophy and psychiatry furthermore, Gerrit Glas, has drawn attention to the untapped potential for improved clinical care from distinctively Dutch philosophical insights into the relationship between mind and brain – these have remained inaccessible largely because it has never been translated into English (Glas, 2003). To all the other challenges of responding to the values pluralism of mental health must be added the challenges of translation.

Anglo-American Analytic and Continental philosophy as a whole, furthermore, represent only about a quarter of the great traditions of thought and practice available from around the world. This is where the open society represented by contemporary philosophy and psychiatry comes fully into play. The resources indeed of the open society of contemporary philosophy and psychiatry are already making an impact in enriching the model of values-based practice. First in the field to recognise this was the Mandela Professor of Philosophy and Psychiatry at Pretoria Medical School in South Africa, Werdie van Staden. Van Staden as noted above hosted the official launch of the International Network for Philosophy and Psychiatry from Cape Town in 2002. Since then he has gone on to draw on the resources of African philosophy in developing what he has called *Batho Pele* or *African VBP* (van Staden and Fulford, 2015). Batho Pele in van Staden's model draws on African traditions of thought and practice that in effect dissolve the division between the individual and collective in values-based practice. Like Stanghellini, van Staden has followed through on the practical implications of Batho Pele, in his case for policy as well as clinical work in mental health. Other African resources include its highly developed tradition of narrative understanding and its role in mental health. Examples from other parts of the world include Balkan cultural pluralism, Dharma therapy based on Buddhist philosophy (refxx), and the xx of Islamic medicine[21].

19 For example in Poland and in Brazil.

20 As noted in Section 3 Stanghellini and his colleagues are currently involved in a program of empirical research testing their model in anorexia and other disorders of eating and feeding.

21 These and many other examples are all in Stoyanoff *et al.* (forthcoming).

6. Conclusions

This article has given an overview of the state of the art of contemporary interdisciplinary work between philosophy and psychiatry. *Section 1* of the article described how the field has brought together a wide range of ideas about mental health from around the world producing what now amounts to a collegial international open society of ideas. *Section 2* introduced a philosophy-into-practice initiative that has developed out of a particular strand of work within the new field concerned with analytic philosophy of values, called values-based practice. As its name implies, values-based practice works as a partner to evidence-based practice. Together they support shared decision-making between clinician and patient as the basis of best practice in person-centred clinical care. Although developed first in mental health, values-based practice is now being deployed particularly in areas of bodily medicine such as surgery. *Section 3* explored through the story of 'Anna' the challenges to implementing values-based in mental health as illustrated by anorexia. This showed the challenges to be essentially challenges of values pluralism. The section described how work in phenomenology has provided insights into the values of people with anorexia that form the basis for an effective response to the challenges of values pluralism presented by this condition. Finally, *Section 4* generalized the argument of Section 3, showing, first, that a wider range of challenges of values pluralism arises across the board in mental health, and, second, that the resources for responding to this wider range of challenges are available from the international open society of ideas represented by the current state of the art of contemporary philosophy and psychiatry.

An Ariadnean golden thread running through the article has been the complementary relationship between philosophy (specifically philosophy of values) and science as resources for mental health practice. I conclude with a brief note on each of the two strands in this thread, a promissory note on values and a cautionary note on science.

6.1 A promissory note on values

As to values, there is still more to say about the importance for practice of the international open society of ideas of contemporary philosophy and psychiatry. I am grateful to the editors of this special issue for the generous word length they have allowed me. Even so I have had to limit myself to what might be described as the 'low hanging fruit' available from the new field of international philosophy and psychiatry. The resources of the new field – from phenomenology, from African philosophy, from Balkan cultural values, from Buddhism, and so forth – are in the terms of this metaphor, hanging there waiting to be assimilated into an enriched model of values-based practice fit for purpose in its role of supporting shared decision-making in mental health. This is important. As the basis for best practice in person-centred clinical care, shared decision-making is as I have indicated of particular significance in mental health in being crucial to contemporary understandings of recovery.

There is though a whole second side to the importance of the international open society of ideas for mental health practice. Just as the open society has a role in supporting best practice in mental health, so it has an equally important role in preventing bad practice. To spell out fully why this is so would require a second article of similar length to this one. The story line of the article would start from the long (and continuing) history of abuses of psychiatry for purposes of political or social control; it would set out evidence of the role of unacknowledged values in making psychiatry particularly vulnerable to abuses of this kind; it would cite a leading campaigner against these abuses on the need for an international open society of ideas to counter them; it would indicate how contemporary philosophy and psychiatry could fill this role not (directly) by way of the resources it offers but through an enhanced empathic engagement across and between the diverse perspectives of its component members; it would

show that developing this enhanced empathic engagement will require further development of the skills base of values-based practice aimed at raising awareness of values; and it would illustrate the role of philosophy in supporting this further development through the work of the Swedish philosopher (and Theory Lead for the Collaborating Centre in Oxford), Anna Bergqvist, on the nature of empathy as an open ended dialogue between perspectives (Bergqvist, forthcoming)[22].

The vulnerability of psychiatry to abuse is of particular concern in the UK at the present time with continuing disproportionate use of involuntary psychiatric treatment in particular ethnic groups and epidemiological evidence that the extent of this disproportion follows administrative boundaries (Weich *et al.*, 2014). There is though no adequate short cut to the above story line. Which is why, for now, any more detailed comments on the role of the international open society of ideas in preventing bad practice must remain no more than a promissory note.

6.2 A cautionary note on science

As has been emphasised, values-based practice, in conception and in realisation, is a partner to the sciences as represented by evidence-based practice. It is through this partnership model that shared decision-making has become the basis for successful translation of research into improvements in clinical care in areas of bodily medicine such a surgery (witness the story of Mrs Jones' Knee in Section 2). One conclusion therefor that might be drawn from the arguments presented in this article, is that current concerns about the corresponding *failures* of the neurosciences to translate into improvements in clinical care, may have less to do with the science side of shared decision-making and more to do with its values-side.

This conclusion would not sit easily with those concerned. True, the concerns about translation have come (inter alia) from within the neuroscience community itself. Thomas Insel, for example, in his time as Director of the world's largest neuroscience research funder, the USA-based National Institute for Mental Health, launched a wholly new framework for psychiatric research (the RDoC framework) motivated by these concerns about translation: 'patients', he said in a blog announcing RDoC, 'deserve better.' (Insel, 2014; also Cuthbert, 2014). Some years earlier, three leaders of the neuroscience research community within psychiatry, David Kupfer, Michael First and Daryl Regier, made essentially the same point in the introduction to their *Agenda for DSM-5*. They, like Insel, called for a new scientific paradigm (Kupfer, First and Regier, 2002, p. xix).

Even in their own terms however such calls should not perhaps be grounds for optimism. As one of the founders of quantum mechanics, no less, Max Planck, quipped in his intellectual autobiography, 'new sciences aren't born, old scientists die!' (Planck, 1950, p. 33) And it is after all nothing less than a new medical science with which this article has been concerned. The medical science of the Twentieth Century was based on a 'doctor decides' model of translating research into practice. Again, there was nothing wrong with this in its day. In Insel's terms, it delivered great results for patients. But the medical science of the Twenty-first Century is based on a 'shared decision-making' model in which evidence from generalized science is brought together

22 The further article anticipated above in this paragraph is now forthcoming in a Special Issue (edited by Louis Sass] of the Polish journal *EIDOS* celebrating the 2019 INPP conference in Warsaw, as Fulford, KWM., King, C., and Bergqvist, A., *Hall of Mirrors: how an international open society of mental health stakeholders can help to overcome values auto-blindness thus reducing the vulnerability of psychiatry to abuse.*

with the unique values of individual people. The delivery of this Twenty-first Century model in bodily medicine (as illustrated for surgery in this article by the story of Mrs Jones' Knee) is relatively straightforward. Its delivery in mental health is considerably more challenging. The challenges are indeed partly scientific. The brain after all is a more difficult organ to study than the knee. But as Anna's story in Section 3, and the wider considerations of Section 4, together indicated, the challenges in mental health are also challenges of values pluralism.

The international open society of ideas that I have argued is the state of the art of contemporary philosophy and psychiatry offers in principle the resources needed for responding to the challenges of values pluralism inherent in the shared decision-making that is at the heart of best practice in Twenty-first Century mental health care. But in moving from principle to practice, from theory to implementation, we should be mindful of Max Plank's caution that we may have to wait for old scientists to die.

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THE PHENOMENOLOGY OF DEPRESSION

abstract

The phenomenological method, characterized by the suspension of judgment (epoché), has helped analyzing the subjective experience of patients affected by mental disorders. Psychiatry, dealing with the human being itself in its complexity and unicity, is placed between the biological positivistic attempt, for which the symptoms of mental illness are a mere consequence of brain dysfunctions and the phenomenological-existential approach, inclined to consider the symptoms as meaningful phenomena of the person's subjective experience. Eugène Minkowski, Ludwig Binswanger, Arthur Tatossian, Kimura Bin, Henri Maldiney and Hubertus Tellenbach are fundamental authors in the phenomenological psychopathology of depression; they described the alterations of the lived time, space, body and others experienced by the depressed. Starting from the main theoretical contributions of the authors, we will focus on the psychopathology and discuss the key themes of clinical depression: guilt, poverty and hypochondriasis. Finally we will focus on the typus melancholicus *construct.*

keywords

phenomenology, psychopathology, depression, melancholy

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Denn das Schöne ist nichts als des Schrecklichen Anfang, den wir noch grade ertragen,
und wir bewundern es so, weil es gelassen verschmäht, uns zu zerstören.[1]
(Reiner Maria Rilke, Duino Elegies, Capitol 1)

An die Melancholie
Zum Wein, zu Freunden bin ich dir entflohn,
Da mir vor deinem dunklen Auge graute,
In Liebesarmen und beim Klang der Laute
Vergaß ich dich, dein ungetreuer Sohn.

Du aber gingest mir verschwiegen nach
Und warst im Wein, den ich verzweifelt zechte,
Warst in der Schwüle meiner Liebesnächte
Und warest noch im Hohn, den ich dir sprach.
Nun kühlst du die erschöpften Glieder mir
Und hast mein Haupt in deinen Schoß genommen,
Da ich von meinen Fahrten heimgekommen:
Denn all mein Irren war ein weg zu dir.

To melancholy
Because I felt horror at the sight of your dark eyes,
I fled to wine, to friends, in order o escape you,
In the arms of love and by the sound of the lute
I, your unfaithful son, forgot you.

But you followed me silently,
And you were in the wine that I quaffed desperately,
You were in the fervor of my nights of love
And were even inn the derision that I directed at you.
Now you cool my exhausted limbs
And have taken my head into your lap,
When I have come home from all my journeying:
For all my straying was a path to you.
(Hermann Hesse)

1. Introduction

Depression is a commonly occurring mental disorder and a major cause of morbidity worldwide (Kessler and Bromet, 2013). According to the World Health Organization (WHO, 2001), with growing number of patients predicted in the next years, depression is one of the most common diseases in the world, contributing heavily on the global morbidity. Classified as Major Depressive Disorder in the Diagnostic and Statistical manual of Mental Disorders 5 (APA, DSM 5), depression is typically characterized by disturbances of mood and affect, diminished ability to concentrate, anxiety, fatigue, recurrent thoughts of death, decreased appetite, weight loss and insomnia. Treatment of depression involves pharmacological interventions, among which serotonin selective reuptake inhibitors (SSRIs) are the most

1 For beauty is nothing but the beginning of terror, that we are still able to bear, and we revere it so, because it calmly disdains to destroy us.

prescribed medications, and non-pharmacological interventions like chronobiologic strategies (light therapy and sleep deprivation), somatic treatments (transcranial magnetic stimulation, TMS; electroconvulsive therapy, ECT) and psychotherapy. As Herpertz and Fuchs (2014) recently wrote: "The DSM-IV and DSM 5 as well as the ICD-10 are mainly conceived for purposes of reliability and, therefore, characterized by rather simple psychopathological concepts compatible with easily applicable data collection techniques. Consciousness and subjectivity, however, are virtually excluded on the theoretical level and undervalued on the pragmatic level" (p. 1). Despite the impressive progresses of neuroscience and psychopharmacology of the last decades, the causes of psychiatric disorders remain unknown. Modern cognitive neurosciences have mainly studied the mind, as discrete and replicable functions and processes, without considering the first-person experiential dimension. On the contrary, phenomenological psychopathology is a method to assess the patient's abnormal experiences from their own perspective, whose theoretical origin goes back to the Karl Jaspers' masterpiece "General Psychopathology" published in 1913. The fundamental objective of the phenomenological approach is the understanding of the way-of-being-in-the-world of the patient. What the patient feels in his own words, the way the patient experiences the dimensions of time and space, how the patient experiences the body and in which terms the inter-personal dialogue with the others is interrupted become the funding questions of the psychopathology. Among others, the most important philosophers who exerted a great influence on many phenomenological psychopathologists are Edmund Husserl and Martin Heidegger.

2. Back to the roots: the Edmund Husserl's phenomenology

Phenomenology (from the ancient Greek word *φαινόμενον* (phainómenon), "thing appearing to view") is a philosophical movement founded in the early years of the 20th century by Edmund Husserl. As conveyed with the famous husserlian sentence "to the things themselves" (*zu den Sachen selbst*), letting the things appear as they are, is the fundamental Husserl's message. According to Husserl, the phenomena studied by phenomenology, must be the psychic experiences (*psychische Erlebnisse*). To begin, the philosopher should deflect the attention from the external material objects and direct her to the subjective experience of the objects themselves, the phenomena. This phenomenological reduction (*phänomenologishce Reduktion*), which is the first reduction of the Husserl's phenomenological method, requires the suspension of judgements (*Urteilsenthaltung*) or epoché (ἐποχή: suspension), in order to identify the phenomena. After the phenomenological reduction, when the phenomena appear, we need to proceed with the eidetic (from the Greek word εἶδος, eidos, "shape") reduction (*eidetische Reduktion*), in order to describe the phenomena. Aim of the eidetic reduction is to describe the fundamental structures (*Grundstrukturen*), the essences, of the phenomena. Through the description, the phenomenology makes these structures visible. According to Husserl, the most important structure of the psychic experiences (*psychische Erlebnisse*) is the intentionality (*Intentionalität*). The phenomena are always intentional experiences (*intentionale Erlebnisse*) and the act of experiencing (*Erleben*) is always experiencing of something (*Erleben von Etwas*). With the transcendental reduction (*tranzendentale Reduktion*), the objectivity is referred to the subjectivity, being the world always there within the framework of the conscience (*Bewusstsein*). Husserl, as mathematician, understood that psychic experiences must be the object of interest of philosophy, in order to understand the world. In other words, in the attempt to give consistency of truth to the objective world, Husserl went back to the human conscience. This thesis, pervading the whole Husserl's philosophy, deeply influenced many psychopathologists of the time, who remained fascinated by the importance of conscience and subjective experience postulated by Husserl, in the context of mental disorders.

3. The Martin Heidegger's hermeneutic phenomenology

Martin Heidegger starts from the Husserl's conceptions to create his hermeneutic phenomenology; in particular, Heidegger recognizes the intentionality as the substantial structure of the *Dasein*. Usually translated in English with "experience", in his masterpiece *Sein und Zeit*, Heidegger uses the term *Dasein* to refer to the human being. Coming from the Latin words in-tendere, intentionality literally means "to be addressed to", underlining the eccentric position in the world of the *Dasein*, always addressed to something. The existence (*Exsistenz*), from the Latin words ex-sistere, literally "being outside one-self", according to Heidegger, is the fundamental characteristic of the *Dasein*. The phenomenologically oriented psychopathologists took this message from Heidegger's philosophy and interpreted it in the context of mentally disordered patients. If the human being is an intentional being, always addressed to something, a projected project, if the human lives in this eccentric position, always dialoguing between himself and the world, how this can change in psychiatric disorders? How is the intentionality of a depressed patient? How the delicate encounter with another person modified in schizophrenia? To fundamental questions like these, phenomenological psychopathology tried to give answers. With important repercussions for the phenomenological psychopathology is also the Heidegger's concept of "readiness-to-hand" (*Zuhandenheit*); the *Dasein*, in fact, exists in-the-world, among the things, towards which it is constantly addressed. With the terms "environment" (*Umwelt*) and in later works "world" (Welt), Heidegger conceives everything that has an importance, a meaning, with respect to the *Dasein*, the human being. The thing, the equipment (*Zeug*) acquires a meaning, based on the practical personal experience. The *Zuhandenheit* is the way of being of the things that have a significance. In patients affected by mental disorders, the world, all the things that have an importance, can appear as tremendous, fighting, laden with sinister messages, the things lose their significance and the hands are useless. Heidegger stresses the point that his phenomenology is a hermeneutic phenomenology, in light of the original meaning of hermeneutic, which was the art of understanding texts. Therefore, Heidegger's whole philosophy could be seen as an attempt to understand (*verstehen*) the *Dasein*. In his masterpiece "Being and Time" (*Sein und Zeit*), Heidegger poses himself the question of Being, achieving the main thesis that Being is based on time.

> Die konkrete Ausarbeitung der Frage nach dem Sinn von "Sein" ist die Absicht der folgenden Abhandlung. Die Interpretation der Zeit als des möglichen Horizontes eines jeden Seinsverständniss überhaupt ist ihr vorläufiges Ziel[2]. (Sein und Zeit, Vorsatzblatt)

Heidegger thinks that the link between being and time has always been present in the western philosophy. In fact, time was already in the construct of the Aristoteles's οὐσία (ousia), translated in Latin as *substantia* or *essentia*, being the word ousia derived from the participle of the verb εἰμί (eimí). Many authors linked to the phenomenological psychopathology have analyzed this importance of time in psychiatric disorders, having every form of psychopathological alteration a particular rhythm of the time experience. In the case of depression, for example, the Swiss psychiatrist Ludwig Binswanger and the French psychiatrist Eugéne Minkowski have evidenced a stagnation of the lived time with a general tendency of the prevailing of the past, over the present and future.

2 "The concrete elaboration of the question about the meaning of "Being" is the aim of the following dissertation. Time must be brought to light-and genuinely conceived-as the horizon for all understanding of Being and for any way of interpreting it".

4. The primate of the experience[3]

"How do you feel?" and "what do you feel?" are the opening questions of many psychiatric interviews and they exactly represent the attempt to begin the phenomenological reduction, the effort to have access to the subjective experience of the patient, the phenomenon, the thing itself (*die Sache selbst*). Phenomenology is a discipline focused on the experience of the conscience, a series of methods that aims at describe and understand the lived experiences. To grasp, realize and describe the structure of the patients' subjective first person lived experiences represent the basis of Karl Jaspers' "General Psychopathology". The etymology of the word experience is complex, letting foresee the kaleidoscopic spectrum of meanings and nuances contained by the word. The topic "experience" has been thoroughly analyzed by Andrea Tagliapietra, whose book "Esperienza" has been held as main source of the following etymological considerations (2017, pp. 74-79). The word experience, like the French *expérience*, the Spanish *experiencia*, the Italian *esperienza*, comes from the Latin *experientia.* Interestingly, the Latin verb *experiri* belongs to the deponent verb class, detaining an active meaning with a passive form. This Janus double-faceted aspect of the verb is structural in the actual experience, where there is no centrifugal experience without a centripetal movement; there is no making feel something without feeling or being felt. Both the Latin *experientia* and the Greek ἐμπειρία (empeiria) comprehend the fundamental Indo-European root –per, associated with the significances of danger (the Latin *periculum*, the Italian *pericolo*, the German *Gefhar* and the English fear) and crossing (the Latin particle "per" indicated a passage through something, the German *fahren*, the English fare and ferry). The root -per- is also present in the Italian word for experience, *esperienza*, often used as synonym of adventure. We often use the expression "going through something" in our colloquial language to mean an emotionally relevant and in some way dangerous experience. In the ancient Greek language the verbs *peiráo* (πειράω) and *peráo* (περάω) respectively meant "I feel" and "I go through". *Péras* (πέρας) meant "limit" and "bond". "Here, from the etymological memory of the word, the dual consideration of the *péras* linked to the overcoming of a border emerges, his crossing, but also to the ascertainment of the limit as what determines, *in se*, the living being, located in his environment and in his corporeity, in the singularity and in the belong to his own death" (Tagliapietra, 2017, p. 76). *Péira* (πεῖρα) comes from the verb *peíro* (πείρω) which meant, "I pass from side to side", "I insert", "I tuck". "The *peírata* are the ropes, the hawsers, those boundaries that, in the Homeric episode of the mermaids, force Ulysses at the mainmast (Tagliapietra, 2017, p. 77). Moreover, the Latin *ex-perire* includes the verb *per-ire*, dying, which meant the passage through the limit *par excellence*. "The experience seems to be linked with a constellation of meanings that imply the idea of travel, that of test (of oneself, of others, of something), exposing to a danger (even to the extreme danger of death) and, therefore, bringing to mind the notion itself of adventure." (Tagliapietra, 2017 p. 75). In German, there are two words for the English word experience: *Erfahrung* and *Erlebniss*, conveying a broad spectrum of meanings. The word *Erfahrung* possess the shades of significances associated with the Indo-European particle –per. The other German word for experience is what the phenomenologists have in mind when they stress the importance of the experience. The word *Erlebniss* in fact is linked to the German words *Leben*, to live or the life, *Leib*, the lived body, the body that I am and *Liebe*, the love. The word *Erlebniss* is loaded with strong emotional content; in phenomenology, the experience is pathic, full of *pathos* (πάθος, emotion or sufferance). To the phenomenological psychopathologists not the conventional, every day, emotionally indifferent experiences are important, but the emotionally relevant ones, the experiences full of *pathos*. Heidegger

3 This paragraph was inspired by the lecture held by Gilberto Di Petta in Figline on 20th October 2017 in the course "Corso residenziale di Psicopatologia Fenomenologica".

disclosed the importance of affectivity in phenomenology in his headwork "*Sein und Zeit*" (Heidegger, 1923).

> Non intratur in veritatem nisi per caritatem[4] (St. Augustine)

Originating from the ancient proto-indoerupean root –ka, meaning "to like, desire", the word *caritas* in Latin was the common translation of the Greek word *agape* (ἀγάπη) which was one of the possible ways the Greeks had to express the love. *Agape* was the endless, unconditioned and transcendent love. In addition, *Kama* in Sanskrit meant love. "The truth is accessible through love"; the Saint Augustine's sentence stresses the role of the emotions for having access to the truth. Heidegger, who carefully read the texts of Saint Augustine, confirmed this role of affectivity as fundament of human existence. In particular, Heidegger conceived the attunement (*Befindlichkeit*) as one of the main "existentials" (*Exsistenziale*) of the *Dasein*. What Heidegger exactly meant with the word *Befindlichkeit* is far from being clear, but the German significance of the word could help, transmitting a wide range of colors. *Sich befinden* literally means "Being located" letting see the closeness between the affective disposition of the individual and the existence. Only in the affection, the *Dasein* exists. What matters to Heidegger is apparently not the fleeting emotions, but the affective attunement preceding them. The Augustine's love is not short-lived and transient; it is pre-theoretical (*Ur-etwas*). In Heidegger's "*Grundbegriffe der aristotelischen Philosophie*", the Author sees a precursor of his *Befindlichkeit* in the Aristoteles's *Pathos*.

> Diese πάθη, »Affekte«, sind nicht Zustände des Seelischen, es handelt sich um eine Befindlichkeit des Lebenden in seiner Welt, in der Weise, wie er gestellt ist zu etwas, wie er eine Sache sich angehen läßt. Die Affekte spielen eine fundamentale Rolle bei der Bestimmung des Seins-in-der-Welt, des Seins-mit-und-zu-anderen[5]. (p. 122)

The importance of affectivity as basic requirement of the *Dasein* is further clarified in the same text:

> Wir werden aus dem genaueren Verständnis dessen, was mit εξις gemeint ist, die Analyse der πάθη verstehen, sehen, *wie das mit πάθος Bezeichnete das Sein-in-der-Welt in einem fundamentalen Sinne bestimmt* und wie es als solche Grund-bestimmung des Seins-in-der-Welt in Frage kommt bei der Aus-bildung der κρίσις, des »Stellungnehmens«, des »Entscheidens« einer entscheidenden Frage. Mit dem Aufweis dieser fundamentalen Rolle der πάθη im κρίνειν selbst bekommen wir zugleich die Möglichkeit, den Boden des λόγος selbst konkreter zu sehen.[6] (p. 169).

In "*Was ist Metaphysik",* we find more clarifications concerning the affectivity in Heidegger's philosophical speculation.

4 "One cannot enter into the truth without love."

5 "These πάθη, affects, are not conditions of the psychic, it is about an attunement of the living in his world, in the way he is located towards something, in the way he lets himself addressing to the task. The affects play a fundamental role in the definition of the "Being-in-the-world" of the Being-with-and-for-the-others."

6 We will see from the understanding of which is meant with εξις the analysis of the πάθη understand, how what is characterized by πάθος determines the Being-in-the-world in a fundamental sense and how this basic-determination of the Being-in-the-world comes into question in the formation of the κρίσις, of the "taking a position", of the "making a decision" about a decisive question. With the demonstration of this fundamental role of the πάθη in the κρίνειν itself we receive all at once the possibility to see concreter the base of the λόγος itself.

> Das Gestimmtsein und die Stimmung ist die Grundart der Erfassung und Er(s)chliessung der Welt[7]. (p. 738)

Tellenbach gave credit to the Heidegger's "*Befindlichkeit*" concept as highlighted in these sentences taken from his masterpiece Melancholy (1980):

> Only in the mood, in the attunement, all Dasein's knowledge, understanding, experience, every meaning and appearing of the world, the global connection of their meanings is made accessible... [...]. It is the "condition"(*Befindlichkeit*) the mean with which the world influences the existence. (p. 52)

5. The endogeneity

Depression takes origin from the sensitivity, the attunement, in German "*die Befindlinchkeit*"; this concept is linked with the Kurt Schneider (1949)'s ideas of subsoil ("*der Untergrund*") and subsoil-depressions ("*die Untergrundsdepressionen*"). Schneider (1949) himself admits the incomprehensibility of the "*Untergrund*":

> Was der Untergrund selbst ist überschreitet die Erfahrung und ist eine philosophische Frage. Er ist für uns leidglich ein Grenzbegriff. Wir erfassen mit ihm also eine Grenze, hinter die keine Erfahrung reichen kann, etwas, worüber es keine Aussagen gibt, was also nicht einfach als somatisch postuliert, aber auch nicht psychologisiert werden kann.[8]

For the Author, the *Untergrund*, translatable with "base color", "subsoil" or "foundation" is what is altered, without a recognizable cause, in some forms of depression ("*die Untergrundsdepressionen*"). On the other hand, Schneider identifies subtypes of depression, secondary to a cause, different form the previous ones: the "*Hintergrundsdepressionen"*. While the "*Hintergrundsdepressionen"* are in some way comprehensible, the *Untergrundsdepressionen* are hardly achievable, regarding the "*Untergrund*", which is a limit concept, in the balance between somatology and psychology, more a "philosophical question", something "that surpasses the experience". This distinction recalls the clinical classification of exogenous and endogenous depressions, applied every day in the clinical practice. The exogenous depressions have a recognizable cause, an external stressor, linked with the ongoing episode. The endogenous depressions, on the contrary, do not have an environmental cause, they do not have a recognizable explanation. The distinction between the two forms plays a key role in clinical psychiatry, being the treatment of the first mainly psychological and the treatment for the second ones mainly pharmacological. According to Tellenbach (1980), the "*Endon*", like the Schneider's *Untergrund*, "is not to be mistaken neither with the somatogenic nor with the psychologic [...] therefore is neither psychologically comprehensible nor somatically explainable" (Tatossian, 1979, p. 126). The complex definition of the "endon" is conveyed by the following Tellenbach's words:

> *And so we define as endogenous what arises as fundamental character's unit in everything that occurs in the life. The endon unfolds since the very beginning of the phenomena of the*

7 Being attuned and attunement are the basic way of comprehending and disclosing the world.

8 What the subsoil actually is surpasses the experience and is a philosophical question. Unfortunately, it is for us a limit concept. Therefore, with it, we catch a limit, which no experience can achieve, something about which one cannot say anything that cannot be somatically postulated and that cannot be psychologized as well.

> *endogenous and in the physis that impregnates them*; where with physis we do not mean the physical in contrast to the psychic, but rather that nature as appears to us for example in Goethe's morphological works; the Aristotelian φύσις that means "heaven and earth, plants and animals and in some way the man... (Heidegger, 1950, p. 299). As a consequence of that, we mean the endon neither as the apersonal of the biological nor as the personal in the sense of the existence, of his vivifying a mental reality. The endon stands *before* these things because it, first of all, makes them possible and imprints them; it stands *after* them because it can be influenced, permeated, formed by them... (Tellebach, 1980, p. 44)

6. The Psychopathology of Depression

With the word depression, we mean the endogenous depression, and we use the word melancholy as a synonym of endogenous depression. It is hard to define and describe the sufferance experienced by the depressed. "The melancholic sufferance is actually inexpressible and inexplicable; a sort of sense of emptiness and petrification" (Tatossian, 1962, p74). Tatossian (1981) distinguished between sadness and depression, defining the first as a feeling and the latter as a mood, i.e. a global mode of being. The German translation of mood, *Stimmung*, evokes its fundamental feature: the resonance, the agreement, with what surrounds the subject. While sadness has always an object, somebody or something to be sad of, depression has no object, no external or internal reference, and no clear and direct causal explanation. Using Tatossian (1981)'s own words, "sadness, as a feeling, has a temporal course, whereas depression, as long as it is present, seems to have neither beginning nor end"; moreover, sadness is often intermittent and occasional, while depression is permanent and pervasive. Finally, if sadness is merely psychic, depression is a disturbance of the lived body, being bodily as well as psychic. In addition to that, while sadness, as feeling, has a movement, a dynamicity, depression implicates a general hypo-mobility, a loss of kinesis. The distinction between sadness (the feeling) and depression (the mood) has a key operational impact in the psychiatric clinical practice, because the standard antidepressant medications are efficacious for depression. Quoting again Tatossian (1981)'s own words, "the medications called antidepressants are not efficacious on sadness where, frankly speaking, the doctor doesn't do anything better than a true friend". To support the distinction between sadness and depression, many depressed patients are not capable of feeling sad at all: Schulte (1961) already indicated the incapacity of being sad (*Nicht-traurig-sein-können*) as a core phenomenon in depression. For this reason, during the treatment of a depressed person, the reappearing of emotions, weeping and feelings of sadness normally indicate initial recovery. Tellenbach (1980) describes this key phenomenon in melancholy with the following words: "In melancholy the ego stands beside his sadness. If sadness is a movement that comes into the world, grows and passes, the melancholic sadness does not show any kind of *movement*. It stands there permanently, without extending. [...] The melancholic can suffer only the obsession of a sadness that does not belong to him. This suffer is an endogenously transformed, extraneous, monstrous, deformed suffer, even perverted, a pathic apathy, so to speak" (p. 28). The essence of the melancholic experience is conveyed by Tellenbach's extract of his patient MBK's own description.

> All connections are lost. One feels or is like a little stone, lost in the endless grey of a fading landscape. The sensation of smallness, insecurity and loss can become so strong, that one almost has a feeling of a dream world in which even being oneself is anything more than an abandoned point, like a dried leaf moved here and there in a lifeless autumnal world. [...] The solitude of the depressed is different form every other solitude and from every other state of abandonment. One is not alone in a house, in a city or

> country. For the house is like lost, it does not mean protection anymore; the city is not a familiar city, the country is not homeland anymore, the starry sky burnt by the ice... However, now one is not humans in the flesh, with heart, strengths and spirit to bear solitude – one is a stone. A stone that suffers and thinks; something like that exists. So to speak, one is retro-evolved in stone. Sometime I have thought, "Now I know what is like to be a stone". It is even too clear that this little stone in the cold universe, this enigmatically afraid and doubting man strives to grab himself, with ineffable, fervid effort, and find a hold in everything on which he can in some way grab himself (human, animals, things)... [...] What is left of the human, when he is deprived of the rational capacity, the intuitive force, the capacity of transmitting and receiving love? A little intellect is left...it is nothing but the bed of a dried stream, a binary on which nothing travels anymore. It is in himself a poor dried leaf. [...] It does not matter which fuel you put into the furnace of suffering and for which reason the fire develops. In a sense it is a good that objects are found, even though this sharpens the suffering; because the true and horrible essence of anguish, in the depression, is its lack of an object. (Tellenbach, 1980, pp. 250-252)

In reference to the patient MBK, Ludwig Binswanger (1960, p. 50) writes: "The patient compares the melancholic, deprived of the capacity of communicating, intuiting and loving, to the "bed of a dried river", to a "rail on which nothing passes". In both the comparisons, the "emptying of the melancholic conscience" the absence of a *Worauf* ("link") and of a *Worüber* ("object").

7. Themes of the melancholic experience

In the melancholic experience, loss seems to be a basic phenomenon (*Grundthema*), the *eidos* (shape) itself of depression; the "style of loss" (Binswanger, 1960, p. 48) (*Verluststil*) of the depressed is different from our normal conception of loss, because it is irreparable and inexorable. Loss may concern physical, moral or economical integrity, thus leading respectively to the melancholic themes of hypochondriasis, guilt and poverty. Typically the depressed feels guilty towards the relatives, parents, wife or husband, daughter or son. Gilberto Di Petta (2003) described the theme of guilt in depression as "guilt towards oneself, other people, life, one's own wishes, one's own body, for existing." Melancholic patients typically feel guilty about ancient facts, often irrelevant, experienced as sources of continuous ruminations. Quoting Tellenbach's own words:

> ...in many cases guilts dated long time ago are often recalled to memory, and their burden cannot be attenuated by any repentance, confession, penitence or grace. There are things they can never forget, things that always come back to oppress (pp. 102-103).

> The patient only lived in the past that forced her continuously to interrogate herselfabout the right and the wrong of every action. (p. 104)

The dominance of themes of guilt in the melancholic patients' thoughts are so radical that it rather seems that "the theme of guilt "finds" melancholy, so to speak" (Tellenabch, 1980, p. 108).

> From a genetic point of view, the melancholic does not derive his conscience of guilt form the given opportunities; he rather feels guilt in a primary way, and simply chooses opportunities for his "being-guilty". (Tellenbach, 1980, p. 199)

In severe forms of melancholy, guilt can acquire psychotic depth, representing a frequent theme of depressive delusions. Professor Hans D described by Tellebach seems to have suffered from a delusional depression where he felt guilty about having destroyed the world. We report here a fragment of the clinical vignette described by Tellenbach:

> He pronounced just brief sentences like: 'All is over, all is nothing, and all is deceit'. He still lived, although he must have been dead long time ago. Therefore, he had overstepped the laws of life and hence the world was lost, and had attributed to himself a monstrous guilt to bear. (p. 169)

The guilt experience in melancholy is always primary, pre-thematic, always part of the depressive core, even if patients tend to indicate external causes, often personal facts occurred long time ago, in reference to which they feel guilty.

> This is indeed the genuineness of such guilt, which is proof of the transformation in psychosis – that is endogenously deformed guilt, culpabilité endogène, as appropriately says Hesnard (1949). (Tellenbach, 1980, p. 198)

Ideas of financial ruin are common in depressed patients, especially in self-employed workers, although real data do not support the patients' convictions. Finally, melancholic patients frequently report physical complaints, in a general perception of the body as degraded, spoiled and transformed. According to Maldiney (1976), the melancholic loss has no object (a loss *tout court*) because it is located at a pre-objective level, before the formation of the objective world. Ludwig Binswanger, quoting the Swiss writer Reto Ross, defines melancholy as "the loss of a hold", of an anchor, of a vital contact with the things (Binswanger, 1960), and from Hubertus Tellenbach's patient MBK., that it is the lack itself of an object.

> It does not matter which fuel you put into the furnace of suffering and for which reason the fire develops. In a sense it is a good that objects are found, even though this sharpens the suffering; because the true and horrible essence of anguish, in the depression, is its lack of an object. (Tellenbach, 1980, p. 253)

8. Structural analysis of the melancholic world

> The pure present is an ungraspable advance of the past devouring the future. In truth, all sensation is already memory. (Bergson, Matter and memory, 1986)

The depression experience is enlighten by phenomenology as a global way of being with one self, with the world and with the others. In depression, various authors have described a typical alteration of the experience of lived time. The lived time is not the time of the external world, measured by the clocks, but a human time. Straus (1928) named these two times "*Ich-Zeit*" and "*Welt-Zeit*" respectively and identified a contrast between these two modalities in endogenous depression. Eugène Minkowski (1933) identified the lived time alteration as the phenomenological essence (*le trouble générateur*) of melancholy, having the depressed lost the "*élan vital*" (propulsive energy). The melancholic alteration of the lived time is slowing down and stagnation of the intimate time.

> The melancholic do not experience time as «propulsive energy», but feel it as a flow of temporal current. Thus, for these patients, the future is perceived as blocked; their attention is directed to the past and the present feels stagnant. (Cardinalli, 2012, 30)

Minkowski says (1933, p. 279):

> Here (in endogenous depression) the lived time seems to singularly slow down, even stop, and the modification of the temporal structure stands between the underlying biological disorder, on one side, and the current clinical symptoms on the other.

Ludwig Binswanger (1960) is one of the most prominent contributors to phenomenological psychopathology and confirmed, in his depressed patients Cécile Münch and David Bürge, an alteration of the time experience. Using the husserlian terms of *retentio*, *presentatio* and *protentio*, with referral to the past, present and future, Binswanger claimed that in the healthy individual there is a natural interweaving of these elements. Binswanger used the speaker metaphor taken by Szilasi, according to which a speaker must have a natural fluency of what's already been said (*retetntio*) and what it's going to be said (*protentio*), in order to keep talking in the present (*presentatio*) and perform an intelligible speech. In depression, the delicate and dynamic balance between the three time dimensions is altered, because present and future are infiltrated by the past: *retentio* expands and infiltrates *presentatio* and *protentio*.
Kimura Bin (2005) coined the term *post-festum* (literally after the celebration) to describe the temporality of depression, a fundamental phenomenological process in which the past is lived by the patient as irremediable, irrecoverable and ineluctable. The human *Dasein* in melancholy is always late with respect to itself, having always already missed the "celebration". As a confirmation of the analysis of the lived time in melancholy performed by the psychopathologists, neuropsychological experiments have shown that depressed patients exhibit a slowed experience of time and that they tend to overestimate time spans, as highlighted by Gallagher (2012) and Vogel (2018).
In addition to the time experience, phenomenological psychopathology has also described a typical alteration of the lived space in depression.

> Space tend to be experienced as desperately empty, dull, flat and without perspective, reaching a critical level. The depressed loses existential proximity with things. Distancing is experienced as loss of spatial depth and things become «dull and flat as in everything is out of reach, living as static objects; not integrated into a landscape, occupying places and not regions. (Tatossian, 1979, p. 87)

The melancholic loses the existential proximity with things and so their utilizability (*Zuhandenheit*). The presence of physical complaints has always been object of interest in classical psychopathology (Wernicke, 1909), reporting depressed patients often abdominal pains, headaches, fatigue, dyspepsia, loss of appetite and insomnia. Phenomenological psychopathology considers the alterations of the lived body as core symptoms of the depressive state. Tatossian (1982) distinguishes between the "body that I am" (*corps que je suis*) and the "body that I have" (*corps que j'ai*). While the first is the body-subject, the second is the body-object, respectively *Leib* and *Körper*, in German. The *Leib* is the lived-body, representing the lived experience of the body itself. The *Körper* is the body as *res extensa*, the measurable body, it is the interface with the world, it enables inter-subjectivity, concreteness as a body that can see and be seen, perceive and been perceived. In a healthy person, there is balance between body-subject and body-object. In depression, the body-object disappears, this making the depressed person experiencing exclusively the body subject. In depression, without body-object, the person loses the connection to the world. Simple acts become difficult; the body is perceived as extremely heavy, stuck and incapable of projection. The absence of the body-object makes the person loose the accessibility to the world, which becomes far, out of

accessibility. Fuchs (2005) considers depression as a corporealization of the self; citing Fuchs's own words "in melancholia, the body loses the lightness, fluidity, and mobility of a medium and turns into a heavy, solid body that puts up resistance to the subject's intentions and impulses. Its materiality, density, and weight, otherwise suspended and unnoticed in everyday performance, now come to the fore and are felt painfully. Thus, melancholia may be described as a reification or *corporealization* of the lived body". Moreover, "*Corporealization* thus means that the body does not give access to the world, but stands in the way as an obstacle, separated from its surroundings: The phenomenal space is not embodied anymore". "Melancholia may be regarded as a "stasis", a freezing or rigidity of the lived-body" (Fuchs, 2003, p. 237). Otto Doerr-Zegers (2017) proposes characteristic disturbances of embodiment as fundamental phenomena of depression. The first phenomenon is the alteration of the embodied self, which is the alteration of the subject's relationship with his own body. This phenomenon implicates the "reification" of the bodily experience, also called chrematization (Doerr-Zegers, 1980), literally feeling like a thing. The reduction of the body vitality may have different degrees in depressed patients and can culminate in Cotard's syndrome, characterized by nihilistic delusions and the painful conviction about the impossibility to die. These patients usually report that their body is made of glass, in support of the phenomenological description of the body reification in depression. The second phenomenon involves the body intentionality and corresponds to the alteration of the relationship of the subject with the world. Ludwig Binswanger (1960) described this inability as a core phenomenon in depression and referred to it as the "not-being-able-to" (*das Nicht-Können*), while Bleuler (1975) talked about "alteration of the centrifugal functions" (*Alterationen der zentrifugalen Funktionen*). The third phenomenon is the alteration of the embodied time, corresponding to the disturbances of the biological rhythms. Several evidences (Wehr *et al*, 1983; Germain and Kupfer, 2009) have pointed out the circadian rhythms alterations in depressed patients, this letting the scientists hypothesize an etiological role of the biological clock for depression. In particular, symptoms tend to be worse in the morning and ameliorate in the evening, oscillating during the day; moreover, in depression, a disruption of the sleep-wake cycle occurs, with a progressive anticipation of the sleep time and a typical late-night insomnia. Depressed patients also present alteration of the body temperature (Souetre, 1989), cortisol (Koeningsberg, 2004; Bhagwagar, 2005) and melatonin (Nair, 1984; Karodottir, 2001) secretion, all physiological parameters regulated by the biological clock. The time stagnation in melancholy takes on a great importance in the clinical practice, representing the fluctuations a relevant moment in the treatment response of the depressed patients. Typically, the time experience of the depressed modifies at the beginning of the treatment response, but this modification is not stable, but rather oscillating in the days and within the single day. This course starts in the body and reveals itself with objective modifications, in terms of distensions of the facial expression, ameliorations of the psycho-motor retardation and improvement of the motor activity. This transition moment, where the time restarts in the body, is particularly delicate, because the mind, the subjective experience of sorrow, is still blocked and frozen. Many suicides linked to depression occur in this transition phase where the body is less blocked and with some energy gifted again, but the mind is still surrounded by the sufferance and the cognition is still distorted. In addition to the lived time, space and body, the inter-subjectivity is typically altered in depression.
"All those looks that devour me...Ha, you are not but two? I thought that there were many more of you. Then, that is hell. I would have never believed that... You remember that: the sulphur, the pyre, the grill... Ah! What a joke: hell is other people". (Sartre JP, 1943. Huis Clos).
Tatossian (1979) understands that the depressed experiences a blockage of vital communication with the world, which would be the "background of all the depression" and Borgna (1992) states that "the depressive psychosis, the patient not only gets away from the

world but he loses the world itself in an implacable cancellation of any inter-subjectivity". The encounter with another person lacks the normal pre-reflective resonance and agreement, defined in Japanese as *Ki* by Kimura Bin (1966). The word "Ki" means initially "origin of the universe", "pneuma", "breath", "air" and at the same time "soul" (Kimura Bin, 1966, 1971). "In the Ki the single takes part to the atmospheric pneuma, to the origin of cosmos" (Tellenbach, 1980, p. 31). Interestingly, the significances nuances of the Ki are similar of those of the Greek particle –ψυ, linked with the images of the vital fresh air, the breath, at the basis of the word ψυχή (psyche), soul.

9. The *typus melancholicus*

The idea that a particular personality might be associated with an increased risk of, in other words might predispose to, specific psychic sufferance was present in the *Corpus Hippocraticum*. Hippocrates named melancholic (μελαγχολικός) those people prone to develop melancholy. Hubertus Tellenbach (Tellenbach, 1980) in a famous study in a sample of hospitalized patients affected my monopolar depression called *typus melancholicus* the premorbid personality structure of depression. The most important feature of this kind of personality is the orderliness, the need for meticulous organization of one's own life-world and the fixation on harmony in interpersonal relationships. In the relationships typically, the *typus melancholicus* cannot stand any controversy, as highlighted in the following extract taken from Tellenbach (1980): "When a dispute occurs "this does not give me peace. I try to accommodate everything for the best". If that is not accepted, "then it does not get out of my mind anymore". Often "a controversial point can fill all of my conscience so that I do not think about anything else and I have no peace until that is smoothed out again". "Peace at any price" is the motto" (F. J. Ayd, 1961, p. 5)." Other features are conscientiousness (the commitment to prevent guilt-attributions and guilt-feelings), hyper/heteronomia (an exaggerated norm adaptation and external norm receptiveness) and intolerance of ambiguity (emotional and cognitive incapacity to perceive opposite characteristics concerning the same object or person). The life of the *typus melnacholicus* is submitted to the duty and to the supremacy of the job, his adhesion to the *Lebenswelt* is very stable, rigid and firm. He must accomplish what he has set himself as a goal, with certain parameters, with no delegations and no delays. The *typus melancholics* normally lacks in sense of humor, avoids risks and feels easily guilty (hyper-sensibility to guilt). Tellenbach finds similarities in his typus with the *Shuchaku-Seikaku* by Shimoda (Shimoda, 1932), where *Schuchaku* means, "persistently sink oneself in thoughts" and *Seikaku* means character. According to the Japanese, a particular personality constitution was a prerequisite to develop depression and this was marked by "an inclination to stay anchored to the thoughts or feelings... For this reason a person with such a character cannot feel lighten before having meticulously completed what they had begun... These people are always particularly valued as exemplars, for the trustiness and honesty" (Tellenbach, 1980, p. 74). Central in this constitution, according to Tellenbach, is its "psychic retentiveness, the tendency to stay anchored at the thoughts and the difficulty of simply letting them go. Tellenbach examines in depth the pre-melancholic situation, that phase in which a melancholic type experiences the very beginning of a depressive episode. According to him, a key role in this situation is held by two constellations, these are includence and remanence. Ambrosini (2011, p. 39) says: "The constellation of includence indicates a self-contradiction that sees the typus melnacholicus parallelly in the extreme attempt to maintain their order and in the need to overcome it, exceeding their own limits. This is the moment in which the undesired is manifested and imposes in the existence to thus destabilize the typical meticulous and orderly form of being of the TM (*typus melancholicus*)". Citing again the words of Ambrosini (2011, p. 39), "the other constellation is that of remanence. This is characterized by the danger of remaining behind regarding the subject's own expectations and the emergency of the duty.

The melancholic type is characterized by the paradoxical tendency of cancelling possible debts early. When they are up against the unexpected and chance and the unforeseen breaks the schemes, this may precipitate the melancholic episode". Finally, despair (*Verzweiflung*) is the link that bridges the patient from the pre-melancholic situation to melancholy. The term used originally by Tellenbach is hardly translatable, because the Author did not want to express the feelings of helplessness and hopelessness typically experienced in depression, but he rather wanted to convey the "remaining captured in doubt" meaning (Tellenbach, 1980, p. 187). The word despair in German, *Verzweiflung*, contains the word *Zweifel*, meaning doubt, which in turn, includes the word *zwei* (two), suggesting the doubling aspect held in the conditions of doubt. Depressed patient, often at the beginning of the episode, complaint of pathological doubts that severely interfere with their every-day life. The occurrence of pathological doubts and obsessive ruminations in depressed patients is also present in a very commonly employed evaluation scale for depression in clinical settings, the Hamilton Depression Rating Scale (HAMD), as a confirm of the role played by this phenomenological dimension in depressed patients (Rohan *et al*, 2016).

10. Conclusions

Monopolar depression is a commonly occurring mental disorder, classified in DSM 5 as Major Depressive Disorder, and a major cause of morbidity worldwide. The phenomenological psychopathologists have analyzed the lived experience of the melancholic patients, this allowing a fine description of the structure of melancholy and permitting a closer look at the specific alterations of the fundamental dimensions of time, space, body and others. Among other authors, in this paper we have focused our attention mainly on Eugène Minkowski, Ludwig Binswanger, Arthur Tatossian, Kimura Bin and Hubertus Tellenbach. The *eidos* of melancholy seems to be the loss, a pre-thematic irreparable loss, in the absence of an object. In the MBK patient's words, "the true and horrible essence of anguish, in the depression, is its lack of an object" (Tellenbach, 1980, p. 253). Declined in the loss of moral, physical and economical integrity, loss often gives origin to the typical themes of the melancholic experience: guilt, poverty and hypochondriasis. Time seems to be a lowest common denominator in the authors' descriptions of melancholy, being depression characterized by a slowed lived time. The time alteration, elucidated by Binswanger as a dominance of the past over present and future, has been considered by Minkowski as the generative disorder (*trouble génératuer*) of depression. Modern neurobiological studies have repeatedly confirmed the circadian rhythms alterations in depression, letting hypothesize a dysregulation of the biological clock as fundamental mark of affective disorders, in support of the clinical intuitions of the phenomenological psychopathologists. We could reinterpret the expression "*maladie du temps*" (disease of time) by Fabrice Gzil (2014) and accost it to depression, where time stagnates, days are devoured by the past and the *élan vital* (propulsive energy) is lost, making the prospective of the future impossible. Although melancholic sufferance is "actually inexpressible and inexplicable" (Tatossian, 1962, p. 74), depression is something that concerns the mood, the *Stimmung*, the accordance, the resonance. The choir where the depressed intones his chant is empty, dull, out of tune; the world, the others, are out of reach, a stage of stuffed men. Far from being a merely psychic phenomenon, melancholy is also present in the body, it shouts in the body. The body object (*Körper*) disappears, making lose the interface with the world and letting the body subject (*Leib*), the lived body, expand and undisputedly dominate the balance between the two. The premorbid personality characteristics of melancholy are those of the melancholic type described by Hubertus Tellenbach, whose most important feature is orderliness. The melancholic type "strives not to lag behind himself... His entire life can be interpreted as an effort to pay his debts before he contracts them" (Ambrosini, 2014). In melancholy, the dialogue with the other is interrupted, the other is

far, out of reach. What strikes the most during an interview with a melancholic person is the silence, felt in the impalpable pre-reflective texture of the relation, not as calm and peaceful, but rather as tense, dull, heavy and sinister. The silence of Dante's Inferno, with the damned frozen in the *Cocito*, incapable of crying.

Quand'io m'ebbi dintorno alquanto visto,	When round about me somewhat I had looked,
volsimi a' piedi, e vidi due sì stretti,	I downward turned me, and saw two so close,
che 'l pel del capo avieno insieme misto.	The hair upon their heads together mingled.
"Ditemi, voi che sì strignete i petti",	"Ye who so strain your breasts together, tell me,"
diss'io, "chi siete?". E quei piegaro i colli;	I said "who are you"; and they bent their necks,
e poi ch'ebber li visi a me eretti,	And when to me their faces they had lifted,
li occhi lor, ch'eran pria pur dentro molli,	Their eyes, which first were only most within,
gocciar su per le labbra, e 'l gelo strinse	Gushed o'er the eyelids, and the frost congealed
le lagrime tra essi e riserrolli.	The tears between, and locked them up again.

(Dante Alighieri, Inferno, Divina Commedia, Canto XXXII, 40-48)

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PSYCHOPATHOLOGY, PHENOMENOLOGY AND AFFORDANCES

abstract

Can affordances help in understanding psychiatric illness and psychopathological experience? In recent work on the philosophy of psychiatry and phenomenology, the answer appears to be a clear 'yes', but some recent worries have emerged that the affordance-concept might be "insufficiently discerning" and thus ill-suited to make sense of psychiatric illness and experience. In this paper I briefly review recent attempts to use the affordance-concept to make sense of psychopathology, as well as the worries voiced by the critics. I argue that much of this criticism is, in fact, best understood as a call for more research and offer some exploratory considerations on how this research might proceed. Specifically, I argue that an improved understanding of the self-referentiality that is inherent to experiencing affordances can be useful for psychiatry.

keywords

affordances, psychopathology, phenomenology, solicitations, self-referentiality

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1. Introduction

Does the framework of affordances facilitate our understanding of psychopathology and pathological experiences? Or more generally, what is the utility of the affordance-concept in the context of psychiatric illness?

Recent research in phenomenology and philosophy of psychiatry is riddled with 'affordance-talk' and one gets the impression that there is somewhat of an implicit agreement that affordances can in fact help us better understand psychiatric illness and psychopathological experiences (see e.g. De Haan *et al.,* 2013; Kim & Kim, 2017; Krueger & Colombetti, 2018). Some recent critics have questioned that implicit agreement, and note that the affordance-concept might be "insufficiently discerning" and therefore ill-suited for making sense of psychiatric illness and experience (see e.g. Ratcliffe 2015; Ratcliffe & Broome, in press).

In this paper I briefly review some of the recent attempts to capture psychopathology in terms of affordances, as well as the points of criticism that were voiced against these attempts. I will argue that these points of criticism contain no knock-down argument for why affordance-talk cannot be useful, but should rather be seen as a call for more research into the phenomenology of affordances. In the remainder of the paper I set out to offer some exploratory considerations on how the affordance-concept can be made more useful for understanding psychopathology. Specifically, I emphasize how researchers ought to pay more attention to the broad self-referentiality of affordances, and how being sensitive to the ambiguity of human 'action' might help to do so.

2. Recent trend of using affordance-concept to make sense of psychopathology

Largely in tandem with an increase in research on embodiment in psychopathology, is a trend to use the concept of *affordances* for understanding psychopathology.
That is, there are many researchers who in recent years have argued that affordances may facilitate our understanding of psychopathology, anomalous experiences, treatments or treatment-effects. Some authors address psychopathology or treatment more generally (Fuchs, 2007; Fuchs & Schlimme, 2009; Koster, 2017; Röhricht, *et al.*, 2017; Kronsted, 2018; Krueger & Colombetti, 2018; Gallagher, 2018a), whereas others have a more precise focus and argue that, for instance, we can better understand autism (Loveland, 1991; Hellendoorn, 2014; Kiverstein, 2015; Constant *et al.*, 2018; Roberts *et al.*, 2018), depression (Seniuk, 2015) or schizophrenia (Sass, 2004; Nelson *et al.*, 2013; Kim & Kim, 2017; Krueger, 2018) if we make use of the affordance-concept.

To be fair, this overview is not exhaustive, nor does it do justice to the intricate differences between various accounts. That is, some authors seem to mainly adhere to an embodied/ecological/enactive/embedded position and more or less take it for granted that affordances play a role within that theoretical position. In other words, they buy into the 4E framework rather than specifically to the affordance-concept. Others only refer to affordances on occasion, seeing it as a useful tool to put into words their findings or ideas (perhaps for stylistic reasons). But for some, affordances play a more crucial role.
Kim & Kim (2017) for instance argue to re-conceptualize schizophrenia in terms of failures to perceive affordances (and Hellendoorn [2014] seems to do something similar for autism). In the case of De Haan *et al.* (2013), their understanding of the treatment effects of deep brain stimulation (DBS) for obsessive-compulsive behavior hinges on the affordance-concept. And Gallagher (2018b) similarly cashes out alterations in autonomy following treatments such as DBS in terms of affordances. What these authors appear to converge on is that framing psychopathology and/or psychopathological experiences in terms of affordances is helpful.
In fact the use of the affordance-concept in recent (philosophical) writings on psychiatric illness seems to be so widespread that an elaborate introduction into what affordances are seems to be superfluous. That is, there appears to be an implicit agreement *that* affordances are useful, and because of that agreement, there is no need to justify this application or to provide an elaborate analysis of what the affordance-concepts entails.
Some authors have questioned this implicit agreement and have voiced their worries that the affordance-concept may be more of a hype rather than actually useful in understanding psychopathological experiences.

3. Critics of using affordances to make sense of psychopathology

In a recent chapter, Ratcliffe & Broome (in press, p.14) set out to investigate "whether or not phenomenological changes in psychiatric illness can be captured in terms of affordances".[1] In other words, they are interested in the "*utility* of the affordance concept – whether, when and how it serves to illuminate something that would be murkier without it". Their own position entails that the concept of affordances "remains too blunt a tool and only gets us to the beginning of a phenomenological inquiry into how possibilities are experienced".
In earlier work, Ratcliffe (2015, p.61, note 24) made a similar point:

> Things do not simply 'afford' activities; they appear significant to us in all sorts of ways. It is not helpful to say that a bull affords running away from, while a cream cake affords eating. What is needed [...] are distinctions between the many ways in which things appear significant to us and, in some cases, solicit activity.

On the opposite side of the debate are researchers who have tried to investigate precisely the phenomenology of affordances, that is, who try to alter the affordance concept such as to accommodate the various ways in which things may appear significant to us (see e.g. Withagen *et al.* 2012; De Haan *et al.* 2013; Rietveld & Kiverstein 2014; Dings 2018). Ratcliffe & Broome (in press, p.16) briefly discuss these authors and summarize their ideas (i.e. their revisions to the original affordance-concept, cf. Gibson 1986) as follows:

1 Ratcliffe & Broome (in press) target not only the affordance-concept, but also the recent construal of psychopathological experiences in terms of 'salience'. Many of their arguments pertain to both concepts, but for present purposes I will focus on affordances.

- Affordances are embedded in forms of life, reflecting not only abilities but also skills and associated norms;
- experiences of affordance are more fragile and depend on idiosyncratic, contingent, changeable cares and concerns;
- affordances reflect, to varying degrees, the structure of a life;
- the field of affordances can be further analyzed in terms of width, depth, height, and affective coloration.

Although Ratcliffe & Broome admit that these additions provide an improvement to the original affordance concept, they nevertheless feel that it remains "insufficiently discerning". Let me briefly summarize some of the points they make to support this claim.

* Experienced affordances (or *solicitations*) tend to be construed in terms of inviting or soliciting a certain action, but this does not seem to cover the full range of how our perceptual experiences may relate to potential activities. For example: an object may no longer afford something, or afford the impossibility to be acted upon.
* It is unclear how and to what extent one might experience affordances for other people. A bystander might observe an individual who is conducting a particular task and experience affordances 'for that individual'. But how far do such experiences go? As Ratcliffe & Broome put it: "do we experience something as 'affording *p* for them but not for me', as 'affording *p* for me, *q* for her, and *r* for them', as 'affording *p* for them and also *p* for us but only if they don't get here first'?" (p. 17).
* The affordance concept really starts to give way when emphasizing the diachronic structure of human concerns. That is, it is unclear how a 'here and now' possibility is to be distinguished from a possibility that is more spread out in time or lies in the (near or far) future. According to Ratcliffe & Broome this requires the specification of 'content' for affordance-experiences. What is required is an indication of *what* is experienced when one experiences a particular affordance (in order to distinguish that experience from another affordance-experience).
* Affordance-experience need not be merely perceptual. It is unclear how other modalities of intentionality relate to affordances (e.g. think of imagining a possibility for action, or remembering one).

These considerations let Ratcliffe & Broome conclude that "the affordance-concept lacks the phenomenological depth required to analyze all-enveloping experiential changes associated with severe psychiatric illness". In brief, their worry is that the affordance-concept is "insufficiently discerning", "lacks the required discriminatory power" and "should only serve as a starting point". What would be a better take on this issue, Ratcliffe & Broome note, "is to acknowledge the many subtly but importantly different ways in which human experience is permeated by a sense of the possible than to mask this complexity and diversity by settling for concepts that are insufficiently discerning".

How to respond to these worries and points of criticism?

To the more optimistic reader, many of the points raised by Ratcliffe & Broome read as questions for future research rather than definitive points of criticism.[2] Moreover, many of the

2 In fact, Ratcliffe & Broome end with a sort of "to do list", which includes an agenda of what research on the phenomenology of affordances should be able to account for, such as "[T]he kind of significant possibility involved; The degree of determinacy with which Y is experienced; How Y relates to and perhaps integrates a range of other experienced affordances; The specificity of any activities solicited by X", etc.

points they raise are already acknowledged by the researchers they aim to criticize. For instance, there has been emerging research that tries to see how longer term concerns and temporal anticipation should be thought of in an affordance-framework (Van Dijk & Rietveld, 2018; Dings, 2018), as well as the way in which social and cultural aspects of our experience relate to affordance perception (Rietveld & Kiverstein, 2014; Van Dijk & Rietveld, 2017). In addition, the idea of an object "anti-affording" actions has been acknowledged and discussed (albeit briefly) (Dings, 2018). Furthermore, there have been attempts to see how the uniquely personal affectively laden experience of affordances can best be understood (Withagen, 2018; Dings 2018). Finally, there has been work that tries to understand affordances in different modalities such as imagination (Bruineberg, Rietveld & Chemero, 2018).
Crucially, the point is not that what these researchers have accomplished so far serves as a full-blown argument for the validity and usefulness of the affordance-concept in trying to understand psychiatric illness and experience. Indeed their findings are not nearly sufficient for that task. But the criticism voiced by Ratcliffe & Broome is rather unfair, in the sense that a field of investigation that is just starting to emerge is criticized for not being fully developed yet. So Ratcliffe & Broome are correct, I believe, that there is a tendency in recent literature in philosophy of psychiatry in which "the word 'affordance' becomes a placeholder, a blank to be filled in". But there is also emerging research that is trying to do precisely that – to 'fill in' the concept by elucidating the rich phenomenology that can be associated with experiencing affordances. In doing so, many authors draw on the writings of e.g. Merleau-Ponty, Heidegger and Koffka (cf. De Haan *et al.*, 2013; Kiverstein, Van Dijk & Rietveld, 2019).

4. Making the affordance-concept more useful for psychiatry: Incorporating self-referentiality

In the remainder of this paper I will try to further contribute to the advancement of this trend by offering some explorative considerations on how the affordance-concept can be made (more) useful for making sense of psychiatric illness and disordered experiences.
To start, it is important to note that when researchers try to make use of the affordance-concept in understanding psychopathology, they are typically interested in *relevant* affordances (i.e. solicitations or invitations) rather than in affordances *per se*. This is important because for an affordance to be experienced as relevant, it has to entail a degree of self-referentiality. That is, it being relevant says something not only about the possibility for action itself, but also something about the individual to whom it is relevant. In Heideggerian terms, soliciting affordances are selfwordly (*selbstweltliche*) experiences (Heidegger *GA* 58; 61) and as such can be useful in clinical practice.
In this respect, Glas (2019) has recently offered a thorough and refined analysis of self-referentiality and its implications for understanding psychiatric illness as well as clinical practice. Glas highlights how affective experiences, including emotions and action tendencies, always tell us something about *both* the situation that elicited that experience as well as about the individual having the experience. This self-referentiality can serve as a heuristic in the treatment of personality disorders (Strijbos & Glas, 2018) and can play an important role in psychiatric self-management (Glas, 2017). An in-depth discussion of this framework goes beyond the scope of this paper.[3] For present purposes, it suffices to acknowledge that self-referentiality of experiences is important for psychiatry, and that an account of affordances that accommodates this self-referentiality would thereby be more beneficial to psychiatry.
Of course self-referentiality was already present in Gibson's pioneering work on affordances. He famously argued that 'to perceive the world is to co-perceive oneself' (Gibson, 1986, p. 141).

3 To illustrate, the rich analysis of Glas (2019) distinguishes self-referentiality (which has first-, second- and third-order forms) from self-relatedness, self-awareness and self-interpretation.

But as I have argued in previous work (Dings, 2018), affordances can have a much broader self-referentiality than is typically acknowledged. Much research on affordances has focused solely on the embodied character of our interaction with possibilities for action: perceiving a chair entails co-perceiving your bodily configuration and bodily capacities. However, particularly in the case of psychiatric illness, what is at stake is a person with a certain history, dreams, social roles, narratives and values (cf. Glas, 2019). The phenomenology of affordances has to be able to accommodate that full range of self-aspects, and thus it needs to be investigated how affordances can be self-referential in a *broader* sense.

Interestingly, Ratcliffe & Broome (in press, p. 6) seem to highlight the importance of (broad) self-referentiality when they say that "what appears salient in a given situation and context of activity is often just what we are most concerned about, something that *reflects* a range of different commitments, values, habits and projects" (italics added). Moreover, elucidating the self-referentiality of affordances (i.e. how your values, narratives and projects might be 'reflected' in the soliciting experience) can shed light on their 'content', as Ratcliffe & Broome call it, as well as how a synchronic experience of a possibility for action relates to diachronic concerns.

In sum, one way (but surely not the only way!) to make the affordance-concept more useful and apt for psychiatric practice and for understanding psychopathological experience, is for it to incorporate (broad) self-referentiality.

5. Self-referential affordances, diachronic concerns and phenomenological ambiguity

In previous work I already tried to shed light on how diachronic concerns affect our experiences of affordances (Dings, 2018; 2019). I highlighted that our experience of affordances depends on their relevance to our concerns. But the heterogeneity of our concerns (e.g. some are diachronic and have been identified with) leads to heterogeneity in our (bodily) phenomenology of experiencing possibilities for action.

Another angle from which to elucidate our experience of affordances is to zoom in on the fundamental *ambiguity of action*. What I have in mind here is the following: affordances are taken to be possibilities for action. But reflection on (human) agency shows that there are particular structures to be discerned in our agency, and those structural features may affect our phenomenology in various ways. In this section I will explore two features inherent in human 'action' (in the context of affordances being possibilities *for action*), both of which have phenomenological counterparts and have implications for self-referentiality.

The first feature of human agency that I will discuss is that actions can have a 'X by Y by Z'-structure.[4] That is, one carries out action X *by* carrying out action Y which in turn is carried out *by* performing action Z. For example, I can be "contributing to society" by "cleaning the street" by "bending down and picking up trash". Thus, we can describe or identify an action on a more coarse-grained and abstract level, as well as on a more fine-grained and concrete level. What is crucial for present purposes is that different levels of identifying action affect our phenomenology. Colloquially put: *what we think we are doing* may have an effect on our agential phenomenology. To illustrate, an experience of "contributing to society" may differ significantly from an experience of "bending down and picking up trash", even though they may arise whilst carrying out the same bodily action.

Indeed there is a wealth of psychological research on how identifying actions on a 'low-level' (i.e. in terms of *how* to carry out an action) versus a 'high-level' (i.e. in terms of *why* the action is carried out) may affect the fluidity, flexibility and stability of how we carry out our actions,

4 Much of what is written here is inspired by existing work in philosophy of action. For instance, the structure of action mentioned here is what Goldman (1970) called a 'generative' structure.

and thereby its related phenomenology (see e.g. Vallacher & Wegner 1987; 1989; Gallagher & Marcel 1999).[5] In an analogous manner, what I experience an object as affording might also be more 'low-level' (i.e. a piece of trash affording picking up) or 'high-level' (i.e. a piece of trash affording contributing to society *by* cleaning the street).[6]

Conversely, human agency can have an 'X in order to Y in order to Z'-structure. In terms of our example: I can pick up trash *in order to* clean the streets *in order to* contribute to society.

To better understand the associated phenomenology, we might turn to Heidegger's analysis in *Being and Time* of how there are different ways of being involved with the world (Heidegger 1962). The various components of our involvements include an "in-which" (e.g. the context within which one is carrying out the action), a "with-which" (e.g. the objects or people with whom the action is carried out), an "in-order-to" (i.e. what one tries to accomplish with the particular action), a "towards-which" (i.e. what the encompassing goal is that one tries to accomplish with that action) and a "for-the-sake-of-which" (i.e. the overall goal one has, or the final state one is trying to achieve). These latter components in particular ("in order to", "towards-which" and "for-the-sake-of-which") are important for present purposes, as they cover multiple timescales and kinds of concerns. They can thereby shed light on making affordance-experiences more discerning, as they enable us to see how such experiences might *reflect* our temporally extended concerns. Specifically, they can help us to make sense of the *purposiveness* that is often inherent to agential phenomenology (cf. Horgan, Tienson & Graham, 2003).[7]

Now the point here is not that Heidegger has provided us with a fully fleshed out analysis that we could simply copy onto the affordance-concept. But given that his ideas similarly pertained to how agents experience possibilities (some of which are 'for acting'), there is likely more to be found here. For instance, I believe that many affordance-researchers have merely emphasized the "in-order-to" character of affordances, while neglecting the "for-the-sake-of-which" that similarly affects their phenomenological character.

Let me further illustrate the points that I have made so far by means of an example. The example is taken from a study by De Leersnyder *et al.* (2018) who investigated emotional experiences and their connection to diachronic concerns. In their study, they report on two individuals (Peter and Jasmine) who received their driver's license. For both, this experience has a positive valence. But whereas Peter reported mostly feelings of 'pride', Jasmine also reported feelings of 'closeness' and 'respect'. When elaborating on these feelings, Jasmine reports that getting her driver's license "*means* I can final bring my children to a mall or to the McDonald's every now and then. I can also take the car shopping, so that my family doesn't have to carry heavy groceries anymore" (ibid., p. 597, italics added).

Although De Leersnyder *et al.*'s study does not employ the affordance-concept, I think we can for present purposes reframe their findings by asking what a driver's license *affords*. Or more

5 It goes beyond the scope of this paper to provide a thorough discussion of 'action identification theory' [AIT] (but see Vallacher & Wegner 2011 for an overview of research). Moreover, the point is not that AIT can replace an affordance-based view. Rather, I believe that psychological research including AIT, which tends to focus on high-level meaningful identifications of action, should be reconciled with ecological or affordance-based research which tends to focus on low-level concrete identifications of action (see Dings, in preparation).

6 In Dings (2018) I discussed in what respects this agent's phenomenology might differ (e.g. in terms of mineness, valence and force). With the example of picking up trash and contributing to society, a moral 'felt demand' might also be part of the phenomenology, where the agent does not feel solicited, but feels that she *ought* to pick up the trash or contribute to society (cf. Nörenberg 2019).

7 Although this too falls outside of the scope of this paper, it is noteworthy that there is again a wealth of psychological research on exactly the purposiveness of our actions (see e.g. Deci & Ryan 1985), much of which originated from phenomenological considerations (cf. deCharms 1968).

generally, we can ask how Peter and Jasmine's field of affordances has changed after they have attained their license. Then it seems plausible that in the case of Jasmine, the driver's license is not experienced *merely* as affording 'legally driving a car', but is also experienced in terms of "in-order-to's" (e.g. to bring one's children's to the mall) as well as in terms of a "for-the-sake-of-which" (e.g. being a caring parent). Conversely we can also make sense of Jasmine's experience as the driver's license affording her the action of "being a good parent" *by* affording her the action of "taking my children to wherever they want to go" and so forth. At any rate, what is crucial is that Jasmine's experience contains a broad form of self-referentiality, where her diachronic concerns (e.g. of wanting to be a good parent) are reflected in her experience. It is precisely because of who Jasmine is -namely someone who cares for her family- that she has the experience she has. To use the phrase that Ratcliffe & Broome use, Jasmine's phenomenology is affected by her "range of different commitments, values, habits and projects". De Leersnyder *et al.* come to a similar conclusion:

> Both Peter and Jasmine considered the situation of getting a driver's license 'emotional' and 'positive' because it was both relevant and conducive to a goal they had set for themselves. Yet, the situation was relevant to Peter because he had accomplished a personal goal, whereas it was relevant to Jasmine because it enabled her to help her family. Peter and Jasmine thus differed in the concerns they considered to be at stake in getting a driver's license (ambition and success vs. loyalty and helping others) – a difference we hypothesize to be linked to the difference in the emotions they experienced (pride for Peter, but pride, closeness and respect for Jasmine). (De Leersnyder *et al.* 2018, p. 598)

6. Broad self-referentiality, authenticity and autonomy

To briefly recap the last sections: I have highlighted that (broad) self-referentiality may be useful for clinical practice (in line with Glas, 2019). I then showed that we can find such broad self-referentiality in the by-by and in-order-to structures of human agency, as these shed light on how the acting bodily agent in the here-and-now is related to its diachronic concerns that stretch beyond the current context. Affordances, as possibilities for *action*, may similarly be experienced with respect to these by-by and in-order-to structures. And so a complete analysis of agents' fields of affordances, if it were to be of more use in psychiatric contexts, should include *meaningful* and abstract affordances in addition to concrete or 'low-level' affordances. In particular, the broad self-referentiality of affordances becomes important when we try to make sense of issues of *authenticity* and *autonomy* in psychopathology, as such issues tend to be more intimately connected to diachronic concerns.

Here is an example: with regard to the autonomy of psychiatric patients who received deep brain stimulation (DBS), Gallagher (2018b, p. 9) writes: "we can think of [their] autonomy in terms of the affordances available to any particular agent in any particular situation". Similarly, authenticity or authentic self-experience of a DBS patient may be seen as an instance where "their field of affordances now *reflects* what *really matters* to them" (De Haan *et al.* 2013, p.8, italics added).

But a field of affordances, by definition, consists of possibilities for action that *matter* to the agent (in the sense of being relevant, cf. Rietveld & Kiverstein 2014). But as Ratcliffe (2015) emphasized, things can matter in different ways. So how to flesh out the intuitively plausible idea that some objects or their affordances *really matter* to someone? What does it mean to 'really matter' as opposed to mattering more generally? I would argue that what is at stake in issues of authenticity (and, to a lesser degree perhaps, autonomy) are the affordances with a broad self-referential character. That is, those that are identified at a higher level of abstraction and are relevant to our diachronic concerns, values, habits and narratives. To return to the example

of Jasmine and Peter receiving their driver's license, what *matters* to Jasmine, in terms of her autonomy and authenticity, is not the affordance of 'legally driving a car', but rather the more abstract affordance of the license enabling her to take care of her family. That is the 'for-the-sake-of-which' at stake, and it is because of this that the license is experienced as *meaningful*.
So the suggestion would be for affordance-researchers to devote more attention to elucidating the high-level, abstract and meaningful forms of human behavior, for several reasons.
First, it puts us in a better position to address Ratcliffe & Broome's criticisms that the 'content' of affordances is unclear and that it has not been shown how the notion of affordances ties in with someone's "range of different commitments, values, habits and projects". Second, it enables us to accommodate the *active* stance that people may adopt towards their own behavior. That is, people self-regulate and may thus actively reflect on and, based on their diachronic concerns, try to *shape* their field of affordances (Dings, 2018; 2019). The third point is connected to the previous one and particularly relevant for present purposes: reflecting on and changing the construal or identification of someone's actions appears to be a major component of many forms of psychotherapy. More generally, levels of identification play a role in understanding and treating psychopathology and psychopathological experience (Watkins, 2011; Vallacher & Wegner, 2011).
To illustrate, patients suffering from Obsessive-Compulsive Disorder (OCD) might obsessively wash their hands. Being sensitive to the various levels of description of the act of washing one's hands allows us to better understand the complex phenomenology associated (cf. Dar & Katz, 2005). On the one hand, many of these patients adopt a relatively high or abstract description of their actions (e.g. washing hands *in order to* avoid bad things from happening; avoiding bad things from happening *by* washing hands). So if you ask them why they wash their hands so often, the answer will likely include such a high level description. But on the other hand, these patients are also very much concerned with washing their hands *right*. That is, they also appear to use low-level descriptions of what they are doing - how to do it properly (e.g. stroking the hands a particular number of times). For treating this type of OCD, it is common to try to 'bring down' the identification level of an act such as to facilitate changing (habitual and rigid) behavior (ibid.).

7. Conclusion

In conclusion, Ratcliffe & Broome are right to point out that the affordance-concept should not become an empty phrase, a placeholder for further explanation. Yet they are too pessimistic, I believe, as there are many researchers who are precisely trying to fill in what our experiences of affordances consist of. I have offered some thoughts on how these researchers might proceed. Specifically I have argued that taking into account some structural features of human agency (by-by relation and in-order-to relation) can help us to better understand the phenomenology of actions and solicitations to act. This is particularly relevant to understanding psychopathological experiences, due to the broad self-referentiality that these features of human agency entail. As such, they offer precisely the sort of advancement of the affordance concept that Ratcliffe & Broome seem to require. Finally, I have suggested some theories and schools of thought (e.g. motivational psychology, hermeneutic phenomenology) that might be relevant for this research. Once more, these suggestions need to be fleshed out in future research. As such, this paper is an invitation to act.

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WORDS MATTER. A HERMENEUTICAL-PHENOMENOLOGICAL ACCOUNT TO MENTAL HEALTH

abstract

The problem of names of illnesses is both a problem of words and values that should address not only the classification of disorders, but also a fundamental question both for medical sciences and humanities: can psychiatric nosology and classifications fit with the ontological constitution of human beings? This paper aims to discuss the so-called "psychiatric object" and its language and it intends to provide a hermeneutical-phenomenological account to mental health. In doing so, the paper will firstly examine the "psychiatric object" and its language; secondly, it will show the difference between taxonomy and ontology, both of interest for the psychiatric object; third, it will insist on the critique of the epistemological status of psychiatry conceived from a natural point of view following three main paths: a metaphysical one (Heidegger, Jaspers), a social one (Szasz, Foucault, Basaglia), and an ethical one (Laing). Finally, it will clarify why phenomenology and in particular hermeneutical-phenomenology can illuminate the understanding of the psychiatric object and its implications in a cultural context, in order to achieve a more humanistic psychiatry.

keywords

language, experience, phenomenology, hermeneutics, society

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1. Introduction

In his novel entitled *Wittgenstein's nephew*, Thomas Bernhard writes:

> The so-called psychiatric specialists gave my friend's illness first this name and then that, without having the courage to admit that there was no correct name for this disease, or indeed for any other, but only incorrect and misleading names; like all other doctors, they made life easy for themselves - and in the end murderously easy - by continually giving incorrect names to diseases. (Bernhard 1988, p. 16)

The problem of the name of an illness is not merely the problem of diagnosis, but it is also a problem of words and values that raises many complicated questions: how can words define and express something of which the borders and patterns are quite mysterious, undefined, and sometimes not accessible by people who experience the illness itself? Can the use of clinical definitions provided by statistic systems of evaluation and diagnosis really grasp the inner experiences of people who suffer from mental health issues? Can psychiatric nosology and classifications fit with the ontological constitution of human beings? What values are at the core of every diagnostic system?

With the title *Words matter* we aim to provide a phenomenological account of mental health starting from the assumption that the problem of language used in the field of mental health is a problem of epistemological constructions that needs to be re-discussed in the light of a deeper understanding of human beings and their suffering. Philosophically speaking, words are not merely signs that we employ in our ordinary way of using language, rather they signify something: objects and moreover relations. Words are the tools that open the path to relations and disclose alterity to us. Our ability to speak and to listen is the fundamental feature of being able to not only simply talk to each other but to get in dialogue with each other and moreover to be a dialogue. This becomes of paramount importance in the clinical encounter, since words introduce each practitioner and clinician to the patient's world, as an experience of displaying different forms of existence (G. Stanghellini, 2016). The issue of language is of interest for both psychiatry and philosophy, because it is through language that we have access to the world, and also to patients' inner world. In this respect, clinical language is far removed from ordinary and philosophical language but shares with them the need to understand, assess and define illness. Starting precisely from this common ground we think that the expression "words matter" aims to draw attention to 3 important points:

1. The problem of names of illnesses is a problem of words and values, and beyond words there are clinical definitions, philosophical concepts and social values; "words matter" means to discuss the central issue of diagnosis as well as the contemporary diagnostic systems (i.e. the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5); the International Classification of Diagnostics, tenth edition (ICD-10); the Research Domain Criteria (RDoC) initiative and the Psychodynamic Diagnostic Manual (PDM-2;).
2. The gap between psychiatric nosology and classifications and the ontological constitution of a human being as such, in its fragility, mortality, linguistic ability, in its desires, fears, concerns; in its personal history, that is not only the history of his/her illness. In other words, the incongruity between the medicalized classifications and the more nuanced complexity of human suffering witnessed in practice.
3. The meaning of patients' suffering and the words that he/she is going to use, the special value of the use of metaphors in the context of the psychiatric interview, the patient's self-narrative.

This paper aims to discuss the so-called "psychiatric object" and its language and it intends to provide a hermeneutical-phenomenological account for mental health. This paper will first examine the psychiatric object and the language used to understand, clarify and grasp this object; secondly, it will show the difference between taxonomy and ontology, both of interest for the psychiatric object; third, it will provide a critique of the epistemological status of psychiatry conceived from a natural point of view following three main paths: a metaphysical one (Heidegger, Jaspers), a social one (Szasz, Foucault, Basaglia), and an ethical one (Laing). Finally, it will intend to clarify why phenomenology and in particular hermeneutical-phenomenology can illuminate the understanding of psychiatric object and its implications in a cultural context.
Despite the challenges in reaching these goals, this contribution offers a critical moment of reflection on the epistemological status of psychiatry from a philosophical point of view: rather than feeding the ambition of "shewing the fly the way out of the fly bottle" (Wittgenstein), it will offer critical reflections on medical science and philosophy.

2. The psychiatric object and its language

Psychiatry is a very young field, which in its 150 years has undergone many changes and difficulties – and is still developing, adjusting and modifying, both in theory and practice (Daly & Gallagher, 2019) . In its young history, this field of medicine moved from alienism (between the end of XIX century and the beginning of XX) in terms of medicalization of mental afflictions to a science "putatively dedicated to the understanding and management of 'mental afflictions' reconceptualized as 'mental symptoms and disorders'" (Berrios & Markova, 2015). Psychiatry has faced at least four important challenges: first, defining the so-called 'psychiatric object' and its implications in all the aspects of human life; second, finding its own language, able to understand, clarify, grasp, classify and communicate its object in a way that is valid for the scientific community; third, defining its practices in terms clinical interventions and, finally, its relation with society and the cultural context.
The 'psychiatric object' cannot only be defined in terms of illness, diagnosis, symptoms and methodologies able to capture valid phenomenal distinctions concerning the patient's experience. At the same time, it cannot be reduced to the human organism or some parts of it. The 'psychiatric object' is more complex and has to do with existence and specifically with some forms of existence that are characterized by phenomena that do not allow people to have an ordinary (or extraordinary) life. If existence has to do with the way through which human being has to be (Heidegger, 1962), it means that this *modus essendi* has a precise way to manifest itself also among people affected by mental health issues. Psychopathological

phenomena can be conceived not as something negative compared to the ordinary way of being but as variations (*Abwandlungen*) of the only and original ontological structure that characterizes existence in all its expressions (Binswanger, 1956; 1963).
The 'psychiatric object' also deals with the encounter between the patient and the practitioner, a personal encounter between two existences that must communicate and enter in a relationship with each other. For this reason, psychiatry requires the understanding of human being in its entirety, a good ability to empathize as well as to not project, attention to multiple sources of knowledge, each with its own epistemology and methods of inquiry (Kirmayer, Lemelson & Cummings, 2015). Therapeutic encounters involve many levels of confrontation: there is the encounter between the patient and the therapist, but also the encounter between the patient and his/her own condition, in which patients start to recognize what is disturbing their ordinary way of life.
In these encounters, there is the issue of language, both the language used to communicate, and the clinical language used by the doctor to formulate a diagnosis. Our original ability to speak and to listen is the fundamental feature of being able not only to simply enter in dialogue with each other, but *to be* a dialogue. Each of us is able to enter a dialogue with everybody but *being* a dialogue is something more: it is not simply a verbal exchange of information, or a conversation, or a discussion, rather, it is a transcendental experience that reminds us of the transcendental constitution of each of us. Put in Gadamer's words, «dialogue is what we are» (Gadamer, 1996). Through dialogue each form of existence we embody comes into the light together with the particular world we live in. Dialogue is what situates us in a world inhabited by alterity in a particular time, it is what allows us to tell our personal story. Being a dialogue allows patients to talk about their personal stories – which are not simply the stories of their illness but also the stories of their lives –, to frame their narratives providing significant contribution to so-called narrative medicine. Words introduce each practitioner and clinician to the patient's world, not merely as a study of the disturbance of language, but rather as an experience of a *way of thinking* in which existence shows itself. Considering all these issues, the so called 'psychiatric object' cannot be reduced to the human body and its relations with the mind (or vice versa), neither to a nomenclature of diagnosis or practices. Rather, we have to consider human being in all its complexity and contexts.
Starting from this common ground, we can start to compare taxonomy and ontology, trying to understand to which extent the use of clinical definitions based on statistical systems of evaluation and diagnosis can really grasp the inner experiences of people who suffer from mental health issues.

3. Taxonomy vs ontology

> The DSM has had a dehumanizing impact on the practice of psychiatry. History taking the central evaluation tool in psychiatry has frequently been reduced to the use of DSM checklists. DSM discourages clinicians from getting to know the patient as an individual person [...] DSM diagnoses have given researchers a common nomenclature but probably the wrong one. (Andreasen, 2006)

This thoughtful yet provocative reflection by Nancy Andreasen shows the impact of the taxonomy used in the DSM on the way medicine is practiced. The issues she raises in her essay had (and still have) a strong resonance with those who practice psychiatry or cross borders between different disciplines. If it is true that from the DSM-III onwards (and through its successors) this diagnostic and statistical manual of mental disorders became universally and uncritically accepted as the ultimate authority on psychopathology and diagnosis, it is also true that it has a range of limits that have been underlined both by the scientific and philosophical community. Diagnosis is a medical concept which covers

both the process of identifying a disease, and the designation of that disease. Reaching a 'diagnosis' involves investigations and observations that help to identify the nature of the underlying disease that is thought to be causing the individual's symptoms. Having a diagnosis indicates that the nature of the underlying disease has been certainly or probably ascertained (Moncrieff, 2010). However, the issue of diagnosis, namely the issue of the name of an illness, is also a problem of words and values that are expressed by that diagnosis. It is not only a matter of selected symptoms in view of a nosographical diagnosis according to what medical-like diagnostic systems assess, but it is also a matter of the inner experience of each human being and their suffering and a matter of values (social, cultural and political) that ground not merely the name of illness but the epistemic model that establishes that name.

Biological approaches to mental health and practicing psychiatry are based on the principle of measurement. In order to measure, questionnaires and forms substitute people's own stories. The psychiatric assessment process is typically defined by the clinician's search for specific behaviors, described in the psychiatric lexicon as symptoms. These behaviors are given weight in terms of their contribution to the clinician's identification of a psychiatric disorder, as indicated by the recognition of symptoms (Bradfield, 2007). Behaviors identified as symptomatic of illness are given explanatory weight in terms of the individual's presentation. These behaviors are focused upon, emphasized, and given priority, while those behaviors not seen as symptomatic are given less consideration. This process may devalue and ignore non-symptomatic behaviors. It is thus evident that a more phenomenologically informed approach, which encourages equal priority of all emerging behavior, may facilitate a fuller and more accurate understanding and description of the individual.

It could be argued that this standardized way of diagnosing mental health issues actually robs people of their own words, language and narratives. Only a genuine and empathic dialogue can fit with the ontological constitution of human being, since *clinical meanings* and *existential ones* sometimes differ. As Jaspers reminds us at the very beginning of his monumental *General Psychopathology*, "the psychiatrist, as a practitioner deals with individuals" (Jaspers, 1997), and the gap between different levels of meaning must be carefully considered in order to be faithful to Jaspers' indication.

Human forms of existence are embodied (physically) and embedded (socially and culturally); among these forms, illness is a specific way of being in-the-world. This means that we cannot simply classify it as something that happens to an objective body, a purely physiological condition that is explainable entirely in causal or mechanistic terms (Gallagher, 2005).

> Mental symptoms are not 'things' that happen to have a content and also a meaning to the sufferer [...]. Mental symptoms have a wider, deeper, personal, and cultural sense and a fluidity that may not be amenable to the sort of techniques of capture that are used in relation to organic or biological dimensions of disorder or disease. (Berrios and Marková, 2015, p. 57)

From a theoretical point of view, a psychiatric symptom is not a clear demarcated thing, like an object, rather it is a certain configuration of consciousness that involves the phenomenal flow with its intentional content and form (structures). What manifests are not isolated symptoms but "certain wholes of interpenetrating experiences, feelings, beliefs, expressions, and actions, all of them permeated by the patient's dispositions and by biographical (and not just biological) detail" (Parnas & Gallagher, 2015).

A symptom is not an entity in itself that can be easily isolated from consciousness and objectified, defined, and described independently of its context. Perhaps, we could define it

as a *Gestalt* and as such, a descriptive approach is improper. Descriptive methods of present day psychiatry tend to perpetuate the problem of description, because these methods, mainly based on the third-person approach to symptoms, are not adequately tailored to the ontological nature of the 'psychiatric object', that is experientially a complete form of existence (Merleau-Ponty, 1963), a human being in a particular form of existence. Calibrating the method to the 'object' (that basically is a subject) means to question the method and its ability to grasp inner experiences of people affected by mental health diagnoses, but at the same time to maintain scientific validity and universal communicability (Sadler, 2005). Many psychiatric conditions may turn out to result from disturbances in evolved neurological processes, but this could be a merely contingent fact, and not stipulative of the very notion of mental health conditions (Broome, 2007).
How can we deal with this issue considering that, on one hand the scientific method and its validity cannot be changed, and a universally understandable and accurate nomenclature is required, while on the other hand, we should not lose sight of human being in its total complexity – and humanity?

4. Putting psychiatry into discussion

The DSM is not independent of epistemology and metaphysics and a critique of this manual is firstly a critique to the epistemological and metaphysical structure on which it is based. Since the end of 1600, science has built a paradigm of truth in terms of measurability, calculations, and projections: only what can be proven through numbers is effective and, as such, true. For centuries, medicine had strong ties with the humanities, but in the last century became increasingly influenced by the exact sciences. For a long time, physicians have not questioned this prevailing view of medicine as applied biology because it is the customary method in which medical care and practices are done. Science is so concerned with the discovery of its power to invent, explore, cure, that along the way it has lost sight of its relationship with the human being. If modern science has changed the way we see the world today, it has also changed the way we see ourselves as human beings, as a "whole": we see ourselves more and more as made up of parts to be repaired, fixed or changed. This has been one of the most influential concepts that pushed thinkers such as Heidegger, Jaspers, Jonas, Marcuse to criticize the technological revolution of the 20th century and the improper use of science, medicine and mental health disciplines. Starting from the peculiarity of their approach to this criticism, they underlined the importance of our mortality and vulnerability in order to understand our ways of being.
The risk of an improper use of medical science grows the more we lose the idea of human being as such and it can irreversibly affect both our lives and life in general. As Jonas has shown (Jonas, 1984) it is not possible to confront the use of modern technology (such as the manipulation of DNA, cloning, alteration of the entire biosphere) without recalling the ethical responsibility that this use implies. This responsibility addresses mankind and its global control over an improper use of technological and material development since it affects life on our planet in its totality.
According to Heidegger, the scientific method initiated by modernity does not work with human beings, neither in its definition nor in considering what health and illness are: "How far can we get with a sick person [with this approach]? We fail totally!" (Heidegger, 2001). Forasmuch as science has no relationship with truth but only with exactness, the human being is ontologically different from the results that come from the accuracy of being measured or being objectified. It is precisely in recognizing the inadequacy of applying the scientific method to the human being, that Heidegger initiates a novel and provocative way of thinking, called meditative thinking, which will affect Binswanger's and Boss' work and practice.
In recent years, this critique of science has become an interdisciplinary dialogue aimed at discovering the benefits of understanding the human being in all its complexity. This

interdisciplinary dialogue began approximately at the beginning of XX century, when some branches of medicine and human sciences examined their practices and acknowledged the contributions of other intellectual and disciplinary resources. An example is offered by psychiatry, which for a long time was seen primarily as concerned with overcoming mental disorders, or broadly as interested in health and human fulfillment, but it is only in the last decades that it has located its specialization in relation to the whole of life and to other spheres of human life such as ethics, law, religion, arts, and so on. Many therapists and theorists became dissatisfied with the theoretical framework offered by traditional psychiatry – and traditional medical paradigms in general– they found alternative conceptual frameworks in philosophy. The general dissatisfaction of the therapies and results has two main reasons: 1) the method of applying natural sciences to mental illness loses sight of the human being as a whole beyond the diagnosis; 2) the method of applying natural sciences to mental illness is not concerned with the inner experience of a human being's consciousness, suffering and undergoing treatment. Mental illness starts to be understood in a variety of new ways, both among psychiatric services and in society. For example, models of mental illness are based on biomedical, cognitive, behavioral, psychodynamic and social perspectives. These new models lead to new and distinct approaches to classification, explanation, and treatment. They influence the focus and methods of research (for example, whether biological or social research is more likely to reveal the causes of schizophrenia) and the significance of symptoms. Some accounts of mental illness explicitly criticize psychiatric models: the notion of mental illness considered as a 'myth' (Szasz, 1960) based on a mistaken analogy between physical illness and psychological distress, or the notion that psychiatric categories (and their practices) are a product of interests of society at large (Basaglia, 1973, 1998; Foucault, 1971), or political and cultural (Laing, 1960; 1982). Mental distress is viewed as a burden or 'illness' to get rid of, as quickly as possible and without pain. Medication fits very well into this view, providing hopes of 'quick fixes', even if in many cases they can turn into chronicity and long term (dis)ability and the 'message' carried by the symptoms is ignored.
This critique of psychiatry provides a strong foundation to explore how a hermeneutic-phenomenological approach to mental health improve the understanding of the psychiatric object and achieve a more humanistic psychiatry.

5. A hermeneutical-phenomenological account to mental health

Before becoming a subject of study in philosophy classes, phenomenology is the method that underpins all of science. Husserl conceived phenomenology as an a priori science of essences, but it has developed through other important authors during the beginning and first half of XX century (Gallagher & Zahavi, 2012; Moran, 2000; Zahavi, 2003). Phenomenology has recently contributed to illuminate psychiatry and psychopathology in setting up different theoretical frameworks (Sass, Parnas & Zahavi, 2011) and to define the subjective essence of the given experience more clearly. It would be a mistake to reduce the role of phenomenology to a purely descriptive science of the way the world appears to the experiencing subject.
The method of applying phenomenology to psychopathology implies a new understanding of psychopathological phenomena conceived as a coherent way of being in the world:

> The scope of clinical phenomenology is neither just to unfold the phenomena that are present in the experiential field of a specific person, nor to select symptoms in view of a nosographical diagnosis. These are the tasks of descriptive and clinical psychopathologies respectively. Rather, it aims to recover the underlying characteristic modification that keeps the manifold of phenomena meaningfully interconnected in the life-world of the person. (Stanghellini & Rosfort, 2013, p. 225)

Phenomenology is efficacious in understanding the human being without forgetting biological constraints: a vision of a person as a psycho-physical entity is very useful for not underestimating either the psyche or the natural organism. The advantages of adopting a phenomenological approach are both methodological (focusing on subjective experiences and not only on symptoms, considering the real object of psychopathology the person and her/his subjective experiences instead of biological symptoms) and practical (phenomenology is helpful in hypothesizing therapy, in modifying the relationship between the clinician and the patient providing a person-centered approach).
We do not suggest to get rid of diagnostic, and statistical categories, rather, we suggest that they be complemented by first-person data. Biomedical research on mental health should not focus only on the body or brain, but on the experience of people. Self-report questionnaires can never capture the full complexity and nuances and therefore, a more qualitative, phenomenological, approach is needed, both in research and medical practice. To achieve this, we suggest that several changes are needed, on different levels:

1. In medical training at universities, basic training in phenomenology could be implemented alongside statistics. Phenomenological training should also include methods of self-reflexivity. For medical students, this means not only learning how to communicate with patients (how to bring bad news for example), but it means to learn how to enter in true dialogue with patients, so that they can gain access to their experience of their inner world.
2. In medical research, especially on mental health, qualitative research should be improved to enrich diagnosis and therefore therapeutic approaches. Qualitative and mixed-methods approaches may bring to light different issues that cannot only be addressed with medication.
3. On institutional/governmental level, changes in the structure of care should be encouraged. Prescribing medication may appear quicker and more efficient in short-term, but in the long term, it may be more cost-efficient if there is more time to enter in relation with patients to really understand their needs, and address them adequately.

In this framework, the concept of sanity (and insanity) shows its fragility: “Sanity is not truth. Sanity is conformity to what is socially expected. Truth is sometimes in conformity, sometimes not” (Pirsig, 1992). From a phenomenological standpoint, a psychopathological syndrome is not simply a casual association of phenomena: the manifold of phenomena in a syndrome are meaningfully interconnected, that is, they form a structure. To have a phenomenological grasp on these phenomena is to grasp the structural nexus that lend coherence and continuity to them, because each phenomenon in a psychopathological structure carries the traces of the underlying formal alterations of subjectivity (Stanghellini, 2011).
It is a matter of words (narratives, patient-practitioner’s encounter, nomenclature) and pieces (alteration of subjectivity). Put in Pirsig words:

> the world comes to us in an endless stream of puzzle pieces that we would like to think all fit together somehow, but that in fact never do. There are always some pieces that don’t fit, and we can either ignore these pieces, or we can give them silly explanations, or we can take the whole puzzle apart and try other ways of assembling it that will include more of them. (Pirsig, 1992, p. 51)

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IMPROVEMENT OF PSYCHIATRY WITH HERMENEUTICS AND PHENOMENOLOGY AS A PREREQUISITE FOR TREATING PSYCHOTIC DISORDERS

abstract

The Inherent inseparability of psychopathology and phenomenology is generally a known fact, established and popularised by Karl Jaspers in Allgemeine Psychopathologie. *In the following paper, I will show the development of interdisciplinary methodology initiated by Jaspers, and discuss it by combining M. Merleau Ponty`s theory of embodiment, R. D. Laing`s existential-phenomenological approach, and T. Fuchs` concept of brain resonance and integral causality with the hermeneutical thoughts of Paul Ricœur regarding the notion of selfhood. The main thesis proposes that fusion of hermeneutics and phenomenology with psychiatry can play a significant methodological role in the approach to diagnosis and treatment of the psychotic disorders spectre, especially regarding the most complex yet inaccurately defined and evaluated mental disorder – schizophrenia. Due to the fundamental interpretative capacity of both disciplines regarding the understanding of the displacement (translocation) of subject, disembodiment, delusions and consciousness, I am considering them as a prerequisite for the effective expansion of psychiatric practice.*

keywords

hermeneutics, phenomenology, subject, embodiment, psychosis, schizophrenia, psycho-phenomenological field, psychopathological hermeneutical circle

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1. Introduction

As the basic task of each scientific field, in the context of its sustainability and progressive value, I am taking a constant improvement of the methodology and the subject perspectives depending on the level of complexity of each particular task that in certain life issues inherently arise. And in relation to the world – the permanent improvement of the epistemic potential of the human species, aimed at the moral and responsible coexistence with the environment (Čović, Jurić, 2019). Psychiatric science is not isolated from the given hypothesis, and because of the intricacy and complexity of the human mental life and psychological manifestations, as well as the adaptation of the consciousness to the constantly new living conditions and the paradigm of "normality" of people in the social context, it requires a necessary dose of flexibility, and should not remain in "molds" and dependent exclusively on the paradigms of historical postulates. I claim that in the contemporary phase of development, psychiatry is ready for, and necessarily requires an interdisciplinary and transdisciplinary methodology as a fundamental scientific paradigm, in order to fulfil a teleological potential and to respond to the complex question of human psyche phenomenology, as well as the mental disorder treatment. Namely, I argue that the psychiatric domain extends to a much broader scale than the biomedical, clinical and neurocognitive practice, and, I think that it inevitably needs to integrate with various disciplines from humanistic domain, above all - philosophy/phenomenology (Herpertz, 2014, p. 179), sociology, psychology, anthropology, and pedagogy.

In the following paper, the importance of interdisciplinary dialogue between the humanities and the biomedical domain will be addressed through the introduction of the necessity of hermeneutic and phenomenological aim implementation into the rudimentary panel of psychiatric diagnostic methodology. The argumentation will be implemented by relying on the example of psychotic disorders (Paris, Philips, 2013), with the emphasis on schizophrenia[1] (APA, 2013), for whose diagnosis and adequately conducted treatment, the aforementioned philosophical disciplines play a key role, according to the appropriate scope of consideration

1 Delusions are, besides the auditory hallucinations, one of the main symptoms and the crucial diagnostic criterion "axis" for recognition of the schizophrenic disorder. I claim that their analysis could not be sufficient without the phenomenological approach. A worthy argument for the given thesis is present in Louis A. Sass' article "Delusion and Double Book-Keeping". (Jaspers, Wundt, Breyer, 2014),

of the relationship between the subject and the object and the ontic mereological constellation[2] potency with which these two philosophical approaches are categorically fulfilled[3].

The inseparable interdisciplinary relationship between psychiatry and philosophy, i.e. the psychopathological and phenomenological approach, is by no means a new fact. Karl Jaspers, a well-known German psychiatrist and philosopher, pioneer of the given orientation, vividly demonstrated the inseparability of the concerned domains, and in his eternal book *Algemaine Psychopatologie*, (*General Psychopatologie*) the subject of philosophical education in relation to a medical worker in the field of mental health stated:

> Of philosophy, he will not, of course, learn anything he could ever take on his science. Initially, this study has a negative value. But anyone who is thoroughly remodeled about critical philosophy will be protected from many misguided questions, excessive debates, and constrained prejudices that otherwise play a certain role in psychopathology in the non-philosophical heads. On the other hand, the study of philosophy will be of positive value for the type of psychopathologists human behaviour in practice and for the clarity of his motives in knowledge. (Jaspers, 1997, p. 18)

I would add that a psychopathologist can indeed learn much from philosophy, and from it take the antidogmatic, *in-essence-of-aporia* critical thinking, which has been presented by many historical actors whose thoughts will be presented throughout the paper. The necessity of an interdisciplinary humanistic approach to the mental health system can also be found in the figure of Paul Tillich, who in the book *Courage to Be* claims:

> Medicine needs learning about man to fulfil theoretical tasks; and it could not have a learning about a man if it does not constantly cooperate with all those professions whose central subject is a man. The purpose of the medical call is to help a man in some of his existential problems, those who are usually called illnesses. But it could not help a man without constant cooperation with all other professions whose purpose is to help a man as such. (Tillich, 1952, p. 50)

Above all, I repeat that it should necessarily integrate with the various disciplines that form the humanistic and social sciences domains – philosophy, sociology, anthropology, psychology and pedagogy, in order to preserve its inherent humanistic character. But, in this presentation, the main focus and primary goal is not to address the relationship between biomedicine and the humanistic domain, instead it is pointing to the unavoidable importance of hermeneutics and phenomenology to the development, treatment and diagnosis of the psychotic spectrum. I am implying that interpretation, therefore hermeneutics, is the starting point for each etiology and diagnosis, and in the context of determining the mereological (Potrč, 2002), constellative place and importance of certain phenomena, is inseparable from phenomenological evaluation and elaboration.

2 This kind of mereology could be analyzed and synthesized with the help of Thomas Fuchs' theory of the "phenomenological field and the life space". (Fuchs, 2019)

3 According to the complexity and wideness of the issues indicated in the title, this presentation will have a propaedeutic character, i.e. it will in the basic lines present the crucial segments of a thesis, and a thoroughly presented system of the aimed thesis will be published in the future.

2. Hermeneutics and Psychopathology

Hermeneutics derives its etymological root from the Greek word ἑρμηνεύω (*hermēneuō* – to translate, to interpret) (Beekes, 2009, p. 462). In Greek mythology Hermes was a messenger of the gods, protector of trade and travelling.
Jean Grondin quotes that "the early usage of 'hermeneutics' places it within the boundaries of the sacred. A divine message must be received with implicit uncertainty regarding its truth. This ambiguity is an irrationality; it is a sort of madness that is inflicted upon the receiver of the message. Only the one who possesses a rational method of interpretation (i.e., a hermeneutic) could determine the truth or falsity of the message." (Grondin, 1994, p. 21)
Hermeneutics has reached its historical and cultural relevance through the interpretation of biblical texts, and later in history, the hermeneutical method was applied to the interpretation of other great relevant textual works of human culture, and I am setting it in the context of interpretation of certain elements of a person that faces psycho-social challenges, mainly the ones of the psychotic spectrum[4].

The key feature in hermeneutics is the concept of hermeneutical circle, which presumes contextual grasping of the interpreted sequence, and it is a kind of mereological eccentrically positioned[5] methodological approach to the interpreted issue. This becomes an extremely important, even crucial factor in the psychopathological approach to the persons with psychosocial challenges, or mental disorders, and it is extremely important and unavoidable in the context of treatment of psychotic patients. I will induce the concept of the "psychopathological hermeneutical Circle"[6] that assumes that we should interpret the wholeness from the details, and from the wholeness find certain parts of patients' mental environment in order to analyze, specify and treat certain disorders. Later in the paper I will connect this concept with Thomas Fuchs' concept of integral circular causality.

Furthermore, subsequent hermeneutics are present in Flacius Illyricus, Schleiermacher, Gadamer, Dilthey, Heidegger and Popper, and in the context of this work, the most relevant figure – Paul Ricœur, who reflected on the hermeneutics of selfhood. We could say that interpretation is a basic diagnostic tool present in the psychopathological domain, and Otto Dörr claims:

> When trying to understand what tradition has meant in any of the fields of human experience, we cannot avoid going beyond the mere understanding of the text we have before us, since this will transmit to us, inevitably, certain viewpoints and/or certain truths. And how can we be sure of the legitimacy or truth value of what is understood? This is precisely the role of hermeneutics: *to constitute the experience of truth*, where natural science appears surpassed, as it occurs with history, art, law, etc. (i.e., in the social sciences). (Fuchs; Breyer; Mundt, 2014, p. 19)

4 Statements of the psychotic patients are a kind of book with torn pages, and the role of the psychopathologist (psycho-hermeneuticist) is to synthetize this confusing „statement mosaic" into a meaningful composition.
5 Helmuth Plessner is the inventor of the concept of the eccentric positionality of the human entity, and in his perspective it is a characteristic that divides human beings from animals and vegetables (Plessner, 1970). I claim that the basic issues of the psychotic person are present in the frame of the eccentric positioning of its presence in the frame of the phenomenological objective field.
6 Argumentative support for the given thesis could be found in the book *Hermeneutics and psychological theory: interpretive perspectives on personality, psychotherapy, and psychopathology* (Messer, Stanley., Sass, Woolfolk, 1988).

I am considering the validity and truthfulness of the message as a crucial stance in the psychopathological diagnostic process, and the most aporetic part of semantical mediation between the subject and his message is present in treatment of a persons diagnosed with the disorder of the psychotic spectrum, with the focus on schizophrenia – the most stigmatized disorder present in the ICD and DSM diagnostic criterion which is, despite the various researches, and the knowledge based upon it, still a big taboo, and is in great measure socially stigmatized. Official researches proves that it is present in about 0,3 – 0,7 percent of people worldwide (Nuno, Guilera, Coenen, Rojo, Gomez-Benito, Barrios, 2019), more in urban than in rural places, and is marked with genetical determinations as well as social ones. Schizophrenia, as it is etymologically disputed, refers to bifurcation, the split on various levels of a person's circular causality of consciousness – the split from his own body, from his own being's continuity and temporality, from his past and his future, from society. Unavailable to verbalize it, he is not sharing the same world, the same phenomenological field with others anymore. The blockade of the person's environmental resonance and contextual integrativity occurs, as well as the semantical and ontical dissonance in relation to the environment. R. D. Laing, famous Scottish Psychiatrist and Philosopher, while writing on the example of a schizophrenic client named Julie quotes:

> The phenomenological characteristics of the experience of this self seems in Julie to be in principle similar. However, one must be prepared to paraphrase her schizophrenia into sane speech before one can attempt a phenomenological construct of the experience of this 'self'. (Laing, 1960, p. 222)

I would say that the task of a psychiatrist, a psychologist and a psychopathologist is to find a suitable mediation tool for translating a complex psychotic statement, and with a lucid, adaptive, creative and flexible hermeneutical methodology, phenomenologically oriented to the objective relational constellation, and a circular causal space in which the patient's self resides, even the interpretation of "grammar" and "geometry" of the psychotic's psyche becomes accessible.

I claim that, in the context of schizophrenia, the most perplexing and most complex task is to puzzle out a true and false self, i.e. to semantically grasp from which semantic root the message comes that the psychotic person communicates and intends to intensify, in the frame of the meaningful message.
Laing on many places emphasizes the importance of understanding the schizophrenic statement, however complicated and difficult it is to grasp. He also claims:

> Even when one felt that what was being said was an expression of someone, the fragment of a self behind the words or actions was not Julie. There might be someone addressing us, but in listening to a schizophrenic, it is very difficult to know 'who' is talking, and it is just as difficult to know 'whom' one is addressing. (Laing, 1960, p. 214)

Ontological background of the selfhood agency, methodologically summarized as the hermeneutics of the selfhood, which is thoroughly considered in the book *Oneself as Another*, Ricœur summarizes quoting:

> *Oneself as another* suggests from the outset that the selfhood of oneself implies otherness to such an intimate degree that one cannot be thought of without the other, that instead one passes into the other, as we might say in Hegelian terms. To 'as' I should

> like to attach a strong meaning, not only that of comparison (oneself similar to another) but indeed that of an implication (oneself inasmuch as being other). (Ricœur, 1992, p.3)

In the given context it is worthy to mention what Merleau Ponty thought on mutual incorporation, or mutual inhabitation of the body. He claims:

> The communication or comprehension of gestures comes about through the reciprocity of my intentions and the gestures of others, of my gestures and the intentions discernible in the conduct of other people. It is *as if the other person's intentions inhabited my body and mine his*. (Merleau Ponty, 1981).[7]

So, if we perceive society hypothetically as a macro-organism, as a body comprising of various beings – or let us say atoms and organs, schizophrenic patients present deviant, unaccepted, categorically bifurcated elements which are disabled for this mutual inhabitation, which are disembodied, and "mentally dead" in relation to the liveness of the existential phenomenological field of social habitat, or environment[8]. Yet, I would say that the situation that is preceding the given schizophrenic disembodiment could in some cases be interpreted as a kind of hyper-worshiping of their own bodily entity, which implies certain narcissistic elements, not in Freudian context of grandiosity of self, but in Kohut's context of secondary, loss-of-confidence kind of narcissism (Kohut, 2009), which makes a kind of shield to a person's relation to the connectedness to others.

We can put the given macro-concept on the micro-scale of one's psyche which is constituted of various mental and physical atoms, and harmonization between them presumes a healthy being.

Sartre, in his existential-philosophical manners, quoted that "Hell is other people" (Sartre, 1989). I would point out that in a psychotic's case hell is raised and represented in his own image in the perception of others, whereby the psychotic subjectivity is dislocated, transmuted into objectivity, whereby "objectivity" judges, observes, follows, reads thoughts to the subject through his own traumas, compassions, fears, anger and various expectations. Furthermore, it should be noted that a person is never affirmed solely by themself but always through the community[9], and the initial community, in which the human psyche as well as psychological disorders are formed, is the family, and the person's early years of life. I think that various mental breakdowns and disorders can be prevented mainly by intervention into this habitat[10].

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7 In this context, it is also worthy to mention Martin Buber's concept of I and Thou (Buber, 1984).

8 Schizophrenic persons certainly live in a kind of the divided worlds. Minkowski, when writing about one hallucinating patient says: "I consider him as someone "hallucinated," as a person "mentally ill," and that I have the impression that a modification of tolerance of perceptible reality has occurred in him, that two dissociated worlds, one superimposed upon the other, exist in him. And since each of these two worlds seems to be endowed with spatial properties, if we pursue our "double-entry bookkeeping. the Idea of two spaces, the one superimposed upon the other in our patient's perceptions, comes to mind as a natural reflection on our part as to the way in which he conceives reality. But here we are led to an impasse; for in reality there is only one space, and it seems impossible at first sight for us to conceive of how this space comes to be doubled and superimposed upon itself even in our subjective life. Moreover, the patient projects his hallucinations into the same space as his perceptions." (Minkowski, 1970, p. 423.) I wonder if the phenomenological approach is not the perfect one for making a proper description and bringing an ontical identification between the hallucinatory worlds living in the schizophrenic's mind?

9 This is a main motive in Aristotle's – *Politics*, rounded in the syntagm *zoon politicon.*

10 The influence on the educational system, above all else, by directing children to the existence of selfhoods who exists beyond them, i.e. from learning that mankind is chased by a handful of different self-hoods which are first

Furthermore, *Ricœur* discusses that the actions of the self can never be understood from the position of pure subjectivity, because the question of motives is a question of personality that is always a concrete historical subject. The crucial point in understanding selfhood is showing the way that understands itself in the chain of intersubjective relations (Todorović 2019). I think that it is a crucial moment of the psychiatric diagnosis, and it needs a hermeneutical approach in order to adequately fulfil its tasks in the field of successful diagnosis and etiology of the psychic disorder.
What is decisive for understanding Ricœur's dialogue with history is a new methodology in which he clearly distinguishes "self" and "identity", "self" and "otherness" (Ricœur, 1992, p. 16). Unlike other methods, hermeneutics puts an emphasis on this very class and is deliberately addressed. The being is a dialectical relation to itself, it means that it is not always in the identity with itself, but is the identity of identity and change. On the other hand, change is never absolutely authentic, but selfhood is always constituted in relation to others, though it preserves its personal relationship (Ricœur, 1986, p. 4). This means that the double dialectics is at work, the dialectics of self-relationship that is rounded up in dialectical relation to others.

Ricœur states that hermeneutics is the site of three interrelated problematics:
1. the indirect approach of reflection through the detour of analysis;
2. the first determination of selfhood by way of its contrast with sameness;
3. the second determination of selfhood by way of its dialectic with otherness (Ricœur, 1992, p. 297)

Ricœur claims that the phenomenological method uncovered and revealed the importance of others in the interpretation of selfhood. Because apart from the fact that others appear in some form, it just wants somehow to "appear for others". Being a self is designing yourself in particular situations. How does he project himself? Ricœur would say: based on the value of the selfhood system.
So, as the fundamental task of a "psyche-hermeneuticist", I consider determining the key moments and causes of the patient's selfhood dislocation (which directs to disembodiment -(Stanghellini, 2009), for which it is necessary to have an insight into the spatiotemporal mereological context of the patient's life, genetical compound of his family and predecessors, periods and epochs in which traumas and other mental *aporia*[11] occurs, which, in the case of psychosis, is of course extremely difficult to grasp through the patients statements. Therefore, as a symptomatology-etiologic tool, psychopathologists need to talk to relatives and friends of the person, but the big question is: are these statements true and benevolent regarding the patient? Therefore, the analyst and diagnostician must accurately analyze the psychological condition of the given "witnesses" and build the mereological mosaic of the phenomenological environment of the patient. Laing was a kind of a virtuoso in such situations, and I think that prior to analyzing a certain family and the social cases and relationships that precede the development of psychosis and stimulates it, it is necessary to set the general framework of the human brain and consciousness evolution, which should later be applied to particular cases.

of all – living beings which need care and understanding, despite their validity or invalidity. This should, of course, be applied to the parents too, in order to provide holistic methodology and raise practical results, and the family situation is definitely connected to transformation of one's psyche. I do not grant that this will bring results, but I am sure that the narcissistic seed in persons is a starting point, a development factor in many mental disorders and illnesses.

11 Greek term ἀπορία refers to something impassable, lack of resources or a kind of puzzlement.

The aforementioned mereological picture of the intentional position and relationship of an individual entity in relation to the environment could not be precisely understood without the use of a phenomenological approach, and in the contemporary literature, in the context of width and quality of the approach, it is inevitable to consider reflections of Thomas Fuchs, whose book *Ecology of the Brain* I am taking as a kind of encyclopedic orientation for the interdisciplinary relation between neuroscience and phenomenology, and as a effective methodological tool for etiological and also as the treatment paradigmatic approach to the phenomenology of the psychotic patients psyche, i.e. – the mental state.

3. Fuchs' *Ecology of the Brain* and the Issue of *embodiment*

The given book is marked with fascinating and paradigmatic interdisciplinary integration between sharp critical philosophical reflection and impressive range of neuroscientific specialized knowledge.
The author indicates the crucial role of, as he says – the *Umwelt* for understanding the human brain, namely as an organ of relation, interaction, and resonance: with the body itself, with the immediate environment of the organism, and with the social and cultural environment of the life-world. It is, as one can notice, closely connected to the arguments set for psychopathologists.
He is trying to break the dualism between body and mind, and sets a thesis that the fact that bodily consciousness does remain coextensive with the organism shows that it does not spring up out of it as a separate entity, like "Athena from the head of Jupiter" (Fuchs, 2017, p. 62). It is rather, from the very beginning, an *embodied and extended consciousness*, and it presents the "integral" of the living organism altogether, not the phenomenon encapsulated in the brain. He writes:

> ...consciousness cannot be envisaged as an invisible chamber that is literally contained in the head and concealed behind the sensory organs. Indeed, it is not contained at all "in the physical body", but rather is *embodied:* conscious acts are particular, integral activities of a living, self-sustaining, sensory-receptive, and mobile organism. Therefore, the primary dimension of consciousness is the reciprocal, homeostatic, sensorimotor, and active-receptive relationship of the living organism and the environment. (Fuchs, 2017, p. 69)

I claim that the question of embodiment that is transmuted to the image that the environment creates towards the subject potentially inhabitates the underlying problem of the development of psychosis.

I would say that the possible cause of the disorder development, and the main issue of the person who is diagnosed with psychotic disorder is that he or she is in a "vacuum" of their own expectations and expectations of others concerning him or herself, and throughout this process his or her perceptive and ontic balance is being mixed up and smashed in plenty of hallucinatory pieces, full of content but without symmetric ontological form. The given chaos brings the feeling of embodiment as the final symptom. Stanghellini's early mentioned article *Embodiment and Schizophrenia* can be used as argumentative support for the given thesis.
He writes:

> In the relations between the disorders of embodied self-awareness and intersubjectivity-intercorporeality, we can recognize a circular relationship. The defective structuring of selfhood, particularly through the phenomena of somato-psychic depersonalization (bodily perception disorders) and auto-psychic

> depersonalization (detachment from one's own emotions and thoughts), can become an obstacle to the inter-corporeal attunement between the self and the other persons. Schizophrenic autism may derive from the incapacity to enter into emotional attunement with others and recognizes as primum movens a different quality of bodily performance. (Stanghellini, 2009)

In relation to the body, Merleau Ponty, through analysis of bodily space notices that

> ...with regard to our own body, what is true of all perceived things: that the perception of space and the perception of thing, the spatiality of the thing and its being as a thing are not two distinct problems...to be a body is to be tied to a certain world, as we have seen, our body is not primarily in space: it is of it. (Merleau Ponty, 1981, p. 148)

The synthesis between a psychotic person's selfhood, his expectations, the psycho-phenomenological space in which he is being constituted, the embodiment and mentality world could be reconnected and integrated with the existential-phenomenological therapeutic approach[12], and the task of the psychotherapist is to bring back the ontical balance in the patient's psyche, to harmonize ontic spatiotemporal balance of the patient's psyche in causal relation to its environmental space of phenomenological field (Fuchs, 2019).
In this context, it is necessary to recall Laing's construct of partial microsystems within persons that are in inter-collision due to the insufficiently formed "integrity of the self". (Laing, 1960, p. 215) The link between these systems, i.e. their integration into the macro-system of the selfhood's oneness, is the work of hermeneutics and phenomenologists. A similar concept is set by Thomas Fuchs who builds the concept of circular causality of consciousness based on vertical and horizontal circularity. The given is referred to in connection with mental disturbances:

> On this basis, the concept developed here may be outlined as follows: mental disorders are marked, on the one hand, by a disruption of *vertical circular causality*, that is, of the interplay between lower-level processes and higher capacities of the organism. As we will see, this primarily affects a patient's relation to him- or herself, which continually influences the course of the illness including the neuronal processes on the micro-level. On the other hand, mental disorders are characterized by a disruption of *horizontal circular causality I, that is, of social relationships and the ability to adequately* respond to the demands and expectations of others. This leads to negative feedback loops in socio-functional cycles, which also have a crucial influence on the course of the illness. Both kinds of circular causal processes are tied to mediation by the brain, but cannot be located within it. For this reason, reduction of mental disorders to brain disorders is in principle not possible. (Fuchs, 2017, p. 256)

I claim that the ontical topology represents the key issue and starting point for research and evaluation of the psychotic stances of human beings, as well as for evaluation and navigation through the psychic field. The given topology, in the context of psychosis, marks issues of ontological dislocation of the selfhood, primarily present through the bifurcation between *Körper* (organic body) and *Leib* (lived body), (Fuchs, 2017, p. 12) of biological and experienced body.

12 Medicaments can play a key-role in the given process, but I claim that the dialogue between therapist and patient plays an even crucial role. It derives the conclusion that philosophy plays a key role in psychotherapy.

Fuchs develops his thesis on the concept of embodied subjectivity, initially grounded in the phenomenology of bodily existence. He writes:

> ...consciousness cannot be envisaged as an invisible chamber that is literally contained in the head and concealed behind the sensory organs. Indeed, it is not contained at all "in the physical body", but rather is *embodied*: conscious acts are particular, integral activities of a living, self-sustaining, sensory-receptive, and mobile organism. Therefore, the primary dimension of consciousness is the reciprocal, homeostatic, sensorimotor, and active-receptive relationship of the living organism and the environment. (Fuchs, 2017, p. 69)

I conclude that if consciousness is a circular relation between body and environment, and between *Körper* and *Leib* of the selfhood, than schizophrenia could be treated with circular therapeutic approach marked with phenomenological postulates strengthened with the bioethical sensibility, and this disorder, or disease can be efficiently curable. If the main problem of schizophrenia is disembodiment, then the phenomenological approach to development of ontical and selfhood dislocation can play a crucial role in treating the given disorder. Above all, in the context of proving that schizophrenic persons actually share living phenomenological space with "normal" ones, the phenomenologist can actualise this potentiality of schizophrenic comeback in the shared, entangled environment of reality.

4. Conclusion

In this paper, in the baselines I denoted the tangents that links the hermeneutical and phenomenological expression in the plan of psychotic disorders, and the necessity of their interdisciplinary discipline is implemented in order to potentially improve the mental health system.

Communication is at the core of a psychotic problem, but also in a potentiality for overcoming it – and at the micro level of an individual's psyche, his relationship to his own self, his communication with the environment, perceptions of others regarding his appearance and exact perceptions of others in relation to the subject. Also on the macro-level relationship between the psychiatrist and psychotherapist towards a person with problems, the communication between disciplines that must necessarily work together in the field of mental health.

In the context of the development of a psychotic disorder, I note that every thought has a communication value, and if we put it on a plan of cosmology and overall evolution – it is impossible to ignore the fact that the entire evolutionary organism is saturated with a handful of entities, atoms and relationships that communicate with each other at a multitude of levels. It is exactly the communication, therefore the semantic line that is interrupted in the schizophrenic's case. Apart from communication, the key problem is the transfer of perceptive energy leading to dislocation of selfhood and complete disorientation in the face of objectivity and disorganization of the being's intentionality. It is difficult for a phenomenologist to, using some miraculous formula, point out the paternal tendencies and directions of life that would ontologically anchor it on the domains of a mental harmony, but can definitely offer outlines or templates for starting points of the practice enquiry.

It is crucial to phenomenologically conclude this paper with the claim that a person in a state of psychosis is not a commodity or biological organism with a fault, but a person whose ontological status is disharmonized and lost[13], but which can be found again and integrated at the personal level of psyche but also at the social level of integration into society. This

13 Laing uses syntagm *Ontological Insecurity* (Laing, 1960).

is, I believe, the strength of the reach of the hermeneutic and phenomenological approach, strengthened by ontological ethical and further integrative bioethical postulates, which, I believe, is the basis of a more integrative, interdisciplinary approach to the psychotic persons, and an orientation for the quality and functional integrative mental health system of the future. Likewise, it is necessary to underline that a psychotic person is above all – a living person who needs help, and is a part of the cosmical "environmental mereology", so we as a community of empathic beings should work a lot on de-stigmatisation of schizophrenia, but also on the de-stigmatisation of psychiatry. Integrative bioethics can be used as an orientative methodological tool for the induction of given directions, in the context of interdisciplinary openness and transparency, which includes open dialogue regarding the mental health of beings in all stages.

I will conclude with the normative thought that we are all connected with the life nexus, and the mission, aim and deontics of human beings is to help, to bring liveness and orientation to disembodied entities, and for the given mission we should include a whole society in order to save disharmonized, schizophrenic persons, and to create a holistic, mereological, hermeneutically and phenomenologically engaged and directed mental health system. Overall, human mental health can be put in the analogy with musical harmony, which presupposes dialogue between multiple factors and elements, and I claim that mental health personnel who are induced with hermeneutical phenomenology could play the role of a conductor of the given fulfillness of the phenomenology field and life space in which mental disorders, including the psychotic ones, develop, manifest, and are cured.

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NATURALIZING PHENOMENOLOGICAL PSYCHOPATHOLOGY

abstract

The relevance of a purely descriptive phenomenology to psychiatry is overshadowed by naturalistic approaches that are both explanatory and predictive. A naturalized transcendental phenomenology, however, carries with it the possibility of explaining and predicting not only the nature of normal subjective experience but also the origin of phenomenological psychopathology in a manner acceptable by scientific standards. A purely mathematical naturalized phenomenology remains in the phenomenological sphere, does not rely on neuroscientific data in its development, is consistent with the Husserlian view of man as free and capable of using reason to influence behavior and focusses on temporality in its definition of normal subjective experience and phenomenological psychopathology. Because what is being naturalized is subjective experience and not any part of the physical world, the project it is not meant to replace the natural science's understanding of psychopathology but to provide a complementary view that is acceptable by scientific standards.

keywords

temporality, Husserl, universality, methodological naturalism

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1. Why naturalize transcendental phenomenology

In the introduction to his final book "The crisis of European sciences and transcendental phenomenology", Husserl rhetorically asks if there is, in view of their constant successes, really a crisis of the sciences. Although he had targeted scientific naturalism throughout his life as an inappropriate forum to develop a science of consciousness, he also describes in this book the philosophical and sociological dangers of reducing man to a naturalistic framework. Naturalism excludes in principle those questions that "concern man as a free, self-determining being in his behavior toward the human and extra-human surrounding world and free in regard to his capacity for rationally shaping himself and his surrounding world." (Husserl, 1970, p. 6). He continues in asking what science has to say about reason and about ourselves as subjects of this freedom and concludes that, sadly, the science of bodies has nothing to say since its abstracts from everything subjective. Had he been alive today Husserl would have similarly indicted the unopposed biomedical model and would have also implied that medicine, as currently practiced, is in crisis. Even in psychiatry in which there is still reliance on phenomenological descriptions of experience for the sake of diagnosis and treatment, the explanatory basis for the origin of a patient's symptoms and the mechanism of successful treatment is still deferred to scientific frameworks.

If medicine is in crisis because of the view of man that it either explicitly or implicitly expounds, how is possible to overcome this crisis? Those sympathetic to phenomenology recognize that the human subject cannot be reduced to the valueless facts assumed by the biomedical model and do not need further convincing. Since the crisis relates to those who view the natural sciences as the only domain relevant to the practice of medicine, it is they who would need to be convinced of the relevance of the phenomenological perspective. The difficulty lies in how to accomplish this goal. Using the idiom of phenomenology and its reference to Being, temporality or Dasein will do little to alter the perspective of those who accept the naturalistic worldview as the final word. To convince these contrarians it will be necessary to demonstrate the relevance of the phenomenological perspective in an idiom acceptable to the worldview that they presently hold and with the criteria that they accept to assess validity. This will entail the demonstration of the explanatory relevance of phenomenology to medicine over and above its descriptive function in a manner consistent with the methodology of the sciences. This in turn will entail the successful naturalization of a transcendental phenomenology.

Transcendental phenomenology assumes that those meaningful experiences elaborated in a descriptive phenomenology are actively synthesized by the subject and that the processes involved in that active synthesis are regarded as the conditions for the possibility of those

experiences. The demonstration of how meaningful experience is constituted from the transcendental condition for experience thus has explanatory relevance and may compete with the natural sciences in rigor. But Husserl struggled all his life to explain the nature of his proposed science of consciousness. “If one reads continuously from “Ideas 1” to “The crisis in the European sciences and transcendental phenomenology”, one is aware of covering the same ground over and over again. Husserl tortures himself constantly in an effort to lay firmly the foundation upon which the philosophical edifice would be constructed.” (Lauer, 1965, pp. 35-36) Subsequent wisdom has it that the transcendental project that Husserl envisioned can never reach scientific status. For such to occur phenomenology would need to be naturalized and it is currently felt that the transcendental project, understood as discovering the conditions for the possibility of the nature of subjective experience, is not amenable to naturalization (Zahavi, 2013). More contemporary discussions accept the non-scientific nature of phenomenology, limit its domain to that of description and set the relation between phenomenology and the sciences as one of reciprocity where results from one domain can inform the study of the other (Varela, 1996, Zahavi, 2013).

But for all the talk of informing each other, the relationship between descriptive phenomenology and the neurosciences will always be asymmetric, the cultural climate being such that the subjective is always overshadowed by the objective. The sciences ability to explain, predict and support counterfactuals outstrips any phenomenological approach that remains purely descriptive. Although certainly relevant to understanding a patient’s symptoms or promoting a more humane approach to a patient, the impact factor of descriptive phenomenology in medicine pales in comparison to the sciences who’s pharmacological and surgical successes continue to impress. Similar to Putnam’s “no miracles” argument for scientific realism that argues that the best explanation for the practical success of the sciences is that the sciences describe the true nature of reality, the practical success of the biomedical model argues that it describes the true nature of humans and there is no need to complicate the situation with the inexactness and ambiguities of descriptive phenomenology. A successful naturalized transcendental phenomenology, however, will have explanatory import based on the criteria used in the natural sciences and may allow phenomenology and the natural sciences to be viewed by the contrarians as equal and complementary partners in the study of the nature of humans.

2. Naturalizing transcendental phenomenology

Although a number of arguments have been presented as to why transcendental phenomenology cannot be naturalized, they can be summarized as follows: since the goal of transcendental phenomenology includes the description of the conditions for the possibility of the application of any framework to experience, including that of science, taking science as the framework to describe the possibility of science within experience simply assumes that which needs to be explained. But this argument against the possibility of naturalizing phenomenology applies only to ontological naturalism that assumes a framework in which everything that exists, including our subjective experience, is an element of Nature as defined by that framework. Methodological naturalism, however, need not assume any definitive ontological framework but accepts that the concepts and methods used in contemporary science exhaust those needed to address the phenomenological project (Kelly, 2016). If no domain of science such as neuroscience or psychology is taken as an explanans and if the principles used to describe the conditions for the possibility of experience are consistent with methodological science, that is, the approach uses concepts of theory, models, explanations and empirical confirmation as they are used in the natural sciences, it is argued that phenomenology has been successfully naturalized.

What is being proposed is a purely mathematical naturalization of subjective experience that makes claims only to necessary forms or structures of experience.[1] Because it makes no reference to the empirical contents of experience, including those of natural science, it is not subject to the criticism of question begging that applies to ontological naturalism. In fact, it takes the natural science as an explanadum rather than the explanans. It relies on universality conditions for a specified mathematical form to show how systems can have universal properties independent of the fine dynamical details of the systems. Because what is being naturalized is subjective experience and not any part of the physical world, the project is not meant to replace the natural science's understanding of the man but to provide a complementary view that is acceptable by scientific standards.

The concept of universality in dynamical systems is critical in the development and understanding of a naturalized transcendental phenomenology. Dynamical systems that operate at the edge of chaos can have properties that are universal and are the same across different systems as long as certain qualitative resemblances exist between these systems. In addition, these qualitatively similar systems that operate at the edge of chaos may have quantitative properties that are also the same across all such systems (Barzel and Barabasi, 2013 and Pujals, 2009). These mathematical properties are relevant to a naturalized phenomenology since phenomenological analysis suggests that skillful coping, that state of interaction with the environment that seems the most natural and that results in an optimal grip on the environment, is best represented by the balance between constraint and spontaneity that characterizes the dynamics that occurs at the edge of chaos (Dreyfus, 2014). The implication is that subjects who adopt an environmental interaction and worldview that seems the most natural, that is, operates at the edge of chaos, may have universal characteristics across all subjects despite the fact the specific details may differ between subjects.

3. Relevance to psychiatry and psychopathology

There is a specific difficulty in applying the naturalization of transcendental phenomenology to psychiatry and the origin of psychopathology. This is the difficulty with reconciling the view of the subject as free in their interaction with the environment and free in the establishment of meaningful experience based on their aspirations and personal history with the fact that the subject clearly did not choose to have the particular psychiatric symptoms that defines the diagnosis. This lack of control over the origin of symptoms fits more with the view of the subject as the passive recipient of symptoms secondary to biological processes totally beyond their control rather than the Husserlian view of a self-determining subject. This explanatory advantage simply further supports the biomedical view of the subject at the expense of the phenomenological. A successful naturalized transcendental phenomenology must be able to show how it is possible that detrimental, painful psychopathology may arise in a subject who is free and self-determining in their behavior toward the human and extra-human surrounding world and free in regard to their capacity for rationally shaping themselves without recourse to standard explanations based on psychology or neurobiology. Specifically, if one asks for the explanation of why a schizophrenic is delusional or why their social interaction differs from non-schizophrenics, one could relapse into naturalistic thinking and provide a causal explanation based on current neurobiology. Alternatively, it is possible to approach the same problem

1 Even though mathematics does represent a framework, it makes no reference to the objective outside world allowing the exercise to remain within pure subjectivity. The purely mathematical approach to cognitive science and a naturalized phenomenology has been extensively developed by researchers at the Centre de Recherche en Epistemologie Applique. See Petitot (2011) as an example.

transcendentally and ask what are the conditions for the possibility of experience such that this type of phenomenological psychopathology could emerge.

4. The Mathematical Naturalization of Transcendental Phenomenology

The first step in the strategy to naturalize transcendental phenomenology is to identify a universal invariant form that characterizes all of experience. Because it is universal and invariant across all experiences, it is the condition for the possibility of all experience thus representing the foundation that is sought by a transcendental phenomenology. The second step is to express this universal form mathematically. In this way, the necessary consequences of this proposed universal form are explicitly described. The eventual goal of such a project is to show how natural science is possible within subjective experience. This will involve demonstrating the origin of the activities of idealization, abstraction, representation which are the foundation of modern scientific theorizing. The elaboration of this project is more relevant to the philosophy of science and the naturalization of normal experience rather than phenomenological psychopathology and lies outside the scope of the present paper.

This universal invariant form of subjective experience that will provide the foundation for a naturalized transcendental phenomenology has been variously described as the Visible and Invisible in the later Merleau-Ponty (1968) or simply as "presence in absence". The implication is that within subjective experience there is always a visible, a sensorimotor flux that defines the present moment, and something else, the invisible that confers meaning onto the present sensorimotor experience. Standard naturalistic approaches to consciousness would take this invisible as some objective aspect of nature, be it brain function, the unconscious or functional psychological modules. To be consistent with phenomenology, these options must be excluded since they would assume an explanatory framework that the phenomenological reduction prohibits. Since experience is claimed to have a universal form consisting of the visible and invisible, the only possible origin of the invisible is the visible, the sensorimotor flux. So we have the seemingly paradoxical situation where the present sensorimotor experience is meaningful because of the invisible but the invisible originates from the present sensorimotor flux.

In the mathematical model being proposed, the invisible is identified with the temporal horizons that are generated by the visible. The universal form of experience is thus identified with temporality that is specifically characterized as present sensible flux that is enveloped by temporal horizons that confer meaning to the present moment.[2] The present sensible flux can be mathematized as any function of time f(t) and the horizons can be mathematized as the time scales embedded within the present signal f(t) that feed back onto the system itself (figure).[3] The result is a dynamical system in which the present sensible moment and the mathematical signature of the past and future are simultaneously involved in the computation.[4] It is a hermeneutic characterization of subjectivity where the present sensible

2 This identification of temporality with "presence in absence" has been developed by Russon. "Rather than recognizing presence as the ultimate ground of reality, the full-fledged description of experience-the philosophical approach called phenomenology-would show...absence to be the primary term in which the ...substance of the world is to be articulated" (Russon, 2003, p18). "It is this temporal character of experience that is the "negativity" that lets there be presence" (Russon, 2003, p19). Also "The very nature of our subjectivity, then, is to be "simultaneously" in the past, present, and the future" (Russon, 2003, p19).See also Gallagher (2012) for a review of phenomenology and time. This conceptualization of phenomenal experience is also in accord with Merleau-Ponty's description of the Visible and the Invisible in which these two components of experience are intertwined as the mathematical formalism suggests (Merleau-Ponty, 1968).

3 A Fourier decomposition of the time series would yield such time scales.

4 This is unlike the "metaphysics of presence" that characterizes the traditional natural sciences. The simultaneous access to and use of the past, present and future characterizes our meaningful subjective experience and distinguishes a system that operates according to reasons as opposed to a system that operates according to causes.

generates temporal horizons to provide for meaningfulness of the sensible moment but the pre-existing horizons are the basis by which the present sensible input is already meaningful.

If the present visible generates the temporal horizons that constitute the invisible the obvious problem with this formulation is the question of how the present contains any information about the past or the future. It seems like an absurd proposition. The present dynamics does contain information concerning the future and past if the dynamics of the system is self-similar. Although application of the concept of self-similarity in spatial dimensions is commonplace, it is also relevant to temporal dimension. If a dynamical system is self-similar its activity over a short time interval surrounding the present carries information concerning its past and future modified by a scaling factor.
Self-similar temporal process are known to have a scale free frequency distribution in which there is no dominant time scale. They are felt to represent those dynamics that incorporate the best balance between spontaneity and constraint. Certainly in our interaction with the environment there is phenomenological evidence to suggest that skillful coping is characterized by this same balance between spontaneity and constraint suggesting that a scale free dynamics best characterizes the phenomenology of this experience. If it is taken as a hypothesis that our active synthetic experience always returns to the state in which this interaction is automatic and effortless after we have experienced a disturbance, this translates, in the proposed mathematical model of subjectivity, into the requirement that the dynamics of the system always returns to a scale-free dynamics upon perturbation.

5. Implications concerning the origin of phenomenological psychopathology

In the mathematical model of subjectivity that is proposed (figure), access to our past and future temporal horizons can be obtained from the present sensorimotor flux if the experience is one of skillful coping, that is, if the experience is the one that feels the most natural and automatic. Even though the temporal horizons (the invisible) and the present sensorimotor experience (the visible) are experienced separately, they are both involved in the computation.
The nature and evolution of these temporal horizons or time scales that envelop the present sensible dictate the nature of the experience at that moment. For example, if the time horizons have no dominant time scale, the phenomenal experience is one of skilful coping in which there is no distinction between subject and object. If the time scale distribution is bimodal (two peaks) the present sensible moment is experienced as two simultaneous

experiences. (Borrett *et al*, 2011). If the future horizons are abbreviated and cannot be expanded to allow the future to provide meaningfulness, the experience can be viewed as a lack of hope. Episodic memory loss is characterized by lack of access to past temporal horizons. Conflict can be characterized by a persistent bimodal experience that is unable to return to the balanced unimodal distribution of skilful coping. The need for immediate gratification can be reflected in a dominance in the shorter time scales. In all these cases, temporality, or more specifically the nature of the time scale distributions in the dynamics, is the parameter than defines the nature of the experience.

Any subject can be characterized by the set of specific parameters that define the details of these horizons. If a subject is identified as constitutionally having abbreviated long term horizons, then, as the dynamical system that defines that subject evolves with the intertwining of the visible and invisible, necessary consequences emerge that would be different from a subject whose access to long term horizons are more full. Because these consequences are necessary, the subject has no active control over the nature of the result forms or structures. Because of the universality applicable to scale free dynamics, all subjects with this parametric signature experience the same qualitative and quantitative consequences. The subject can still be regarded as free and self-determining because the model of the subject contains all the accessible past, present, and future information available to the subject as they attempt to optimally interact with the environment.[5] The necessary dynamical consequences of the parametric signature is simply a limitation to their freedom. Why a particular subject has abbreviated long term horizons is a causal question and is more suitably addressed by natural science. How it is possible for a self-determining subject to experience necessary but painful experiences if they tend to focus on the present moment is more appropriately addressed by the present model.

The question concerning the origin of delusions in a schizophrenic would be approached similarly. The causal answer to the question would require a neurobiological explanation. The transcendental answer to the question would require identification of the temporal horizon parametric profile that results, by necessity, in this particular pathological form of experience.

This focus on temporality or time scale distributions in subjective experience distinguishes the phenomenological approach to psychopathology from biomedical approaches in which disturbances in causal networks, be they neuroanatomical/neurochemical as in the case of neuroscience, abstracted functional modules as in the case of psychology or conflated combinations of both, define the pathological basis of psychiatric conditions. Because temporality has been mathematized in the form of time scale distributions, it is amenable to empirical experimental confirmation, as is necessary for methodological naturalism to apply. The analysis of such time scale distributions can proceed theoretically based on the fundamental mathematical form or empirically with the use of models of the basic equation and its correlation with human data through EEG/MEG studies.[6] In the case of phenomenological psychopathology, the details of the nature of the disturbance in temporality in specific psychiatric syndromes as described by patients will need to be addressed to allow correlation with predictions from the models.

5 This claim related to freedom and self-determination requires extensive elaboration and justification but for the purposes of this paper will be taken for granted.

6 The use of neural networks or autonomous agents would be viewed as models of the more fundamental theoretical dynamical equation.

6. Conclusion

Until phenomenology achieves the status that Husserl envisioned, a science of subjectivity, its relevance to psychiatry will always be overshadowed by naturalistic conceptual frameworks whose ability to explain symptoms and predict treatment directions continues to impress. A naturalized transcendental phenomenology carries with it the possibility of explaining and predicting not only the nature of normal subjective experience but also the origin of phenomenological psychopathology. A purely mathematical naturalized phenomenology remains in the phenomenological sphere, eschews any reference to data from the natural sciences in its development, focusses on temporality in its identification of normal subjective experience and phenomenological psychopathology, allows for empirical confirmation based on time scale analysis such as with EEG and is consistent with Husserlian view of man as free and capable of using reason to influence behavior. Because what is being naturalized is subjective experience and not any part of the physical world, the project it is not meant to replace the natural science's understanding of phenomenological psychopathology but to provide a complementary view that is acceptable by scientific standards.

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THE DIFFICULT CASE OF COMPLICATED GRIEF AND THE ROLE OF PHENOMENOLOGY IN PSYCHIATRY[1]

abstract

It has been argued that some unremitting forms of grief, commonly labeled as complicated grief*, pose a serious threat to the well-being and life of the mourner and may require clinical attention (Lichtenthal et al., 2004; Zisook et al., 2010). One central issue in this debate is whether and how we could draw a* divide between uncomplicated and complicated grief *to avoid, on the one hand, the medicalization of appropriate grief responses, and on the other hand, to provide help to those who suffer from complicated grief. In this paper I show that a phenomenological approach can help with this task. First, I present Ratcliffe's (2017) and Fuchs' (2018) phenomenological analyses of typical grief responses. Then I argue that a promising way to draw a divide between uncomplicated and complicated grief is to look for the presence of* reintegration *processes geared towards establishing a new relation with the deceased.*

keywords

grief, complicated grief, depression, phenomenology, psychiatric diagnosis

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1. Introduction

Sadness is often an appropriate emotional response to difficult life events. Such events often lead to a prolonged, albeit non-pathological, sadness. The loss of a close person is one such event and grief is normally taken to be an appropriate response to it. Despite their adequacy, the sadness of the grieving person and the variety of symptoms that grief involves have been a controversial subject in recent discussions in psychiatry (DSM-IV, DSM-5; ICD-11). On the one hand, many emotions and symptoms characteristic of grief seem to overlap with common symptoms of depression. But if grief is an appropriate response to a loss of a close person, then we should avoid medicalizing non-pathological grief responses. In recent debates in psychiatry it has been suggested that, although grief and depression may overlap, we need some rough guidelines for how the two could be distinguished in diagnostic practice (DSM-IV; DSM-5, APA, 2013).

On the other hand, it has been argued that some forms of grief may, indeed, be in some sense pathological and require clinical attention (Lichtenthal *et al.*, 2004; Zisook *et al.*, 2010). Some people do not recover from the sadness that comes with grief and experience prolonged suffering and dysfunction. Because of that, it has been argued that we might need some reliable criteria for distinguishing between typical forms of grief and those that could qualify for intervention (Lichtenthal *et al.*, 2004). *Complicated grief* (CG) is a commonly used term to describe the latter (Zisook & Shear, 2009). The need for diagnostic criteria for CG has been recognized in recent and forthcoming editions of diagnostic manuals that provide operationalized criteria for mental disorders (DSM-5; ICD-11 Beta draft). However, the task of distinguishing between uncomplicated and complicated form of grief is daunting and the proposed solutions are still controversial (e.g. Wakefield, 2013).

In this paper I will show that a phenomenological approach can help with the task of drawing the divide between uncomplicated and complicated grief. This task is important, since complicated grief may require clinical attention, whether or not it should find its place in diagnostic manuals. Drawing on Ratcliffe's (2017) and Fuchs' (2018) phenomenological analyses of typical grief responses, I will argue that a promising way to draw a divide between uncomplicated and complicated grief is to look for the presence of *reintegration* processes geared towards establishing a new relation between the mourner and the deceased (section 4). I will propose an account of the dynamics and etiology of complicated grief, which will be useful in distinguishing between typical grief responses and complicated grief. I start by introducing the notion of grief and summarizing some of the recent discussions in psychiatry concerning the question of how to distinguish it from depression (section 2). I then move on to discuss complicated grief and recent attempts at providing diagnostic criteria of it (section 3).

2. Grief and depression

Grief can be broadly defined as a reaction to the loss of a close person (this kind of loss is often called bereavement), involving both psychological and bodily experiences (Gross, 2015, p. 5). So conceived, grief is a universal psychological phenomenon. Although grief often involves intense suffering and leads to existential crisis, with time, most grieving people adjust to the new situation and manage to resume their life after the loss. To date there is no evidence clearly indicating that grief requires treatment or professional intervention (Jordan & Neimeyer, 2003). Grief may take many forms, depending on, for example, cross-cultural differences in its expression. Among the painful emotions commonly experienced in grief we typically find: shock, sadness, loss, anxiety, guilt, regret, fear, loneliness, intrusive images and thoughts, depersonalization. It is often emphasized that grief is not a state but rather a *process* with a particular dynamics (Zisook & Shear, 2009; Ratcliffe, 2017). At first, such painful emotions are often overwhelming. With time, they tend to come in bursts and the mourner can find other activities and situations meaningful and joyful. The overall experience of a grieving person can and often is compatible with experiencing some positive emotions.

Several emotions and symptoms commonly experienced in grief overlap with those that can be found in major depression. This observation has recently led to a debate concerning the diagnostic criteria for major depressive disorder and has drawn researchers' attention to the nature of uncomplicated grief. Since grief is a commonly experienced, appropriate response to a loss, psychiatry shouldn't medicalize typical grief responses. Thus, we need a way of distinguishing between depression and grief. Following this observation, it has been argued that bereavement, i.e. the loss of someone close, may function as an exclusion criterion for major depressive disorder (DSM-IV). The so-called bereavement exclusion criterion was intended to discourage the diagnosis of major depressive disorder during the first two months after the loss and prevent the medicalization of grief. However, the bereavement exclusion criterion turned out to be controversial. It has been argued that it may have harmed those grieving people who have full-blown symptoms of major depressive disorder by depriving them of treatment and professional help (Parkes, 2013). In the aftermath of this debate, the bereavement exclusion criterion was removed from the DSM-5, although not without criticism (Wakefield, 2013, p. 171).

The authors of the DSM-5 decided that in the case of bereavement and when grief symptoms overlap with those of major depressive disorder, a depression diagnosis should still be carefully considered by drawing on individual history and the situational context (DSM-5, p. 161). The following guidelines for distinguishing between grief and depression were suggested. Grief tends to involve "feelings of emptiness and loss", whereas depression involves "depressed mood and the inability to anticipate happiness or pleasure". Depression is more pervasive and persistent, while positive emotions still arise during grief. In addition, while depression often involves feelings of worthlessness and self-loathing, grief usually does not affect one's self-esteem. In both cases, thoughts of dying may occur, but they typically differ in content: the depressed person may feel that she does not deserve to live, while the bereaved person may rather think of joining the deceased (for critical discussion see Ratcliffe, 2017).

The characteristic dynamics of grief is one important feature distinguishing it from depression. Zisook & Shear (2009, pp. 68-69) distinguish between *acute* and *integrated* grief. Acute grief, according to them, occurs early after the death of a close person and can involve a variety of painful emotions that tend to be omnipresent and have a high degree of intensity, as well as various dysfunctional behaviours and relative disinterest in other people and activities. The level of preoccupation with sadness and accompanying emotions in this form of grief may vary and, as Zisook & Shear (2009) observe, the experienced emotions tend to wane with time. Within a couple of months, acute grief tends to transform into integrated or abiding grief.

The latter commonly involves sadness, thoughts and feelings concerning the deceased, due to which the loss becomes accommodated in the autobiographical memory of the mourner. Integrated grief is less preoccupying and less overwhelming and the grieving person can find some ways of enjoying other aspects of life and engage with other people. At this stage, the mourner typically finds new and meaningful ways to continue their relationship with the deceased (Zisook & Shear, 2009; Fuchs, 2018).

The above discussion concerning the divide between grief and depression shows how modern psychiatry concevies of grief and struggles to differentiate it from depression. By putting it in a broader nosological context, the above material draws our attention to the nature of typical grief responses and can thus help understanding how they may in some cases develop into a pathological form. Although the suffering and existential crisis that are commonly involved in grief can be particularly intense and overwhelming, with time most people come to terms with their loss in one way or another. However, in some cases grief does not lead to any kind of resolution, suffering continues and the mourner cannot resume their life. Such cases are often labelled as *complicated grief* (CG). In the following section I introduce the notion of complicated grief and summarize recent attempts to establish diagnostic criteria for capturing it.

3. Complicated grief and recent nosological attempts

Drawing on the above sketched distinction between acute and integrated grief, Zisook & Shear (2009) characterize *complicated* grief as a result of "a failure to transition from acute to integrated grief" (p. 69). They estimate that complicated grief may affect about 10% of all grieving people and tends to last well beyond six months. As in normal grief, complicated grief may take various forms and involve a whole spectrum of painful emotions and behavioural symptoms. These can be captured by the so-called *separation* distress - continuing preoccupation with the deceased that involves recurrent bursts of painful emotions and intense longing for the deceased. The separation distress symptoms may be accompanied by ruminating thoughts about circumstances or consequences of the loss, anger, bitterness, feelings of estrangement and guilt - the so-called *traumatic* distress symptoms (Zisook & Shear, 2009; Zisook *et al.*, 2010). A good measure of CG symptoms is provided by the 19-item Inventory of Complicated Grief (ICG, Prigerson *et al.*, 1995). Complicated grief is indicated by the score equal or higher than 30 at the time of six months after the loss. Several studies suggest that the score qualifying for CG on that scale is correlated with impairment and negative health consequences, such as: sleep disturbances (Hardison *et al.*, 2005); daily routine disruptions (Monk *et al.*, 2006); increased risk for cancer, cardiac disease, substance abuse and suicidality (Prigerson *et al.*, 1999; Szanto *et al.*, 2006).

The unremitting nature of complicated grief poses a serious threat to the well-being and life of the mourner. Because of that, it has been argued that complicated grief deserves clinical attention (Lichtenthal *et al.*, 2004; Parkes, 2013; Jordan & Litz, 2014; Zisook *et al.*, 2010). Whether and how complicated grief should be addressed in psychiatry is a thorny issue and there may be various approaches to how such clinical attention could be fostered. Establishing a set of operationalized criteria for complicated grief may be one, but need not be the best solution. Given the dominant *operationalization approach* in psychiatry, where the focus has been on providing operationalized lists of criteria required for clinical diagnoses to improve their validity (APA, 2013; Andreasen, 2006), the main approach also in this debate has so far been on whether and how to design the adequate and reliable diagnostic criteria that would capture complicated grief (Lichtenthal *et al.*, 2004; Jordan & Litz, 2014).

It has been argued that the characteristic phenomenology, behavioural symptoms, trajectory, and clinical correlates of complicated grief form a distinguishable nosological unit that cannot be captured by any other currently established diagnostic unit, such as major depressive disorder (MDD), posttraumatic stress disorder (PTSD) or adaptation disorder (AD) (Lichtenthal

et al., 2004). Zisook *et al.* (2014) argue that establishing a separate nosological unit for complicated grief could foster research and professional help for individuals suffering from it by providing a commonly shared point of reference. Simon (2013) provides some evidence that CG may be responsive to targeted intervention of complicated grief treatment (CGT), where interpersonal therapy is combined with cognitive behavioural techniques.
Following the above arguments and desiderata, the need for diagnostic criteria for CG has been recognized by the authors of recent and forthcoming editions of the operationalized diagnostic criteria for mental disorders (DSM-5; ICD-11 Beta draft). The DSM-5 (APA, 2013) decided to include diagnostic criteria corresponding with the complicated grief symptoms in the section for *conditions that require further study*. The proposed criteria for the *Persistent complex bereavement-related disorder* require (APA, 2013):

A) Death of a close other
B) Since the death, at least one of the following on most days to a clinically significant degree for at least 12 months:
   1) Persistent yearning for the deceased
   2) Intense sorrow and emotional pain in response to the death
   3) Preoccupation with the deceased
   4) Preoccupation with the circumstances of the death
C) Since the death, at least six of the following on most days to a clinically significant degree for at least 12 months after the death:
   1) Marked difficulty accepting the death
   2) Disbelief or emotional numbness over the loss
   3) Difficulty with positive reminiscing about the deceased
   4) Bitterness or anger related to the loss
   5) Maladaptive appraisals about oneself in relation to the deceased or the death (e.g. self-blame)
   6) Excessive avoidance of reminders of the loss
   7) A desire to die to be with the deceased
   8) Difficulty trusting other people since the death
   9) Feeling alone or detached from other people since the death
   10) Feeling that life is meaningless or empty without the deceased or the belief that one cannot function without the deceased
   11) Confusion about one's role in life or a diminished sense of one's identity
   12) Difficulty or reluctance to pursue interests or to plan for the future (e.g. friendships, activities) since the loss
D) The disturbance causes clinically significant distress or impairment in social, occupational or other important areas of functioning
E) The bereavement reaction must be out of proportion or inconsistent with cultural or religious norms

The need for such criteria has also been acknowledged by the WHO. Following recent research on complicated grief (e.g. Parkes, 2013), the authors of the forthcoming version of the ICD-11 diagnostic manual proposed a narrative formulation that may underlie the upcoming criteria for the *Prolonged Grief Disorder* (Maercker *et al.* 2013).[1] The main difference between the two

1 The suggested formulation reads as follows: "Prolonged grief disorder is a disturbance in which, following the death of a partner, parent, child, or other person close to the bereaved, there is persistent and pervasive grief response

proposals for CG diagnostic criteria is that while DSM-5 criteria focus on the length of the time when the specific symptoms are present, the ICD-11 proposal requires also dysfunction or impairment resulting from the grief and leaves room for culture or situation specific variation in grief responses (Jordan & Litz, 2014).

The debate concerning the need for diagnostic criteria for CG continues (Bandini, 2015; Brinkmann, 2018). The DSM-5 suggestion was criticized for "representing a problematic compromise between competing grief theories that may lead to overdiagnosis and overtreatment" (Wakefield, 2013, p. 172). Other concerns are: pathologizing non-complicated grief (Stroebe *et al.*, 2001); simplifying individual and cultural variability in grief expression (Prigerson *et al.*, 2002); increased costs of complicated grief treatment, if it were provided to the estimated 20–33% of all people (Piper *et al.*, 2007).

Whether or not complicated grief will find its place in the forthcoming diagnostic manuals for psychiatric disorders, the consensus seems to be that it often requires some sort of clinical attention. The central dilemma in this discussion is whether and how to recognize and appropriately respond to complicated grief to avoid, on the one hand, the threat of medicalization of appropriate grief responses, and on the other hand, provide help to those who suffer from complicated grief (Zisook *et al.*, 2014). The success in this task crucially depends on gaining a better understanding of how a *divide between uncomplicated and complicated grief* can be drawn. In the following section I show that the insights from recent *phenomenological* work on grief can be particularly useful for this task and propose one, novel way of drawing the divide based on a conception on the dynamics and etiology of complicated grief.

4. Towards the phenomenological analysis of complicated grief

Recent research on the phenomenology of grief can be helpful in understanding the divide between uncomplicated and complicated grief. So far, this research has focused primarily on the underlying structure and dynamics of experiences involved in typical grief responses. In this section I go beyond recent discussions on the phenomenology of grief and focus on complicated grief. In particular, I argue that one of the core features of complicated grief is related to the absence or disturbance of *reintegration* processes geared towards establishing a new relation with the deceased. So understood, complicated grief can be identified by, among others, careful investigation into the dynamics of grief experience. Phenomenological analysis provides means for such an investigation and can foster various forms of clinical help for those who suffer from complicated grief. I start by summarizing recent phenomenological research on grief and then sketch my proposal for distinguishing typical grief from complicated grief.

In a recent paper on grief, Matthew Ratcliffe (2017) provides a phenomenological analysis of the structural differences between grief and depression experiences and argues that his approach can facilitate differentiating between the two in clinical practice. He proposes the following three differences between experiences of 'typical' grief and major depression. First, grief involves losing what he calls *systems* of possibility. The lost systems of possibility are

characterized by longing for the deceased or persistent preoccupation with the deceased accompanied by intense emotional pain (e.g. sadness, guilt, anger, denial, blame, difficulty accepting the death, feeling one has lost a part of one's self, an inability to experience positive mood, emotional numbness, difficulty in engaging with social or other activities). The grief response has persisted for an atypically long period of time following the loss (more than 6 months at a minimum) and clearly exceeds expected social, cultural or religious norms for the individual's culture and context. Grief reactions that have persisted for longer periods that are within a normative period of grieving given the person's cultural and religious context are viewed as normal bereavement responses and are not assigned a diagnosis. The disturbance causes significant impairment in personal, family, social, educational, occupational or other important areas of functioning." Maercker *et al.* 2013

those that depend on a relationship with a deceased person. "When one is confronted by that person's irrevocable absence, they collapse" (p. 4). The change in access to such possibilities, Ratcliffe argues, affects the way in which one relates to the world. Despite its overwhelming nature, grief typically does not imply the loss of access to what Ratcliffe calls *kinds* of possibility, which has a more global character and involves not being able to see future as open and full of possibilities and is characteristic for depression. Second, according to Ratcliffe typical grief involves dynamic perspective-shifting, whereas depression crucially involves an inability to shift perspective. While grief is typically experienced as a process with a certain dynamics, severe depression typically involves experiencing the world as static, unchanging and inescapable (p. 8). In depression, a person feels that they cannot adopt a perspective outside of the state they are in, hence the diminished ability to shift perspectives. This is quite different from experiencing conflicting perspectives in grief, where the presence and the absence of the deceased person and the contrast between the past and present world come to the fore in one's experience (see also Fuchs, 2018). Ratcliffe suggests that the above conflict between the world before and after the loss is a crucial element of the underlying structure of experience in grief.

Third, according to Ratcliffe grief typically involves a sustained ability to relate to and feel connected with other people, including the deceased, the capacity for which is substantially reduced in depression (p. 10). Depression often involves insurmountable isolation from people and the sense of not being able to enter into interpersonal relations. Grief, on the other hand, is often centered around the continuing experience of relating oneself to the deceased. In some cases grief and continuing preoccupation with the deceased may lead to deep isolation of the grieving person from other people and activities (p. 10). Nevertheless, the remaining sense of connection with the deceased is what sets experiences related to interpersonal connections in grief apart from depression where experiences of relating to others typically do not occur. In a brief passage (p. 4) Ratcliffe observes that some cases of grief may be characterized by the static and permanent experiences apparently similar to those in depression, in that they involve a global sense of disconnection from other people and from activities that did not involve the deceased person. Despite the apparent similarity between the static and overarching nature of complicated grief and depression, according to Ratcliffe, the two have different structures: "The stasis of depression involves feeling unable to relate to others, whereas the stasis of grief can be symptomatic of a resolute and unwavering second-person relationship with a specific individual, the deceased" (p. 11), he notes. The stasis experienced in cases of complicated grief is attributable to one's continuing to relate to a specific individual in a certain way, rather than failing to relate to anyone in that way (p. 12).[2] Ratcliffe's interesting observation strongly suggests that a phenomenological approach can be useful also in the investigation of complicated grief. However, the specific question of how to draw a divide between uncomplicated and complicated grief requires further, systematic discussion that could also suggest a possible etiology of complicated grief.

A further insight into the structure of experience in which the grieving person relates to the deceased and the world comes from Thomas Fuchs' (2018) phenomenological analysis of grief.[3] Fuchs observes that grief normally involves an experience of conflicting perspectives

2 Ratcliffe notes that other types of grief experiences may be more similar in structure to those that occur in depression. For example, in 'traumatic grief' (Neria and Litz, 2004), following the bereavement, a person is unable to experience 'affective trust' in things and, more specifically, in other people.

3 Fuchs (2018) identifies the following six elements that according to him build a common structure of the experience of grief: bodily expressions, alienation of world and self, temporality, ambiguous presence, readjustment ("grief work") and reintegration.

in which the deceased is both present and absent. The remaining personal connection with the deceased is in grief experienced as the interplay between their presence and absence. The experience of these conflicting perspectives is normally transformed in time throughout the adjustment process that occurs in grief. Readjustment (or "grief work", p. 54, see also Bonanno, 2001; 2009) is, according to Fuchs, a core element in the process of grief (54-55). The gradual process of adjustment involves an alternation between continuing "immersion in activities that implicate the deceased, and repeated experiences of absence and negation of one's expectations" (p. 55). Fuchs argues that the process of readjustment, when successful, typically does not result in detaching oneself from the deceased or cutting the bond with them (cf. Freud, 1917: 255). Rather, it is geared towards establishing a new inner relationship with the deceased that accommodates their presence but "does not get in conflict with external reality any longer" (p. 58). The experienced conflict or ambiguity between the presence and absence of the deceased can typically be resolved in the process of re-establishing one's relation with the deceased. Hence, according to Fuchs, the fundamental question in the process of grief is "Who am I now that my loved one is gone?". Addressing it may involve re-organizing one's identity and experiencing recurring waves of painful emotions that may take months or even years. Throughout this process the experienced ambiguity between the presence and absence of the deceased can be finally resolved by establishing a new connection. Fuchs proposes two complementary ways of reintegration with the deceased. One way involves various forms of *identification* (or incorporation) of the lost person. The mourner learns to preserve and incorporate the persisting presence of the deceased in the memory, instead of searching for it outside. The mourner may also at later stages start exhibiting some of the traits of the deceased in their own behavior. Another way of transforming the relation with the deceased involves various forms of *representation*. Fuchs mentions culture-specific memorial rites, commemoration days etc., as typical iconic and symbolic forms of representing the deceased that can preserve the continuing relation to them (p. 58). Both types of resolving the experienced ambiguity share the acknowledgement of the loss and provide ways of regaining the relation to the loved one.

The above presented phenomenological reflections on the nature of experiences involved in grief (as opposed to depression, Ratcliffe, 2017) and its experiential dynamics (Fuchs, 2018) can serve as a starting point for understanding the nature of complicated grief.[4] The conception of typical dynamics of experiences involved in typical grief responses, as described by the above phenomenological analyses, can be useful for the purpose of drawing the divide between uncomplicated and complicated grief.

On Ratcliffe's view, the *static* nature of the experienced preoccupation with the deceased and the experience of global disconnection from other people and activities are among the core characteristics of complicated grief. Although Fuchs (2018) does not provide any timeframe or normality conditions for the above described reintegration process in uncomplicated grief, his analysis may nevertheless provide some insights for the issue of complicated grief.[5] According to him, one of the core experiences in grief is the painful ambiguity between the presence

4 It is another question whether these accounts provide an exhaustive characterization of typical grief responses. For example, one could argue that not all typical grief responses involve existential crisis or the painful ambiguity of presence and absence, as suggested by Fuchs (for discussion see Bonanno 2009). A thorough discussion and/or criticism of these accounts of typical grief goes beyond the scope of this paper.

5 Fuchs may actually be rather skeptical about this notion. He suggests that Freud's view that detachment is a resolution in grief may have had an influence on what he calls pathologizing of grief in modern medicine. In footnote 13 (p. 55) he mentions the criteria for complicated grief as some of its symptoms. He also explicitly rejects engaging in a normative analysis of grief (p. 45).

and absence of the deceased and the world before and after the loss, which tends to paralyse mourner's life. As the above analyses suggest, grief as a process is geared towards resolving this ambiguity in a way that can allow the grieving person to return to their life *and* find a way of connecting with the deceased.

I would now like to propose that the disturbance of the above sketched processes of reintegration may be a key component explaining the occurrence of complicated grief.

The dynamic of grief typically implies that *reintegration processes*, i.e. those that lead to acknowledging the loss and finding ways of re-establishing the relation with the deceased, are at some point initiated and proceed with time (e.g. Klass *et al.*, 2014, Boelen *et al.*, 2006). As a result of this observation, I suggest that the divide between uncomplicated and complicated grief could rely on whether, when and how the grieving person enters the so described reintegration processes, where by re-establishing the relation with the deceased they can resolve, to some extent, the experienced, paralysing ambiguity of their presence and absence. Uncomplicated grief can turn into complicated one, when the *work of grief* or the typical progress in the reintegration is either not initiated or largely disturbed at some point. Based on these observations, I propose that the stasis experienced in many cases of complicated grief, as described by Ratcliffe, has a particular kind of source or etiology. It is as a result of *the disturbance in the processes of reintegration.*

There are several, possibly compatible reasons to think that the reintegration processes are a key element in the dynamics of grief and that their disturbance may result in its complicated forms. First, one can see the dynamics of grief as a psychological process guided by some instrumental norms. On that view, reintegration processes are an expression of our broader coping *resilience* system that works towards establishing a balance in our mental life in the face of stressful and traumatic events (e.g. Bonanno, 2009).[6] Second, there may be normative reasons for why reintegration processes are necessary in the dynamics of grief. For example, it could be argued that a prolonged grief is no longer fitting because after the death and with time the deceased starts playing a different role in one's life and the attitudes and emotions typical for grief, are no longer appropriate (Nussbaum, 2003, for discussion see: Marusic, 2018; Na'aman, 2019).

Without medicalizing either uncomplicated or complicated grief, the divide between the two can be drawn in terms of disturbances in the typical dynamics of grief where the processes of reintegration involving various forms of experience and their intensification occur. Phenomenological analysis is crucial for uncovering the presence or absence of individual *experiences* involved in the process of reintegration and for assessing possible disturbances. This is because phenomenological inquiry is particularly suitable to investigate individual experiences that concern: the mourner's acknowledgement of the loss, the way in which the deceased is represented by the mourner and the kind of relation that is established after the loss, the emotions that are associated with the continuing bond with the deceased (e.g. Klass *et al.*, 2014). Given the heterogeneity of such relations and grief experiences, in each and every case we might need to investigate the specific dynamics of reestablishing the relation with the deceased in the process of grief. Although disturbances in reintegration processes may take various forms and involve a variety of experiences, we can still see them as the underlying *structural* feature of complicated grief.

6 For a related discussion of resilience mechanisms and prolonged PTSD see Herman 1992, 2015. It is plausible that a more general resilience system may be involved in explaining one's individual capacity in dealing with different forms of stress and trauma. Thus, reintegration processes may be important for dealing with other types of situations and their presence may be one of individual's stable characteristics. I thank Laurence Kirkmayer and Elisabetta Lalumera for interesting comments on this matter.

A natural question to ask this point is *when* in the course of time we should expect the signs of reintegration processes and when we should be alarmed by their absence and suspect complicated grief? The answer, unfortunately, is far from straightforward. Since the dynamics of grief may depend on various contextual factors, such as mourner's psychological resources to deal with the loss, the relationship they had with the deceased or the cultural context, this proposal does not provide an answer to the question about the typical timeframe of the reintegration processes involved in grief. Different constellations of these and other relevant contextual factors may place different requirements for the reintegration processes. For example, a mourner who has a propensity for depressed mood and had a particularly complicated relation with the deceased may face different challenges in the process of grief than a mourner who was relatively close with the deceased and could prepare for their loss by following their illness for some time. Grief may be a genuinely universal phenomenon, but the work of grief and experiences involved in readjustment processes may vary quite a lot. Different constellations of contextual factors and different challenges seem to suggest that specific reintegration processes may require different timeframes. For this reason, using a single time threshold to draw the divide between complicated and uncomplicated grief may be artificial and uninformative.

The above observation about the expected variance in the timeline of the reintegration processes in grief has implications for drawing the divide between uncomplicated and complicated grief and fostering clinical approaches to the latter. Without a specific time threshold, the prospects for providing strict diagnostic criteria for complicated grief may seem particularly dim. However, it is worth noting that the above proposal emphasizes one core aspect of the divide between uncomplicated and complicated grief, without actually taking a stance on the issue of diagnostic criteria as such. Given the expected diversity in the reintegration processes involved in grief, neither prolonged suffering in grief (the time aspect) nor the intensification of some of the experiences involved in grief, as suggested in the DSM-5 and ICD-11 research criteria, may be sufficient for capturing the divide between uncomplicated and complicated grief.[7] Some difficult reintegration processes may take particularly long time, and understandably so, and, respectively, some may result in particularly intense symptoms. Because of that, the criteria listed in both manuals may be informative for understanding experiences of the grieving person to the extent that they can be seen as an expression of the underlying problems with reintegration. As I have argued here, in order to understand complicated grief we should go beyond symptoms mentioned in such criteria and search for factors indicating whether reintegration processes in grief take place. This could be done with the use of a thorough clinical interview investigating, among other, the relation with the deceased, ways of relating to them and remembering them, typical emotions, as well as the nature and the amount of preoccupation with the loss. I have suggested that the best way to investigate these questions is by means of phenomenological analysis. In light of information gathered in such interviews we may be able to see a particular experience of grief as either transitioning or as stagnant. It is only in the dynamic context of readjustment and reintegration processes that the stasis of complicated grief can be identified.

5. Conclusions

I have discussed recent research in the phenomenology of grief and depression (Ratcliffe, 2017; Fuchs, 2018) and suggested that a phenomenological approach may be particularly useful for the task of drawing a divide between uncomplicated and complicated grief. I have argued for

7 The ICD-11 proposed suggestion of such criteria tries to avoid some aspects of this problem by explicitly by acknowledging cultural diversity in the assessment of CG.

a new account of complicated grief and suggested that a promising way to draw the divide is to look for the presence of *reintegration* processes geared towards acknowledging the loss and establishing a new relation between the mourner and the deceased. The proposal is a starting point for a much needed, full account of complicated grief.

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WARDENS AND PRISONERS OF THEIR MEMORIES: THE NEED FOR AUTOBIOGRAPHICAL OBLIVION IN HIGHLY SUPERIOR AUTOBIOGRAPHICAL MEMORY (HSAM)

abstract

Human consciousness is a finite entity; therefore, memory must be selective: remembering must also mean being able to forget. In 2006, James McGaugh documented the first known case of hyperthymesia*—a syndrome that affects a very limited percentage of the world population. The main symptoms of this mental disorder involve the concept of memory stuck in the past, where the individual is imprisoned by his or her own memories, and any projection towards the future is precluded. The inevitable change produced by the flowing of time naturally helps people to find reasons to live and to search for a sense of being in the world. The present study puts forward a phenomenological approach to hyperthymesia in the quest for a natural, healthy form of oblivion, or the ability to forget. Through existential analysis, it could be possible for the individual to recover the natural and necessary structure of Dasein.*

keywords

temporality, hyperthymesia, Daseinanalyse, memory, oblivion

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1. The role of memory in the identity construction process

When the individual identity of each human being is created, memory guarantees the continuity of perceptions, emotions and interpretations of reality. This mnemonic function allows people to carve out "the autobiographical Self" (Damasio, 2010, p. 210), a self-representation formed through a person's memories and reflection on his or her past life. According to *Le sens de la mémoire* (J.Y.-M. Tadiè, 1999), the inner identity is therefore created starting from the autobiographical memory.

The story of the individual identity is variable and fluid, as a dynamic is put into operation that is both teleological and retrospective at the same time (Heller, it. trans. 2017, p. 10). Its final purpose or *causa finalis* (Aristotle) is the present situation as a reinterpretation of the past. According to À. Heller, no one creates their autobiographical story starting from their past self (2017, p. 13). By this, Heller does not intend that the individual needs to trace the deterministic sequence of facts in the past that have led to the present; the main idea is that "the past is at the service of the present and that the present is the key to interpret the past" (Ricoeur, 2017, my translation). The Self is not homogeneous, but it aspires to a certain level of uniformity directly dependent on the need to find new meaning in life through the mnemonic trace (Heller, it. trans. 2017, p. 20). It is quite clear that it does not seem reasonable to ask whether such mnemonic traces are true or false; it sounds more reasonable to talk about *authentic* or *inauthentic* memories. The memories we retrieve of our own accord should not remain fixed and unvaried; we reinvent our personal past by sieving through our memories. As Bergson clearly explains, the reason why we identify ourselves in the *images-souvenirs* [memory-images] (Bergson, 1991, p. 90) is that as we recall our past, we adjust its coherence to our current personality. F. Cimatti claims: "it is the act of remembering that creates the memory, not the other way round" (Cimatti, 2016, p. 19, my translation).

2. Hyperthymesia: the story of Jill Price

The main symptoms of memory disorders displayed in reported cases are mostly a form of disorientation; in less serious cases, they mainly alter the perception of time, while more serious manifestations might lead to an impaired self-identity.

Hyperthymesia or hyperthymestic syndrome (HSAM, Highly Superior Autobiographical Memory[1]) makes those affected unable to forget any part of their past lives. These patients can

1 Parker, E.S., Cahill, L. & McGaugh, J.L. (2006). A Case of Unusual Autobiographical Remembering. *Neurocase: The Neural Basis of Cognition*, 12(1), 35-49; Ally, B.A., Hussey, E.P. & Donahue, J.M. (2013) A case of hyperthymesia: rethinking

retrieve any memories in vivid detail, going back even to their first 12 days of life. Individuals cannot usually trace back nor recall memories before the age of 3: the brain of a child is likely to receive billions of inputs, meaning that conserving every memory without selection would be dysfunctional for the normal process of adaptation to the world.
The syndrome was first described in the 2006 publication by the neurobiologist J.L. McGaugh[2]. It presented clear differences to the cases reported by Lurija in 1968, such as the cases of SS and others commonly known as 'superior memory individuals'[3]. Whereas SS could memorise long strings of digits and numbers, those affected by hyperthymestics cannot (Parker *et al.*, 2006, p. 36). Scientists started to pay closer attention to the case of Jill Price in 2000, when she decided to get in touch with McGaugh, in her effort to turn her life around and try to understand what was happening to her mind.
The case of Jill Price—well known in the literature as AJ, *the woman who can't forget*[4]—is the first reported case of hyperthymesia. The syndrome of 'super memories' causes "continuous, automatic autobiographical recall", in a manner that is immediate and quick rather than deliberate or reflective. Jill's memories were vivid and full of emotion, "*uncontrollable, and totally exhausting*" (Price, 2008, p. 5). According to Jill's report, her memories became "shockingly complete" (p. 1) probably at the time of her first house move. To her, any change felt unacceptable. She felt a "desperate need to stay" (p. 146) in her physical space, in what appeared to be an attempt to stop time. Hence, Jill had become a prisoner of her memory (p. 3): "the more pressure I felt to move on and start a new life, the more emphatically I clung to my past because, I think, the future for me was all about a continuation of the past" (p. 144).

3. Neuropsychological research on hyperthymesia

Memory tests have shown that patients like Jill are unable to remove any autobiographical memory, either semantic or episodic. Additional tests have also excluded the diagnosis of confabulations, namely "a falsification of memory occurring in clear consciousness in association with an organically derived amnesia" (Berlyne, 1972, p. 38).
Moreover, hyperthymestic patients show remarkable difficulties in controlling anxiety, together with obsessive-compulsive tendencies, which would explain their maniacal propensity to 'hoard' memories and why they refuse to let them go.
Finally, the consequence of this overload of memories is that hyperthymestics struggle to focus on present situations, and they are not able to project themselves towards the future. The memory capacity of hyperthymestics is solely "superior" with regard to autobiographical retrieval; therefore, their academic achievements are within the average range. This marks an additional difference between hyperthymestics and the case studied by Lurija.
Recently, neuropsychological research on hyperthymesia has achieved important results, and it seems that it might be able to provide a clearer medical explanation for this disorder in the

the role of the amygdala in autobiographical memory. *Neurocase: The Neural Basis of Cognition*, 19(2), 166-181; Patihis, L. (2015). Individual differences and correlates of highly superior autobiographical memory, *Memory*, 24(7), 961-978; Santangelo V., Cavallina C., Colucci P., Santori A., Macrì S., McGaugh J.L. & Campolongo P. (2018). Enhanced brain activity associated with memory access in highly superior autobiographical memory. *Proceedings of the National Academy of Sciences of the United States of America* (PNAS), 115(30), pp. 7795-7800.

2 See Parker E.S., Cahill L. & McGaugh J.L. (2006). A Case of Unusual Autobiographical Remembering. *Neurocase: The Neural Basis of Cognition*, 12(1), pp. 35-49.

3 See Lurija A.R. (1968). *The Mind of a Mnemonist. A Little Book About a Vast Memory*. New York, NY: Basic Books. Solomon Šereševskij (well known as SS or 'the mnemonist' after Lurija's publication) was able to memorise a whole set of feelings; his form of memory is called 'synaesthesia', while HSAM affects autobiographical memory, both in its semantic and episodic components.

4 In 2008, Jill wrote her autobiography, *The Woman Who Can't Forget. The Extraordinary Story of Living with the Most Remarkable Memory Known to Science*.

future. At present, the neural correlates of the syndrome have been identified in a specific area of the human brain, the prefrontal-hippocampal gyrus, which consists of the prefrontal-medial cortex and hippocampus; the former is involved in the remembering process by accessing the mnemic cerebral trace, and the latter is where our memory is generally deemed to be located. Hyperactivity in these cerebral areas may explain the difference between hyperthymestics and cases such as SS: the former may have access to a more consistent number of traces than control subjects (*access phase*), whereas during the *retrieval phase* cerebral activity is the normal range:

> we did not observe any neural difference between subjects with HSAM and control subjects during the reliving phase. In contrast, the findings suggest that the increase in neural activity was specifically involved in accessing AMs, recruiting a left-lateralized frontoparietal network [...] in subjects with HSAM only during memory access (Santangelo *et al.*, 2018, p. 4).

4. A phenomenological perspective

Unlike a medical-cognitive approach, existential analysis (*Daseinanalyse*), aspires to analysing space and time as experienced by the individual not as logical categories but, as Paci describes them[5], by living and feeling the space around us, and by measuring existential time, not by a clock but by how we live and experience it. It is in such a framework that we experience our memories and expectations, together with the structures of our relationships with others—possible or impossible, real and unreal—and the necessity and contingency of these relationships.

This specific perspective allows us to understand Jill's story better. She thought there were only two stable elements in her life: being afraid of death and hating chaos. Throughout the course of her entire life, she has tried to make sense of both physical objects and memories. According to Jill's report, this can probably be traced back to a specific childhood memory:

> my mom and Diana and a third friend of theirs, Patty, were talking about Diana's father having gone into the hospital for surgery and died. What stuck most in my mind was that they kept saying he had 'wrapped things up' and 'got things in order' [...] it seemed the only thing alleviating how upset they were that Diana's father was never coming back: he got his things in order (Price, 2008, p. 86).

This mnemonic feeling may provide a plausible explanation to the phenomenon of "chaining" (Price, 2008, p. 27); in other words, Jill's unusual way of recalling episodes of her life begins in a random way, but the chain which forms is no longer random since the memories are linked by their date. Her brain makes her think about the same date in different years, not about one moment before or after the one she recalled. Moreover, "emotionally the idea of distortions is upsetting" (Price, 2008, p. 129); this may be the reason why house moving is both unacceptable and unsettling for her.

Jill's memory seemed unable to ensure active and healthy oblivion, or the ability to forget. A kind of "*selective oblivion*" (Colonnello, 2017, p. 48, my translation) should filter memories in order to only hold onto those which might have some bearing on future experience. Instead, Jill got stuck in a present that was linked neither to the past nor to the future. She seemed to deny temporality and its natural flow, rejecting at the same time the idea of letting go of those

5 See Paci E., (1971). Preface to it. trans. to Minkowski E., (1970) *Lived Time. Phenomenological and Psychopathological Studies*, it. *Il tempo vissuto. Fenomenologia e psicopatologia*. Torino, IT: Einaudi, p. XXXII.

memories which relentlessly filled her mind.

5. A proposal for an existential therapeutic approach

According to Ricoeur's theory, confrontation with the reality of death - that is, the deaths of other people—is the first step to release the *Dasein* (Heidegger's term for the body-mind paradigm in human beings, present *here and now* i.e. existence) from the sense of the pointlessness of its "thrownness", i.e. *"being-thrown-in-the-world"*. Once we realise that *death does not happen to those who die, but to those who grieve*, it becomes possible to consider our *thrownness* as a blessing. Once freed, *Dasein* recovers its "*dimension of awaiting"*, interpreted by Ricoeur in the Augustinian concept: "I hope to keep alive up until death: *up until* death - neither *with a view to* nor *towards* death" (Ricoeur, 2017, my translation).
During a period of family hardships, Jill needed to undergo psychotherapy. Until then, she had never told anyone about how her memory worked. She thought that it was impossible to communicate; she tried dominating her memory by writing down memories in diaries, but she never managed to make a sense out of them that could feel personal to her.
The human experience of the world is completely temporal. As a result of this, temporality structures the living body, which is changed by such experience; it also structures the language used by people to communicate. As custodian and dweller of his or her body-and-mind, the whole person lives and inhabits his or her *timelanguage* [Tempolinguaggio], i.e. the narrative structure of human identity (Biuso, 2013, p. 73, my translation). Consequently, the body-and-mind structure becomes able to rewrite its broken and fragmented identity. In fact, the body is always dynamic, present here and now and projected towards the future. Hence within the living memory, the future shapes the past, not necessarily by adhering to the accepted sequence of past, present and future, but by creating its own temporality. (Weinrich, 2010, p. 203).
In a specific and reinterpreted moment in time and space, experience (*Erlebnis*) is brought back into the flowing of time [*Erfahrung*]: "totally tied to temporality, the sense [Erlebnis, *n.d.a.*] structures the meaning of human finitude" (Biuso, 2013, p. 90, my translation). Both psychoanalysis and existential analysis take advantage of a form of linguistic and narrative approach, which are not in contrast, but in continuity. It is the distinction between the subconscious and consciousness that marks the difference between these two approaches. Unlike the Freudian *talking cure*, which claims "where id was, there ego shall be" (Freud, 1933, p. 4687), Daseinanalysis invalidates this one-directional path from past to present: according to Daseinanalysis, the present gives new meaning not only to the *past* [*Vergangenheit*] but also to the *having been* [*Gewesen*].
Within the Daseinanalysis framework, somatic symptoms are clear expressions of an unresolved and demanding sorrow which can only be cured by allowing for a natural time flow. Indeed, time is the last hermeneutic resource for reaction: while people talk to the analyst, things to come to light that have been bottled up and unsaid; the flowing of time allows this. Little by little, patients feel relieved, "in order to rewrite in retrospect the chain of events which threw their volition into the dark heaviness of the past" (Colonnello, 2017, p. 121, my translation). The final aim is for the entirety of the individual's *body-mind* to 'dive into' its natural temporality.
Throughout long months of analysis, Jill started to let time flow again and dived into her own temporality: "I felt that I was making a fresh start" (Price, 2008, p. 172). This is precisely and essentially the aim of the existential analysis: "to spread out these works [experiences] before oneself or before others is to see them fixed, shrunken, tarnished, extinguished" (Minkowski, 1970, p. 157); such works are restored to healthy oblivion—the other side of remembering.
This constitutes the turning point, where *Dasein* discloses a new point of view and a different perspective in which it gains awareness of the flowing of time. A new sentiment [*Stimmung*]

towards the past comes to life; the need for the past to stay petrified recedes, and patients become able to go beyond it by recovering a range of possibilities within their experiences. The narrative dimension of existential analysis is generally believed to offer a unique opportunity: we live *one more time*, repeating the autobiographical experience and allowing the body to become memory and temporality, because "memory does not consist in a regression from the present to the past, but, on the contrary, in a progress from the past to the present" (Bergson, 1991, p. 239). This is the essential therapy for people to be able to forget again.

6. Experiencing human finitude

Jill's life arrived at its turning point when she met her husband. The change she experienced when her husband died can be explained by recalling the concept of "*élan*", well described by Minkowski:

> as soon as I think of an orientation in time, I feel myself irresistibly pushed forward and see the future open in front of me. And this fact of "being pushed" [...] means that I tend spontaneously with all my power, with all my being, toward a future [...] At the same time, [...] I am immediately presented with the progression, in the same direction, of everything around me that has any relation whatever to time, that is to say, in the final analysis, the entire universe (Minkowski, 1970, p. 38).

Facing the impossibility to turn back time and come back from death, human existence begins a reconfiguration of its own way to experience the world:

> death, in putting an end to life, completely circumscribes it, all along its way. It transforms the order and texture of the events of life into a life [...] it reveal[s] to us the notion of *a life* in life - and [it] puts us face to face with our own life and our own mortality (Minkowski, 1970, pp. 133-134).

In order to understand the thesis supported by Minkowski, we should bear in mind the fact that in this instance death is not an experience which levels any difference between people. Psychiatrists have hardly ever attempted "to outline an affective psychology of death; from this point of view, we always see it through our own personalities" (Minkowski, 1970, p. 131). Free from the emotions we felt for the deceased person, death is not the experience of grieving, but the moment of time when life gets its fulfilment. Death is a part of life; it is not the opposite of life.
Once the awareness of her husband's death was recovered, Jill changed the way she experienced time as well; in fact, she felt free from the need to constantly record her memories in diaries, as she no longer felt trapped in a perception of madness. When she resorted once more to writing down her memories, she did so in a more selective fashion and free "from my fear of the future and my obsession with the past" (Price, 2008, p. 222). She also became more aware of her mental disorder and had high hopes for the future of people who struggle with pathologies related to memory, as great progress has been made by researchers in the field. She ended her story on a positive and optimistic note: "I intend to use the strength and learning I have gained to work toward the day when I am no longer the prisoner of my memory, but rather I am its warden" (Price, 2008, 248).

7. Conclusions: therapeutic benefits offered by 'oblivion'

The therapeutic path which allows people to look back on life experiences in a different way requires oblivion. Remembering is useful at first; later we need to forget: "the most important step of clinical therapy is not so much *helping a person to remember what he or she is not able to remember,* as especially to *forget what she is not able to forget*" (Carignani, 2016, p. 102, my

translation).
Memories need to be reinvented through oblivion. On one hand, this is possible because of the natural *apoptosis* (the programmed death of a cell) of the neurons. Moreover, there are specific neurotransmitters which make the constant renewal of synapses and the related paths for the recovery of the existential narration necessary. On the other hand, the simultaneous mental activity of the Self—which should not be seen as a mere neuronal functionality—destabilises the biological trace itself, so that it will be modified by time, and by old and new memories.
We can conclude that oblivion is the natural limit of memory. Just as oblivion belongs to the authenticity of memories, so the perspective of the end belongs to the authenticity of life.
In the light of the close connection between remembering and forgetting, we can clearly understand how hyperthymestics can benefit from writing down their memories. Indeed, Jill's story shows that writing procures some sort of relief because it seems to make memories immortal and offers a way to elude the necessary flowing of Time. Furthermore, transposing memories in narrative form compels the individual to select them more carefully, absorbing some and discarding others. It is similar to the cell metabolism process, but it concerns both body and mind, because it is life itself that decides such criteria of memory selection. Through the experience of its finitude, life is projected towards the future, eventually providing a new sense to the past that is coherent with the changes imposed by Time.
It is the selection and preservation of memories, and their consequential categorisation in the unity of consciousness flowing homogeneously, that structures the way human beings are not some kind of "garbage dump" (Borges, 1998, p. 135) into which a river of stimuli is poured but active spectators of the wonders of the world.
Humans are capable of taking back control over their personal lives. They are also able to come to terms with the finitude of life itself, assigning to the irreversibility of time a meaning that is stable and unstable at the same time, because "the meaning is fleeting, the truth is a wanderer" (Biuso, 2009, p. 204, my translation).

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SECTION 2

SECTION 2

SCIENCE IN PROGRESS. NEW CONCEPTUAL FRAMES FOR EMPIRICAL PSYCHOPATHOLOGY AND FOR PSYCHIATRY

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DELUSION, REALITY AND INTERSUBJECTIVITY: A PHENOMENOLOGICAL AND ENACTIVE ANALYSIS[1]

abstract

According to current representationalist concepts, delusion is considered the result of faulty information processing or incorrect inference about external reality. In contrast, the paper develops a concept of delusion as a disturbance of the enactive and intersubjective constitution of a shared reality. A foundation of this concept is provided by a theory of the objectivity of perception which is achieved on two levels: (1) On the first level, the sensorimotor interaction with the environment implies a mobility and multiplicity of perspectives that relativizes the momentary point of view. (2) On the second level, the social interaction with others implies a virtual shifting and contrast of perspectives which helps to overcome a merely subject-centered worldview through participatory sense-making.
On this basis, the alteration of experience in beginning psychosis is phenomenologically described as a subjectivization of perception, resulting in an overall experience of self-centrality and derealization. Delusion then converts the disturbance of perception into a reframing of the perceived world, namely an assumed persecution by mundane enemies. Through this, a new sense-making is established, yet in a way that is fundamentally decoupled from the shared world. The possibility of intersubjective understanding is thus sacrificed for the new coherence of the delusion. Further implications of the loss of the intersubjective co-constitution of reality are analyzed, in particular related to disturbances of communication.

keywords

delusion, perspective-taking, shared background, enactivism, subjectivization, self-centrality

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Normal convictions are formed in a context of social living and common knowledge. Immediate experience of reality survives only if it can fit into the frame of what is socially valid or can be critically tested .... Each single experience can always be corrected but the total context of experience is something stable and can hardly be corrected at all. The source for incorrigibility therefore is not to be found in any single phenomenon by itself but in the human situation as a whole, which nobody would surrender lightly. If socially accepted reality totters, people become adrift.
(Jaspers 1968, p. 104)[1]

1. Introduction

As Jaspers indicates in this quotation on incorrigibility, delusions may not be regarded as mere disorders of thinking, reasoning or reality-testing. Rather, they can only be explained on the background of the *totality of a patient's situation* which is characterized by a dissolution of "socially accepted reality". In contrast, the currently predominant psychiatric paradigm is based on a conception of the patient as an enclosed individual with a more or less clearly defined brain dysfunction. On this view, delusions seem to be the product of faulty neuronal information processing, or of "broken brains". After all, delusions misrepresent reality, so they must somehow be "in the head", usually being defined as "false beliefs based on incorrect inference about external reality" (APA 2000, p. 765).

On the other hand, this can hardly be the whole story, for even the current definitions of delusion contain a cultural clause: convictions that seem bizarre from a Western viewpoint may well be shared with others in a corresponding cultural background and then give no justification for a diagnosis of delusion (APA 2013, p. 103). This already shows that the essence of delusion cannot be just a wrong content or representation of reality. In this paper, I will argue that delusions should rather be considered as intersubjective phenomena. Instead of reifying them as localizable states in the head of the patient, a phenomenological and enactive approach regards delusions as disturbances of intersubjectivity, namely on two levels:

1. Delusions manifest themselves primarily as *failures of communication:* While interacting with the patient, one realizes that it is not possible to arrive at a shared

1 Emphasis added. - The term "Each single experience" is my own translation from the original "*Jede einzelne Erfahrung*," whereas Hoenig's translation "Individual experience" is misleading, to say the least.

definition of the situation through the usual giving and taking of reasons or mutual perspective-taking.

2. On a deeper level, delusions may be regarded as a *failure to co-constitute reality*, that means, they are characterized by a *disturbance of transcendental intersubjectivity* as the condition of possibility for mutual understanding. This has been variously interpreted in terms of a loss of background certainties, common sense, we-intentionality, or basic trust (Rhodes & Gipps, 2008; Stanghellini, 2004; Fuchs, 2015a, b), or in the concept of schizophrenic quasi-solipsism (Sass 1994).

The second characterization applies in particular to the delusions found in schizophrenia, which Jaspers called "delusions proper" (Jaspers, 1968, p. 96) or "primary delusions" (p. 98), and which he contrasted with the "delusion-like ideas" of patients with paranoia (today delusional disorder), psychotic mania or depression. The latter he regarded to be in principle psychologically motivated and understandable: In paranoia, for example, it is mainly suspicion and anxiety that lead to delusion of persecution; in mania, grandiose delusions are an expression of the underlying mood, and so on. In contrast, primary delusions involve a "transformation of basic experience which we have great difficulty in grasping" (p. 95). In recent phenomenological psychopathology, this difference has been interpreted in Heideggerian terms, contrasting "ontic delusions" (i.e., mundane delusions, belonging to the experienced world, such as in paranoia) with "ontological delusions" (referring to altered structures of subjectivity as the transcendental basis for experience itself) (Sass, 1992, 2014; Sass and Byrom, 2015; Parnas, 2004). It is the latter kind of delusions that I will deal with in the following.

In order to develop an intersubjective and "inter-enactive" concept of delusions, I will first give an account of (a) the constitution of reality through enactive perception, (b) its co-constitution through "inter-enaction", that means, through the communicative negotiation of viewpoints and mutual perspective-taking on the one hand, and through implicit or transcendental intersubjectivity on the other hand. For this account, I will use both phenomenological and enactive concepts. The guiding question is how the objectivity of perception and the shared reality are (co-)constituted. This will serve as a foundation for analyzing the disturbance of reality constitution in schizophrenic delusion.

The account I will offer here is thus closely linked with recent work on the enactive constitution of a shared world (Stewart *et al.*, 2011; Durt *et al.*, 2017) and the application of enactivism to psychopathology (Drayson, 2009; Colombetti, 2013). Traces of such an intersubjective view can be found in various 20th century authors (e.g. Janet, 1926; Glatzel, 1981, pp. 167ff.). It is also clearly present in more recent works by Louis Sass (1992, 1994, 2014), who applies concepts from William James, Heidegger, and Wittgenstein to analyze the subjectivistic and sometimes quasi-solipsistic nature of schizophrenic delusions as a fundamental withdrawal from the shared practical world. Drawing from these authors, my approach puts particular emphasis on the assumption that the sense of reality is inherently bound up with our sensorimotor interaction with the environment and our interactions with others, that means, on the enactive and interenactive constitution of the shared world.

2. The objectivity of perception

2.1 Embodied engagement in the world

The standard account of delusions regards them as "mistaken beliefs" about objective facts in the world that are held with incorrectable certainty. The underlying assumption is that there is an external reality which is only given to us through representations in our mind. This applies to *perceptions* (which are only images produced by the brain and could therefore also be called "true hallucinations") as well as to *beliefs* about external states of affairs. This

fundamental assumption of an internal representational domain separated from an external reality is challenged by the enactive approach to cognition (Varela, Thompson & Rosch, 1991; Thompson, 2007). From an enactive point of view, reality is not something predetermined and external, but continuously brought forth by a living being's *sensorimotor interaction* with its environment. In the case of humans, this includes the constitution of a shared reality through *social* interactions such as taking part in conversations, mutual understanding and co-operative action. Importantly, both kinds of interaction over time also create fundamental bodily and mental structures, habits and certainties, which serve as a background of each encounter with concrete situations and enable our immediate, pre-reflective and practical grasp of the world. Let us look at these processes more closely.

According to the enactive approach, living beings do not passively receive information from their environment which they then translate into internal representations. Rather, they constitute or *enact* their world through a process of *sense-making*: By actively searching and probing the environment for relevant cues - moving their head and eyes, touching a surface, walking towards a goal, grasping a fruit, etc. - they make sense of their surroundings. In other words, they constitute their experienced world or *Umwelt* through their ongoing sensorimotor interaction and embodied coping with the environment (Varela *et al.*, 1991; Thompson, 2005, 2007; O'Regan and Noë, 2001). Hence, to "perceive" (from Latin *per-cipere* = to grasp through) is only possible for a living being that is able to actively move and to grasp for something. Even in seemingly pure perception, a living organism is not in opposition to the world, but always already entangled with it. But if the world is constituted for us through our own embodied and interactive sense-making, how can this entanglement result in the objectivity of perception which, after all, apparently presents us the objects themselves? How does perception overcome mere subjectivity?

An essential presupposition for this objectivity is the constant shifting of perspectives through *self-movement* (such as moving around an object, grasping and turning it, etc.) which creates changes and contrasts depending on one's own action.[2] For this, the body's movement has to be accounted for in perception, that is, it has to be *self-referential* or *self-given*. Thus, the movements of the eye are taken into account and compensated by the sensory system through "efference copy" mechanisms, for otherwise the perceived surroundings would start to sway with every eye movement.[3] Self-referential movement, or as it may also be termed, "agentive kinesthesia," combined with the active shifting of one's point of view, is a crucial means of establishing an objective relation to the environment, namely through an interconnection of the organism's *spontaneity* and *receptivity* which mutually relativize and specify each other (on this, see also Blankenburg, 1991).

Importantly, this skilled sensorimotor interaction with the environment over time becomes part of the body's habitual knowledge and anticipations. With growing familiarity, the objects wished and searched for are already prefigured by the sensory system as perceptual

2 There are a number of other characteristics of embodied perception which contribute to the "realism" of experience, but are left out of account here. Among them are the establishment of shape and colour constancy, the intermodal integration of the different senses, the resistance of objects, and others. See also O'Regan and Noë (2001) and van Duppen (2016).

3 Efference copies from the brain motor areas "report" imminent movements to the sensory system, thus preparing it for the change in the perceptual field resulting from the body's action (cf. Holst & Mittelstaedt, 1950). Interestingly, if one moves one's eyeball *externally* (e.g., by softly pressing it with the finger from the side, with the other eye closed), the perceived environment in fact starts to sway. In this case, the eye movement is not self-referential.

schemas *(Vorgestalten)* which are projected into the environment, so to speak, to facilitate the identification of the objects.[4] Moreover, what the environment enables and affords, and how it changes depending on our actions, is already anticipated in our perception. Thus, as Husserl (1950, pp. 91ff.) has shown, we perceive a house not just by looking at its visible side, but also by "appresenting" its invisible aspects, which we implicitly anticipate to behold once we move around the house. The actual aspect thus includes and reflects the totality of possible aspects making up the unity of the full object. Therefore, my experience of the reality of an object depends on a *horizon of possible further experiences* of this object - a horizon that is derived from my former dealings with it, but which is now implicitly given or "appresented". *Object permanence* as acquired through sensorimotor interaction in early childhood (Piaget, 1955) is a crucial part of this: The objects will continue to exist also during my absence. This always present horizon enables my perception of the *object itself* instead of a merely momentary impression or image. Of course, my anticipating perception is constantly either confirmed or corrected by the ongoing interaction with the objects, that is, by further shifts of my perspective.

2.2 Intersubjective reality

As we have seen, perception does not present images or appearances, but the full objects, for it is part of our embodied engagement in the world and not just passively being impressed. However, there is still another level of objectivity which is characteristic of human perception. For in perceiving the house, we experience it not only as an object of our possible engagement or skilled coping (moving towards it, opening the door, going upstairs, and so on), but also as *independent* of our present perception. The objects are not only there "for me," in the immanence of my subjectivity, they are given *as such*. Berkeley's "*esse est percipi*" certainly does not correspond to our experience of perception: Nobody would get the idea that the objects only emerged through his perception, and without it would vanish into nothingness. How is this independence possible?

Husserl's later answer to this question referred to the intersubjectivity of perception: The house that I see is also *a possible object for others* who could see it simultaneously from other sides. Thus, the object gains its actual objectivity, that is, its independence from my own perspective, through the *implicit presence of a plurality of other perspectives*. Husserls also speaks of an "apperceptive horizon of possible experiences, my own and those of others," which turns the mere subjectivity of my experience into an "*open intersubjectivity*" (Husserl, 1973b, p. 107, p. 289; see also Zahavi, 1996, pp. 39ff.). Thus, there is again a horizon of perception, but one that is shared with others. The plurality of possible subjects corresponds to the plurality of aspects that the objects afford. Moreover, in perceiving the objects, I implicitly rely on their meaningfulness for others, that means, on the general structure of significances and affordances of our shared world. In perceiving, we always enact and inhabit a space that we share with others.

More fundamentally, according to Husserl, objectivity depends on *transcending my private sphere of subjectivity* which primarily occurs in the encounter with the other (Husserl, 1973a, p. 110; 1973b, p. 277; on this, see also van Duppen, forthcoming). The other is always beyond my immanence, another sphere and center of perspectival consciousnes which remains inaccessible to me and thus constrains my own subjectivity. It is this *alterity* of the other which grounds my experience of objectivity, indeed my "perceptual faith" (Merleau-Ponty, 1968,

4 This may sometimes lead to illusions, for example when searching for mushrooms and mistaking a shiny leave for a mushroom, or when expecting to meet an acquaintance and mistaking another person in the distance for him.

p. 19) in a world that exists independent of my own perception. Because this intersubjectivity is implicit or transcendental (the "condition of possibility" of an objective reality to exist), the others need not be explicitly present - even Robinson Crusoe on his island saw it always "with others' eyes". In a fundamental sense, the objects and events in the world are always public, not private (Husserl, 1973c, p. 5); they belong to a *shared world*, even if they are only perceived by myself in the concrete case. This is also emphasized by Sartre, summing up Husserl's view:

> The Other is present in it [i.e., in the world] not only as a particular concrete and empirical appearance but as a permanent condition of its unity and of its richness. Whether I consider this table or this tree or this bare wall in solitude or with companions, the Other is always there as a layer of constitutive meanings which belong to the very object which I consider; in short, he is the veritable guarantee of the object's objectivity.... Thus each object far from being constituted as for Kant, by a simple relation to the subject, appears in my concrete experience as polyvalent; it is given originally as possessing systems of reference to an indefinite plurality of consciousnesses; it is on the table, on the wall that the Other is revealed to me as that to which the object under consideration is perpetually referred - as well as on the occasion of the concrete appearances of Pierre or Paul. (Sartre, 1956, p. 233)

In enactive terms, this implicit or transcendental intersubjectivity may be interpreted as resulting from a history of "participatory sense-making" (De Jaegher & Di Paolo, 2007). From birth on, both the presence and the meaning of objects is continuously established through social interactions, particularly including situations of joint attention and joint practices of coping with the world. We learn to perceptually distinguish, to recognize and to handle objects be witnessing how others relate to them (Tomasello, 1999; Gallagher, 2008). Thus, reality is co-constituted or "interenacted" from the beginning. This intersubjective constitution has become a part of our habitual or implicit relation to the world, just like the sensorimotor interaction with the objects has become part of our embodied knowledge and perception (Fuchs 2016).[5]

On this level of reality constitution, the equivalent to the self-referential movement and contrast of spatial viewpoints is *social perspective-taking*. Seeing the world with others' eyes extends the bodily self-movement by adopting *virtual* perspectives and thus multiplies the possibilities of contrasting. Social situations with their multifarious meanings and ambiguities are in particular need of mutual exchange, communication and correction of viewpoints through taking the others' perspective. Thus, the principle of the intersubjective constitution of reality is the relativization of one's subjective point of view through social interaction with its alignment of perspectives. Although this alignment never comes to a definite conclusion, the possibility of further interaction opens up the horizon of achieving a mutual understanding that we anticipate in every encounter with others.

The presupposition for these processes is obviously the human capacity of *shared intentionality and perspective taking* - that means, to transcend one's own perspective and to grasp others' intentions

5 Of course, Husserl's concept of transcendental intersubjectivity may not simply be translated into a developmental account of learning about the world from others. If I refer to the genetic aspect of intersubjectivity, this is not to say that the transcendental level can be reduced to a history of accumulated learning. However, since human beings are obviously not born as transcendental subjects, this level has somehow to be reached in the course of early development and social interaction, though this does not have to be a gradual progression or accumulation (see also Fuchs, 2013a; van Duppen, forthcoming).

and viewpoints. This suspends the individual's primary self-centrality and enables perspectival flexibility. Intersubjectivity in its full sense is thus based on the ability to oscillate between one's egocentric perspective and an allocentric or decentered perspective. This crucial step of human cognitive development may also be summarized as reaching the "*excentric position*," a term coined by German philosopher H. Plessner (1928) to denote a third or higher-level stance from which the integration of the ego- and allo-centric perspective is possible. It is also the position which enables a shared or "we-intentionality" of the members of a group, as being jointly directed towards a common object or action goal (Searle, 1995; Elsenbroich & Gilbert, 2014).

This position is not only based on perspective-taking and decentering, but also includes an *implicit, taken for granted background* as the presupposition for a shared reality. It consists of the fundamental assumptions, "axioms of everyday life" (Straus, 1958) or bedrock certainties (Wittgenstein, 1969) that are shared by the members of a culture without necessarily being made explicit or verbalized. *Common sense* may be regarded as an expression of those basic certainties, but it also includes the shared habitualities, forms of interaction and "rules of the game" that are embodied rather than explicitly taught in the process of socialization. In the affective dimension, this background corresponds to a *basic trust* in the world and in others that develops from infancy through the interaction with the caregivers. The co-constitution of a shared reality, indeed our most fundamental "perceptual faith" in the experienced reality (Merleau-Ponty, 1968) crucially depends on this habitual and pre-reflective background which carries and supports all specific communication and negotiation of viewpoints within the lifeworld.

Let me summarize the above considerations: Perception transcends the centrality and boundedness of the subjective perspective by a *decentering* that occurs on two interrelated levels:[6]

- On the first level, the *sensorimotor interaction* with the environment implies a mobility and multiplicity of perspectives that relativizes the momentary coupling of organism and environment.
- On the second level, the *social interaction* with others implies a virtual shifting and contrast of perspectives which helps to overcome a merely subject-centered worldview through participatory sense-making.

Thus, the single, momentary and subjective perception is put into perspective, receives depth and objectivity through a horizon of multiple other perspectives that is opened up and realized both through one's sensorimotor and social interactions with the environment. On both levels, the *self-referentiality or self-givenness of the subject's spontaneity and activity* is crucial for gaining an objective view on the world, and that means, for the constitution of reality (Blankenburg, 1991).[7] On the first level, a living being's sensorimotor processes become *transparent* for reality inasmuch as it takes its own position and activity into account. This self-referentiality of movement enables the "mediated immediacy," to use Hegel's term, of the body's relation to the environment. On the second level, the view of human beings on the shared world is clarified to the extent that they become aware of themselves in relation to

6 Both levels and their corresponding forms of interaction with the environment may be distinguished conceptually, but their development in early childhood of course proceeds in close intertwinement.

7 This self-referentiality or self-givenness of action should not be confused with the self-referentiality or self-centrality that is characteristic of paranoid and delusional states (see below). The former is related to the organism itself, the latter to the perceived environment.

others. For it is precisely the *knowledge of myself in my relation to the environment* which enables me to distinguish what is "for me" and what is "in itself," and to grasp the objects as well as the others in their independence from my own subjectivity.

Finally, on both levels an individual's history of interactions is sedimented in his or her implicit memory, resulting in fundamental habitual structures:

- On the first level, the body acquires the capacities of skillful coping and thus, a fundamental *familiarity with the world*. The horizon of possible perspectives and dealings with the objects is already anticipated or implied in each present perception.
- On the second level, early socialization establishes the habitual structure of *being-with-others,* which manifests itself in an implicit or open intersubjectivity as well as in a basic trust in the common world.
  Through open intersubjectivity, human beings definitely transcend the subjectivity of their centric perspective and gain access to the shared, objective reality. For "objectivity" ultimately indicates that the objects are experienced as intersubjectively accessible, "as actually there for everyone" (Husserl, 1960, p. 91). This is why we implicitly perceive a given experiential object as transcending its momentary appearance. Human reality is therefore always *co-constituted or interenacted* through participatory sense-making, both implicitly and explicitly.

3. Subjectivization of perception in schizophrenia

The significance of this analysis for various psychopathological phenomena seems quite obvious. For example, from an enactive point of view, *hallucinations* are only pseudo-perceptions which lack the sensorimotor cycles necessary for realistic perceiving on the first level. They may thus be regarded as products of the *prefiguring activity* of sensory or other brain systems which are projected into the field of awareness without resulting in sensorimotor interactions or perspectival change (this is why they are frequently experienced by the patients as "not really perceptions"). In other words, hallucinations are the result of a *decoupling* of brain activity and normal body-environment feedback. On the other hand, the second level of sense-making is concerned as well, inasmuch as the perceived (pseudo-)objects do not take part in the reality that is in principle accessible to others.

Turning to *delusions*, I will start my analysis by looking at the characteristic phenomena at the beginning of schizophrenic psychosis which amount to a radical *subjectivization of perception*. As is well known, in the predelusional atmosphere or "delusional mood" (Jaspers, 1968; Fuchs, 2005; Sass & Pienkos, 2013), the patients experience their surroundings as strangely unreal, *as if they were seeing only artificial images instead of real objects.* Objects look spurious, somehow manufactured or contrived; people seem to behave unnaturally, as if they were actors or impostors. It all feels like being in the center of an uncanny staging or pre-arranged scenes[8]:

> Wherever you are looking, everything already appears unreal. The whole environment, everything becomes strange, and you get terribly frightened ... Somehow everything is suddenly there for me, like being arranged for me. Everything around you suddenly refers to you. You are in the center of a plot like in front of backdrops. (Klosterkötter, 1988, p. 69; own transl.)

8 In his seminal work *Die beginnende Schizophrenie,* the German psychiatrist Conrad (1958) termed this first stage of delusional development the "*trema*," a Greek term for the "stage fright" that actors may feel before the play starts.

> I'm constantly worrying about me. I would not say I'm persecuted, but everything feels oppressive. Take this table or these walls - they are strange. I guess everything looks phony! But it's not only here, the walls in my living room also feel paper-like as if I was in a set. (Madeira *et al.*, 2016)

Such "Truman show" or "Matrix" symptoms, as they are frequently called by the patients themselves (Madeira *et al.*, 2016), point to a radical change of the structure of perception, although no obvious disturbance of the sensory field may be detected. Instead, it is the *intentional direction* of the field that is reversed: Whereas the perceived objects formerly had their independent existence and kept their distance, they now start to refer to the patient, approaching him in an uncanny and oppressive way[9]. Everyday objects and situations lose their familiar meanings and seem to hint at something novel, yet still enigmatic and puzzling - perplexity, anxiety and increasing agitation is the patient's usual reaction. The reason for all this is that perception no longer grasps the objects as such, but only presents their appearances (Fuchs, 2005). *It has lost its intentional and decentering structure*, and this is why the patient becomes the "center of the world". The derealisation he experiences is thus quite different from a mere alienation of the surrounding world, as it may occur in neurotic or affective disorders.[10] On the contrary, having lost their independent reality and neutrality, the objects are only there *for the patient* or seem arranged *because of him*. In other words, they lack their intersubjectively shared meanings and are no longer consensually given to everybody - which is, as Sass (1992, p. 283) also notes, one crucial mark of the real. Indeed they are no longer objects in the strict sense at all, but only *pseudo-objects*, appearances or images, set up for an unknown purpose.

Not infrequently, this subjectivization of perception culminates in the impression that the existence of the objects or the world as a whole depends on the perceiver - as it were, a pathological form of Berkeley's "*esse est percipi*" (see also Sass, 1992, pp. 277f.):

> Whenever I took my eyes of them [the hospital guards], they disappeared. In fact, everything at which I did not direct my entire attention seemed not to exist. (Landis, 1964, p. 90; quoted from Sass, l.c.)

> At a party, everything seemed to originate from him or depend on him. (Parnas *et al.*, 2005, p. 255)

> If I perceive a door and then look away, then it's almost as if the door ceases to exist. (Henriksen, 2011, p. 24)

The last patient sometimes had the impression that she was the only person who really exists and that she was "responsible for the world moving on" a form of solipsistic self-centrality which

9 This experience is particularly accounted for by the neurobiological concept of the hypersalience syndrome (Kapur, 2003). It may also be illustrated by Sechehaye's quotation of her patient Renée: "This existence accounted for my great fear. In the unreal scene, in the murky quiet of my perception, suddenly 'the thing' sprang up. The stone jar, decorated with blue flowers, was there facing me, defying me with its presence, with its existence. To conquer my fear I looked away. My eyes met a chair, then a table; they were alive, too, asserting their presence. I attempted to escape their hold by calling out their names. I said, 'chair, jug, table, it is a chair'" (Sechehaye, 1994, p. 56).

10 In these disorders, derealization is rather due to a loss of affective or bodily resonance, leading to a lack of attractive or impressive qualities of the environment. Objects then lose their allure and rather look hollow, empty or dead instead of ominous, uncanny or strangely significant (on this, see Fuchs, 2013c).

frequently leads to a kind of "passive omnipotency," as if the patients were able to determine the course of events or to move the world, yet without even knowing how (Conrad, 1958, p. 74; Fuchs, 2000, p. 143). The explanation is quite obvious: If perception has lost its objectivity, and this means, its implicit or *open intersubjectivity*, then the objects seem to move or even to exist only *for me*, or "by my grace". Object permanence, acquired in early childhood and having become a transcendental condition of perceiving, is lost again.[11] Moreover, as the German psychiatrist Matussek (1987) has shown in his analyses of delusional perception, patients are frequently captivated by minor details of the perceptual field and may fall into a veritable "rigidity of perception" *(Wahrnehmungsstarre),* unable to detach themselves from the object. This means that the cycles of sensorimotor interaction with the environment are impaired or arrested, thus contributing to the subjectivization of perception. Feelings of unreality usually deepen with increasing inaction and passivity (Sass, 1992, p. 297).[12] This may culminate in the experience of being enclosed in one's own perceptions, like in a subjective camera movie:

> I saw everything I did like a film-camera. (Sass, 1992, p. 286)[13]

> For me it was as if my eyes were cameras, and my brain would still be in my body, but somehow as if my head were enormous, the size of a universe, and I was in the far back and the cameras were at the very front. So extremely far away from the cameras. (de Haan & Fuchs, 2010, p. 329)

Here the subject gets into a position outside the world; he literally becomes a homunculus within the head looking at his own perceptions like at projected images.

In all these cases, we can see that perception does no longer transcend itself and reach the objects as such. Instead of perceiving the world, the subject experiences *his experiences themselves*; thus, he seems to be the "constituting center of the experiential universe" (Sass, 1992, p. 294) which revolves around him. The objectivity, i.e., the implicit intersubjective givenness of the world is lost, and the patients are enclosed in their own pseudo-perceptions like in a solipsistic inner world. The intersubjective constitution of objective reality is thus replaced by a radically subjectivist or idiosyncratic experience.

An interesting analogy may also be seen in the structure of *dream consciousness*: here too, the subject is the 'center of the world'. All things and events are displayed for him instead of being independent entities; they appear "out of the blue" and yet "just in time", only to vanish into nothingness in the next moment. Moreover, the subject is delivered to the dream appearances in characteristic passivity - the practical sensorimotor interaction of body and environment

11 This does not mean that the child similarly perceives things *as* being dependent on him, for unlike the schizophrenia patient, he lacks a reflexive awareness of his own perceiving. In general, as Sass has also emphasized, the subjectivized perception in schizophrenia must be distinguished from infantile egocentrism (Sass, 1992, 277).

12 In "The paradoxes of delusion", Sass also gives a number of case examples of withdrawal from sensorimotor activity as being connected with psychotic experiences (Sass, 1994, 34ff.) and writes: „The more one stares at things, the more they may seem to have a coefficient of subjectivity, the more they may come to seem ‚things seen'", that means, mere appearances. On the other hand, „the act of moving a physical object also confirms one's own experience of activity and efficacy, thus precluding a sense of passivization as well as subjectivization" (l.c., 35f.).

13 Another example given by Sass already shows a delusional elaboration of this primary experience, dropping the „as-if" account: „I was myself a camera. The views of people that I obtained through my own eyes were being recorded elsewhere to make some kind of three-dimensional film" (Coate, 1965, 101; quoted from Sass, l.c.).

is missing.[14] At the same time, all situations show a self-referential significance ("tua res agitur"), even though this significance often remains enigmatic and mysterious. Though other persons usually play a major role in dreams, open intersubjectivity is lost: the dreamer has no excentric position from which he could relativize what happens by regarding it from another's point of view. He is not able to distinguish what is 'for me' and what is, in itself, since he lacks the higher order *knowledge of himself in relation to his environment.*

4. Transition into delusion

As a typical example for the transition of these disturbances into delusion, we can take the following case:

> It seemed ever more unreal to me, like a foreign country .... Then it occurred to me that this was not longer my familiar environment ... it might be no longer our house. Someone might set this up for me as a scenery. A scenery, or maybe it could be transmitted to me as a television play. ... Then I touched the walls in order to check whether this was really a surface. (Klosterkötter, 1988, pp. 64f. own transl.)

Again, the patient's perception is subjectivized and thereby derealized: The natural attitude towards the world, the normally unquestioned "perceptual faith" is called in doubt. Since she is not aware of the disturbance of perception as such, it is the objects that seem to have changed, and she is testing their surface quality. In addition, however, the inversion of the intentional field already creates the impression of an external power being responsible for it. Getting more and more terrified, the patient was finally struck by the sudden evidence that a foreign secret service abused her for experimental purposes and projected fake images into her brain via rays (Klosterkötter, 1988). This insight felt like "scales falling from her eyes" and at least reduced the tension and terror she felt before, if only at the prize of a growing sense of persecution.

The subjectivization of perception already prefigures the loss of intersubjectivity that we find in full-blown delusion. For it fundamentally shakes the basic trust in the shared, constant and reliable world - a shake whose terrifying effect may hardly be overestimated. On this background of an intolerable "ontological uncertainty," the relieving and restabilizing effect of the delusion is based on the fact that it converts the *transcendental disturbance* of perception into an *inner-worldly happening*, namely an assumed persecution by mundane enemies or powers. In other words, the disturbance of *perception* is converted into a reframing of the *perceived*.

With this, however, *a new objectivity is created*: Precisely what had seemed uncanny, spurious and "made" before is now turned into the new reality of an actual, though concealed persecution and machination.[15] Whereas before the perceived had lost its meaningful coherence, now everything is purposefully meant and arranged for the patient: Gazes observe her, secret cameras take shots of her, and the like. The inversion and self-centrality that resulted from perception losing its decentering returns in the omnipresent self-reference of alien powers that is typical for delusional ideation. Sense-making is thus reestablished (as the

14 Interestingly, schizophrenia patients have been found to show a poor deactivation of the Default Mode Network in the brain (which is normally active in introverted, self-referential states such as day-dreaming) even when they are attending to external stimuli (Pomarol-Clotet *et al.* 2008; White *et al.*, 2010). This suggests that a dreamlike or subjectivized state can be sustained in these patients even during world-directed activity.

15 Strictly speaking, it is only a pseudo-objectivity, because it is only constituted *for the patient*, thus lacking implicit intersubjectivity.

German *Wahnsinn* or "deluded sense" indicates), yet in a way that is fundamentally decoupled from the shared world[16].

We can summarize these fundamental changes in two steps, leading from (1) derealization to (2) delusion:

(1) *Reality turns into appearance*: Perception is subjectivized and presents only pseudo-objects.
(2) → *Appearance turns into new reality*: Delusion converts this appearance into a new objectivity, implying that there is a reason for the changed environment (namely, the semblance is in fact created on purpose).
(1) *Inversion of the perceptual field:* The loss of decentering perception leads to solipstic self-centrality.
(2) → *Inversion of intentionality*: Delusion converts this self-centrality into self-referential intentions of hidden agents *in the world*. In other words, subjective or "transcendental" self-centrality is turned into mundane or social self-centrality.

Not every schizophrenic delusion is based on the centralization of perceptual experience, however. Another, though related route to delusion derives from *self-disturbances* that affect the experience of one's body, actions and stream of consciousness (Sass & Parnas, 2003; Parnas *et al.*, 2005)[17]. Among these, I mention in particular *experiences of passivity*, namely the alienation of movements and thoughts: Bodily movements occur that are not initiated by the self, or thoughts emerge in the patient's mind as if generated from outside. Patients may then experience themselves as robots or human machines, becoming the passive spectators of their body's actions or their own thoughts (De Haan & Fuchs, 2010).

From an enactive point of view, this may be explained by a *loss of the self-referentiality or self-givenness* of one's own activity: Actions or thoughts appear in consciousness like alien fragments, only experienced in a deferred manner or *ex post* (on this, see Fuchs, 2013b; 2015c). The loss of self-agency results in an experience of disempowerment and passivity which again implies an inversion of intentionality and a self-centrality of the experiential field; instead of acting or thinking, the patient is being acted upon, or his thoughts are inserted. Delusions of control now turn these experiences into a mundane impact of external agents: The patient's movements are steered by means of rays, thoughts are inserted through brain control, and the like. Such delusions usually involve a loss of boundaries between self and other, also termed *Ich-Störungen* or "ego-disorders" in German psychopathology. Frequently, patients use

16 Using Heidegger's distinction of the „ontological" (i.e. the fundamental existential level) and the „ontic" (the inner-worldly happenings), Sass rightly describes this process as the transformation of „a fundamentally ontological experience [...] into one that is at least quasi-ontic in nature" (Sass, 1992, 294). However, it seems that he takes this transformation to be only the result of using the (insufficient) everyday language and context to describe the ontological change; the patient lacks the philosophical insight, so-to-speak, to stay on the ontological level of description, resulting in a "confusion of ontic with ontological" (l.c., 293). By contrast, I regard the transition into the "ontic" delusion as the crucial means by which a coherent inner-worldly experience is re-established. In other words, a new, rigid framework locks in, which resists any possible questioning or returning to the ontological level. In this stabilization consists the function of delusion, and it explains its rigidity.

17 The concept of schizophrenia as a disturbance of basic, pre-reflective self-awareness or 'ipseity' developed by Parnas and Sass cannot be dealt with here. Recently, van Duppen (forthcoming) has proposed the concept of „open subjectivity" as a common core for both the subjective and intersubjective dimension of schizophrenic disturbances. This fills an important gap in the phenomenological account of schizophrenia as a disorder of both self and intersubjectivity.

a physicalistic, technical or spatial vocabulary to describe these impacts, corresponding to the reification of their self-experience (for example, the well-known "influencing-machines", Hirjak & Fuchs, 2010).

Regardless whether being based on perceptual or more self-related disorders, with the formation and crystalization of the delusion a coherent and meaningful kind of reality is re-established. Delusion "makes sense," however, in a fundamentally solipsistic way; for it turns the radical subjectivization and passivity of experience into a new, purposefully staged reality that is incompatible with the worldview of others. I will now further investigate this aspect.

5. The loss of open intersubjectivity

5.1 Breakdown of the "as if"

The transition to the full-blown delusional conviction is marked by a typical change of attitude and language, namely a *loss of the "as if"*. At first the patients still maintain a critical distance to their experiences which is usually expressed in "as if" clauses: It only seems *as if* something extraordinary is going on (see also the above examples: "as if I was in a set," and "as if the door ceases to exist"). This implies the preserved capacity to shift one's perspective and take an external point of view from which what seems to be the case "cannot actually be true". It indicates that the "excentric position" (Plessner, 1928) is still attainable. I quote another case vignette:

> I could no longer think the way I wanted to ... It was as if one could no longer think oneself, as if one were hindered from thinking. I had the impression that all that I thought were no longer my own ideas at all ... as if I wouldn't be the one who is thinking. I began to wonder whether I am still myself or an exchanged person. (Klosterkötter, 1988, p. 111; own transl., emphasis added)

Again, the patient finally dropped the reservation of the "as if" and came to be convinced that a criminal organisation had implanted a chip in her brain to control her thoughts. The onset of delusions is thus marked by the breakdown of the "as if". This implies not only a change in the degree of certainty but also the definitive *loss of open intersubjectivity*. For the possibility of calling one's experience into doubt is still based on taking the perspective of the "generalized other" (Mead), that means, on an implicit intersubjectivity or common sense. The "as if" is the last connection to the shared world.

However, the ambiguity of the "it seems as if" is too disturbing and tantalizing for the patient to be maintained for a longer time. Before long, the existential anxiety and the overwhelming urge for coherence of the perceptual field enforce a disambiguation, and the delusional conviction finally locks in place.[18] The loss of the "as if" is therefore tantamount to a breakdown of the perspectival flexibility which would still enable the patient to take a general point of view and thus to gain a distance from the situation. It means a loss of the excentric position. Thus, the possibility of intersubjective understanding is sacrificed for the new coherence of delusional sense-making in an otherwise incomprehensible, deeply

18 Needless to say, this is not a step somehow „chosen" by the patient; nor is it comparable with the ignoring or repression of unpleasant aspects of reality in neurotic disorder. Freud's explanation of psychosis as "wishful replacement of reality" (Freud, 1924) seems incompatible with the terror that many schizophrenia patients experience in their delusions and hallucinations (this does not preclude that a psychodynamic approach might have some limited value in explaing certain contents of hallucinations and delusions). One might rather think of attributing the turn into delusion to an inherent tendency of consciousness towards coherence, or, in terms of dynamical systems theory, think of an "unusual attractor" of the neuronal system which, once snapped in, may not be left again.

disturbing world. Once locked, this new and rigid coherence is further fortified through delusional elaboration: looking for additional evidence as well as systematically neglegting counter-evidence.[19]

A manifestation of this rigidity is the *exclusion of coincidence* (Berner, 1978). The principle of coincidence normally allows us to neutralize a seemingly purposeful arrangement or simultaneity of events: "It seemed *as if* it was meant for me, but in fact it was only coincidence". This presupposes shifting my primary, egocentric perspective on the situation to a neutral frame of reference in which I do not play a role. For the schizophrenia patient, however, the opposite is the case: It is precisely the normally irrelevant background elements that adopt a "telling," sinister and threatening significance. They all manifest a concealed intentionality which aims at him. He can no longer neutralize these salient elements by attributing them to coincidence or to the "as if", because the excentric position from which the principle of coincidence could even be taken into account is no longer attainable. One could also say that with the transition to delusion, the ‚as if' is given up as a *formal* reservation and instead shifts into the *content* of the delusion: What first seemed unreal, staged or artificial on the level of perception now becomes the actual staging, play-acting, and machination of the enemies - an *intended* 'as if'.

5.2 Loss of the shared background

If we now turn to the specific interaction with a deluded patient, we find a peculiar structure of *non-understanding* which is ultimately not due to a disagreement on particular statements or facts but to the *fundamental assumptions on which the conversation itself is based*. In normal verbal interactions, mutual understanding is achieved through reciprocal utterances, taking each other's perspectives, misunderstanding and repair, clarifying meanings, and the like. In the process, we continuously shift between the ego- and the allocentric perspective. Deeper disagreement requires the give and take of reasons which may then lead to an increasingly consensual understanding or otherwise at least to an "agreement to disagree". However, in the conversation with a deluded patient, all these processes remain strangely futile. When confronted with doubts or objections, the patient does not adequately respond. On the contrary, he will either assume a consensually perceived situation even though this is not at all the case from the other's point of view (McCabe, Leudar & Antaki, 2004; Fuchs, 2015a); or he will justify his claims in a way that is not in the least sufficient for the interlocutor ("But how do you know they implanted a chip in your brain?" - "Well I just can feel it."). He may even not attempt to make himself understood at all ("It's pointless. I just know it, that's all."). In any case, the psychiatrist will experience what may be called a "gap of plausibilization", that means, a blatant disproportion between the improbability of the patient's statements and his attempts to justify them.

If we then ask ourselves how it is possible that someone can maintain a belief *as unusual as that* (believing that a chip has been implanted in his brain, or that his biological sex has changed overnight, and the like), the question itself already shows that *we have lost common ground*. As Jaspers stated above, a delusion corresponds not to a single belief, but to a "*total context of experience*" which "can hardly be corrected at all. The source for incorrigibility therefore is not

19 To a certain degree, this resembles the phenomena of *asomatognosia*, where a paralyzed limb is no longer recognized as one's own, or *hemilateral neglect*, where a whole side of space is no longer perceived or even taken into account as a result of damage to the contralateral brain hemisphere. In such neurological cases, the coherence of the experienced world is maintained at the prize of "sacrificing" part of one's body or part of the world which are then no longer accessible to consciousness.

to be found in any single phenomenon by itself but in the human situation as a whole, which nobody would surrender lightly" (Jaspers, 1968, p. 104). However, this applies to our own situation as well, for it is always based on a bedrock of fundamental certainties (Wittgenstein, 1969) or background assumptions that we rely upon without explicitly awareness, but which we "would not surrender lightly". This shared background is part of our everyday conduct of life, consisting of all the lived regularities, dispositions and assumptions that are neither propositions, representations nor rules. It is based on accumulated experience which has sedimented into our implicit knowledge and expectations, resulting, for example, in an everyday physics which tells us that humans just cannot fly out of windows in the air, or move far away trains by the power of their mind; or in an everyday biology which simply excludes that people's sex could change overnight[20], or that chips in their brains could be sending thoughts into their mind.

We live and act on the background of these certainties not because we have ever concluded or made sure that they are true. They are just self-evident - part of our implicit intersubjectivity or common sense. To call them into doubt would be a pointless endeavor; indeed we would not - or even could not - rationally argue against it, but simply deem it "nonsense". However, as Rhodes and Gipps (2008) have rightly argued, for the deluded patient, *this background has fundamentally changed.* With the radical subjectivization of his perception in delusional mood, the basic trust in the shared world has been shattered; common sense has lost its validity. As shown above, the emergence of delusion turns precisely this radical subjectivization and passivity of experience into a new objectivity, that means, into *a new self-evidence.* Now the patient cannot doubt these new certainties either - this would just not make sense for him. He literally lives in a different world: Moving far away trains is normal in a world where *everything revolves around the self*. Chips in brains are self-evident in a world of *radical passivity*. Changed biological sex is expectable in a world in which *the self has lost its continuity*. The new certainties are outside of any possibility of doubt or justification, no different from the certainties we rely upon in our world.

From this follows that the patient's delusional convictions are not rational conclusions or explanations. Delusions are not based on correct inferences from distorted primary experiences, as the so-called "empiricist" theory would have it (Maher, 1988; 1999). No abnormal experience whatsoever could make it rational to belief in thought insertion or brain chips, not because of the unusual content as such, but because the very notion of rationality implies the excentric point of view of the "generalized other," and thus, in principle, intersubjective communicability. However, this general viewpoint is lost in delusion, and *there is no private or solipsistic rationality instead.* On the other hand, delusions are not based on irrational, faulty reasoning or wrong inferences either, as the "rationalist" approach assumes (e.g., "jumping to conclusions" on an insufficient evidence basis, Garety & Hemsley, 1994; Campbell, 2001). Such wrong conclusions are far too widespread to constitute the essence of delusion. Delusions are neither rational nor irrational; they are not theories, inferences or judgments about reality at all but *self-evident revelations*, which are only attained *through a leap,* and which first and foremost establish a new coherent reality.

This means, however, that the communication with a deluded patient, inasmuch as the delusion is concerned, has lost the background of implicit intersubjectivity and common sense

20 This delusion may be found in the famous autobiographical report of Daniel Paul Schreber (1903/1988; see below).

on which mutual understanding is ultimately based.[21] No rational argument whatsoever is valid any longer once the shared frame of reference is lost within which it could be claimed - it is just pointless. It is also for this reason that a psychiatrist usually does not need to falsify the patient's statements in order to make a diagnosis. Their incongruence with our shared basic assumptions about the world suffices to recognize the delusional conviction as such - an incongruence that we realize with an unsettling, "vertiginous feeling" (Rhodes & Gipps, 2008, p. 299), but of which the patient himself is not even aware.[22]

Since the objects and situations that delusional language refers to are not intersubjectively co-constituted but rather solipsistic (pseudo-)objects, one may even argue that we are dealing here with a kind of "private language". For its meanings are no longer co-intended or shared but only valid within the idiosyncratic delusional framework. Correspondingly, Spitzer (1990) suggested that schizophrenic delusions should actually be considered as self-reports about private or inner states, and not as epistemic statements on factual matters in the public world (often the patients do not even claim intersubjective validity for their experiences). As is well known, Wittgenstein (1953/1968) considered a private language impossible, and one might indeed question whether the notion of language as an intersubjective realm of meaning is still applicable in this case. This would mean that delusions are indeed fundamentally "incomprehensible," as Jaspers argued (1968, p. 98).

Jaspers' claim seems too strong, however: It would be overstated to say that the loss of co-intended meaning implies absolute incomprehensibility. After all, it is still possible to translate the patient's utterances into our own language, provided that we take the transformation of the patient's world into account, as I have tried to describe here. As Rhodes and Gipps have pointed out, in order to understand the patient's delusional world, we have to "pursue the imaginative exercise of temporarily suspending those certainties that constitute the bedrock of our reason itself, certainties that are implicitly challenged by the delusional belief" (Rhodes & Gipps, 2008, p. 299). Blankenburg (1971) likened this task of the psychiatrist to the phenomenological epoche, that means, a methodic bracketing of our everday assumptions about the world.

5.3 Loss of the excentric position

Finally, we can also conceive the disturbance of communication in delusion as resulting from the partial *loss of the excentric position* that I have already described above as loss of the "as if". For the alignment of different perspectives in the course of a conversation presupposes perspectival flexibility - transcending one's own and taking the other's perspective in order to grasp his intentions and making oneself understood. This flexibility is based on the excentric position. Granted, the patients are still able to imagine what others could think or intend (there is no basic defect of a "theory of mind"); they even take their *presumed* perspectives excessively, but in a way that all these perspectives seem to be directed back to the patients themselves.[23] What they lack with regard to their delusion is the higher-order independent

21 It is remarkable that this disconnection from the shared background is frequently restricted to the delusional content, while other domains of communication and understanding may remain intact. The delusion crystallizes around a core theme which establishes meaning and coherence with regard to the fundamental perceptual and self-disturbances. Once this delusional schema is fixed ("plugging the leak," as it were), other areas of life may remain unaffected.

22 This applies to full-blown delusions. It should be noted, however, that the patients are sometimes still aware of the improbability of their experiences for others. This may result in a "double bookkeeping" (see below).

23 This has sometimes been termed "overmentalization"; see for example Montag *et al.* (2011). For a critique of

position from which they could relativize their experience of self-centrality (being alluded to, observed, persecuted by others, etc.). Taking the perspective of the *real* other is replaced by an illusionary self-referential perspective. The others are indeed only pseudo-subjects, figures or stereotypes for the delusional narrative rather than real counterparts whose perspective the patient could take.

Another result of losing the excentric position is the phenomenon of *transitivism described by Bleuler (1911/1950). Here, becoming* "conscious of another consciousness" may threaten the patient with a loss of his or her self, as in the following cases:

> When I look at somebody my own personality is in danger. I am undergoing a transformation and myself is beginning to disappear. (Chapman, 1966, p. 232)

> The others' gazes get penetrating, and it is as if there was a consciousness of my person emerging around me ... they can read in me like in a book. Then I don't know who I am any more. (Fuchs, 2000, p. 172)

As I mentioned at the beginning, perspectival flexibility needs to be self-referential or self-given in order to present the perceived object or the other in independence from oneself. In transitivism, however, the patients are passively drawn into the other's perspective and overwhelmed by their gazes or their mere presence (see Fuchs, 2015a). Having lost the independent position which mediates between ego- and allocentric perspective, they are caught in a short-circuit of perspectives, as it were, resulting in a melting of self and other. They are entangled in a self-referential and delusional view from the outside that dissolves their ego-boundaries. This short-circuit may also lead to the experience of thought-broadcasting: All the patient's thoughts are known to others; there is no difference between his mental life and that of others any more.

Finally, a seemingly paradoxical result of losing the excentric position is the phenomenon of "double book-keeping," also first identified by Bleuler (1911/1950, p. 378): Here, the everyday reality and the delusional reality are *juxtaposed* instead of one being sacrificed for the other. The patient now lives in two worlds at the same time, as it were: on the one hand the world of voices and delusions, and on the other hand the world as shared with others. For example, a patient may hear voices as clearly as the voice of the psychiatrist and believe them just as real, yet at the same time acknowledge that the psychiatrist does not hear them. A patient with grandiose delusion may be fully convinced that his coronation is imminent yet continue to do humble services on the ward, feeling little if any conflict between the two stances (Sass, 2014).

In these cases, the integrating excentric position is lost too, but the delusional view does not replace the commonsensical perspective - they just coexist in different ontological domains without contiguity or overlap. However, this does not mean that the patient's private reality would lose its delusional character and become a mere realm of his imagination or phantasy - on the contrary, its authority for the patient is even greater than that of

Frith's (1992, 2004) concept of a lack of "theory of mind" as an overall explanatory framework for schizophrenia, see Gallagher (2004). This does not exclude problems of social cognition and perspective-taking with regard to real others in schizophrenia; see for example, Bliksted, Fagerlund, Weed, Frith & Videbech, 2014; Pinkham 2014.

consensual reality. Hence, the patients remain ambiguous, wavering between the demands of both domains. Thus Daniel Paul Schreber, in his famous "Memoirs of my nervous illness" (1903/1988), on the one hand develops his extended delusional system with utter conviction and zeal, while on the other hand denying that it claimed ordinary commonsensical realness: "I could even say with Jesus Christ: 'My Kingdom is not of this world'; my so-called delusions are concerned solely with God and the beyond; they can therefore never in any way influence my behavior in any worldly matter" (Schreber, 1988, pp. 301f.). In his thorough analysis of the "Memoirs", Sass notes: "Schreber's claims seem, then, to involve two attitudes: one in which he accepts the essential innerness and privacy of his own claims, the other in which he assumes that they have some kind of objectivity and potential consensuality" (Sass, 1994, p. 55; see also Sass, 2014).

One may conclude that in double bookkeeping, subjectivity and intersubjectivity have separated, yet the claim of the "generalized other" cannot be completely neglected. This confirms once more that delusions may not be understood without reference to the open intersubjectivity from which they have detached.

6. Summary and conclusion

As I have shown in the first part, the constitution of reality is based on a polarity or a dialectical relation that we find on two levels:

1. the dialectic between receptivity and spontaneity which mutually relativize each other, played out in the *sensorimotor interaction of organism and environment.*
2. the dialectic between subjectivity and intersubjectivity, as played out in *social interaction or participatory sense-making.*

On both levels, the self-referentiality or self-givenness of one's own relation to the environment is a crucial presupposition for the decentering that is necessary to transcend pure subjectivity and to constitute an independent reality. In human perception, both levels are inseparably interlinked and, through a twofold decentering, they together enable the objectivity of perception. We live in a world of objects, because we are involved in its constitution through our sensorimotor engagement. And we live in a shared objective reality because we continuously "interenact" it through our joint activities and participatory sense-making. Moreover, both phylogenetically and ontogenetically, this enactive and intersubjective (co-)constitution of reality has become a transcendental structure of human perception itself: Even in the absence of others, my perception always implies their possible presence, as an implicit or *open intersubjectivity*.

Thus, there exists a close intertwinement of the enactive and the interenactive constitution of reality, which characterizes the transcendental structure of human perception. This structure is realized in the course of sensorimotor and social interactions in early childhood, and is also in place in schizophrenia patients before the first manifestation of the illness, even though in an unstable and fragile way.[24] I have analyzed how in beginning psychosis the decentering structure of perception breaks down, leading to a subjectivization of the perceptual field, to an

24 This "ontological unsecurity" (Laing, 1959) is manifested in the premorbid self-disorders frequently dating back into the patients' childhood (see Parnas & Henriksen, 2014 for a review). Whether this instability may be related to disorders of early brain maturation and connectivity (Stephan, Friston & Frith, 2009) remains to be further investigated..

inversion of intentionality, and thus to a fundamental derealization that is the condition for delusion formation in the further course.

Which precise pathogenetic pathways lead to the loss of objectifying perception, is not clarified so far; to address this complex issue was not the aim of the paper.[25] In any case, once this structure collapses in beginning psychosis, the objectivity of perceived reality is shaken or lost, resulting in an overall experience of self-centrality, even though the level of sensorimotor interaction with the environment is usually not conspicuously affected. All the more, the intersubjective co-constitution of meaning is now severely disturbed, and in delusion this co-constitution is finally sacrificed in favor of a new coherence of the perceptual and intentional field. As I have pointed out, the loss of the "as if" manifests this decisive step of a decoupling of subjectivity from open intersubjectivity. It is equivalent to a loss of the excentric position or perspectival flexibility (at least inasmuch as the domain of delusion is concerned) and to a fundamental alienation from the commonsensical background necessary for shared intentionality and communication within the lifeworld.

Interestingly, we can find an "interenactive" account of delusions *avant la lettre* already in Pierre Janet who pointed out that a belief essentially implies a certain *readiness to act*:

A belief is ultimately a promise of action. To believe in the existence of the Arc of Triumph implies being able to show it to a someone, to drive him there, and to experience a disappointment, should it turn out not to be there. On the other hand, ... [a delusional belief] belongs to the verbal acts that cannot be transferred into actions. (Janet, 1926, p. 95; quoted after Parnas, 2004, p. 156)

As Janet's example aptly shows, the readiness to act which characterizes a normal belief is also inherently intersubjective. What we believe to be the case, even more what is part of our immediate "perceptual faith" in reality, must not only in principle be accessible to others; it should always be open for *a shared practical engagement* as well. However, since the delusional belief is based on a subjectivized and passive perception partly decoupled from the cycles of sensorimotor interaction, it does not imply adequate action readiness (at least not in a commonsensical way[26]). Even more, it does not enable an *interenactive* relation to a shared reality: What the patients experience (being implanted chips in their brains, hearing voices, and the like) cannot be "shown" to others. As Sass notes, schizophrenia patients rarely act as if their delusional convictions belonged to a practical and consensual world. They rather seem

25 Various etiological hypotheses have been proposed, of which only some shall be mentioned:
- A neurobiological disturbance of enactive perception on the sensorimotor level could play a major role, for example, a failure of efference copy mechanisms (Pynn & DeSouza, 2013).
- The hypersalience of perceptual impressions may be caused by a dopaminergic hyperfunction in the brain (Kapur, 2003).
- The lack of self-givenness of perception may be due to the basic disorders of self-awareness or "ipseity" that Parnas and Sass have claimed as a fundamental disturbance of schizophrenia (Parnas & Sass, 2001; Sass & Parnas, 2003; on this connection, see also Fuchs, 2015c).
- Another important condition could be a loss of basic trust and familiarity with the shared life world, as suggested by the increased incidence of schizophrenia in migrant and otherwise marginalized populations (Fearon *et al.*, 2006; Cantor-Graae & Selten, 2005; Zammit *et al.*, 2010; Bourque, Van der Ven & Malla, 2011). Under these conditions, the interenactive constitution of reality may be undermined.

26 In contrast to delusion-like ideas or "ontic delusions" in paranoia (see introduction above), primary or ontological delusions in schizophrenia hardly lend themselves to practical engagement and appropriate action. On the contrary, the majority of patients remain surprisingly passive despite severe suffering and experienced persecution.

to belong to a special domain which is "sealed-off from real-world action" (Sass, 1992, p. 274f.). Therefore, they usually do not even assume that it is amenable to intersubjective examination or that it may as well happen to others. As we have seen, the two worlds frequently remain completely separated from each other through "double bookkeeping". One might indeed argue that the so-called "delusional beliefs" are not beliefs in the epistemic sense at all, for they lack the basis of a shared intentional relation to the world.

Although there are important differences, we may finally conclude that the fundamental alteration of experience at the roots of schizophrenic delusions resembles in many respects the state of dreaming: Here too, the shared world is replaced by a private world of figments and imaginations that are not recognized as such and lack the reservation of the "as if". They also lack the open intersubjectivity of an experience that would in principle be accessible to everyone, thus transcending mere appearances. It is a world which Heraclit famously called the *ídios kósmos* of the dreamer, in contrast to the *koinós kósmos* of daytime:

> The waking have one common world, but the sleeping turn aside, each into a world of his own. (Diels & Kranz, 1951, fragment B 89)

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BODY EXPERIENCE, IDENTITY AND THE OTHER'S GAZE IN PERSONS WITH FEEDING AND EATING DISORDERS

abstract

The purpose of this paper is to define and describe the main phenomenological dimensions of the life-world of persons prone to Feeding and Eating Disorders (FEDs), within the framework of a model that considers abnormal eating behaviour an epiphenomenon of a more profound disorder of lived corporeality and identity. The core idea is that persons with FEDs experience their own body first and foremost as an object being looked at by another, rather than coenaesthetically or from a first-person perspective. Alienation from one's own body and the need to feel oneself only through the gaze of the others can be illuminated by looking at it in the light of the Sartrean concept of feeling a lived-body-for-others.

keywords

body experiences, body-for-others, feeding and eating disorders, identity, Sartre

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1. Introduction

Feeding and Eating disorders (FEDs) encompass three main diagnoses: anorexia nervosa, bulimia nervosa, and binge eating disorder. However, the collection of disturbances of eating attitudes and behaviours includes several other conditions such as pica, rumination disorder, purging disorder, atypical anorexia and bulimia nervosa, subthreshold binge eating disorder, and night eating syndrome.

Longitudinal studies indicate that most patients migrate among diagnoses over time (Fairburn, Cooper *et al.*, 2003; Milos *et al.*, 2005) without a substantial change in basic psychopathological features (Tozzi *et al.*, 2005; Fairburn and Cooper, 2007; Eddy *et al.*, 2008; Castellini, Lo Sauro, *et al.*, 2011) suggesting the existence of a common psychopathological core. Indeed, these disorders consist in abnormalities that are shown on two different domains, one behavioural and the other experiential.

Behavioral anomalies include binge eating, dietary restraint, compensatory purging, and body checking. Abnormal experiences include preoccupations with one's weight and shape and an anomalous perception of these. There is a general agreement on considering behavioral anomalies – which are required for DSM diagnosis – as secondary epiphenomena to a more basic psychopathological core, namely excessive concerns about body shape and weight.

In the DSM-5 (American Psychiatric Association, 2013), FEDs are characterized by severe disturbances in eating behaviour, but, as a matter of fact, the abnormal eating behaviour can be considered the epiphenomenon of different specific cognitive and emotional disturbances (Fairburn, Cooper *et al.*, 2003; Williamson *et al.*, 2004; Dalle Grave, 2011), including an overestimation of the shape and weight concerns and of the personal identity (Carter *et al.*, 2004; Loeb *et al.*, 2007; Ricca *et al.*, 2010). Persons affected by FEDs have a tendency to overvalue their body shape and weight (Fairburn and Harrison, 2003), and "tend to define themselves on the basis of their shape and weight and their ability to control them" (*ibidem*, p. 407) - whereas most people evaluate themselves on the basis of the way they perceive their performance in other domains, e.g. work, relationship, etc.

The present paper aims to overcome the simplistic behavioural assessment suggested by the DSM, and to provide a comprehensive description of the main psychopathological dimensions in the persons affected by FEDs - especially focusing on the subjective perception of their own body, and their personal identity. The basic idea is that FED patients can be better understood as suffering from *a specific disorder of lived corporeality contributing to an anomalous constitution of one's identity*. We believe that a comprehensive understanding of these dimensions can improve diagnosis and clinical approach to patients.

2. Lived body

FEDs are defined as behavioural disorders, whose psychiatric diagnosis is strictly based on abnormal eating behaviour. On the other hand, clinical reports show that these persons experience their body differently from other people. Since the beginning of the 20th century, phenomenology has developed a distinction between lived body (*Leib*) and physical body (*Koerper*), or between body-subject and body-object (see Husserl, 1912-1915a; b). The lived body is the coenaesthetic apprehension of one's own body, the primitive experience of oneself, the basic form of self-awareness, or direct, unmediated experience of one's own body, and not a representation of it mediated by reflection (as the case with body image) (Merleau-Ponty, 1945; Stanghellini, 2009). In other words, this is my own direct experience of my body in the first-person perspective, myself as a spatiotemporal embodied agent in the world (Husserl, 1912-1915a, b; Merleau-Ponty, 1945; Dillon, 1997; Stanghellini and Rosfort, 2013; Stanghellini, Trisolini, *et al.*, 2014;). The body object is the body thematically perceived or investigated from without, as for example by the natural sciences as anatomy and physiology, in the third-person perspective (Husserl, 1912-1915a; b; Merleau-Ponty, 1945; Stanghellini, Castellini *et al.*, 2012). The physical body refers to the body that can be manipulated, e.g. by surgery. The lived body turns into a physical, objective body whenever we become aware of it in a disturbing way. Whenever one's movement is somehow impeded or disrupted, then the lived body is thrown back on itself, materialized or 'corporealized' (Fuchs, 2005). It becomes an object for oneself. The unmediated and pre-reflexive experience of my body is the implicit background of my day-to-day experiences against which I develop a coherent sense of self as a unified, bounded entity, naturally immersed in a social world of meaningful others.

Persons prone to FEDs often report their difficulties in feeling their own body in the first-person perspective and in having a stable and continuous sense of themselves as embodied agents. What seems to be impaired is the coenaesthetic apprehension of their own body as the more primitive and basic form of self-awareness. They have difficulties perceiving – with different extents of insight – their emotions and they do not feel themselves.

This is a typical narrative about the feeling of *elusiveness* related to one's body. The patients is asked to write a letter to her body and here is what she writes:

> *If you were a geometric shape, you'd be a sphere... Elusive... rolling away! I'm not taking you. You don't get caught... Escape! So I feel elusive.*

3. Lived Body-For-Others

In addition to the two dimensions of corporeality (body-subject and body-object) discussed above, Sartre (1943) emphasized that one can apprehend one's own body also from another vantage point, i.e. as one's own body when it is looked at by another person. When I become aware that I, or better my own body, is looked at by another person, I realize that my body can be an object for that person. Sartre calls this the 'lived body-for-others'.

It is necessary to make a premise: to live one's own body as an entity seen by another person is to be considered both a primary data, and a compensatory way of experiencing one's own body.

Each of us experiences one's own body in the first and third person, and we establish our own identity through an integration between these two perspectives.

In people affected by FEDs, this integration is missing because the possibility of feeling oneself from the first person perspective is diminished, and becomes possible only when they are looked at another person. The body is principally given as an object to 'be seen'. It is a body exposed and subjected to the other's gaze.

These are typical narratives highlighting how the in people with FED is a body-for-others:

I feel my weight through the gaze of others.

Others can make you feel beautiful and thin, or ugly and fat.

The gaze of other person gives me a sensation of being.

With the appearance of the other's look, writes Sartre, I experience the revelation of my being-as-object. The upshot of this is a feeling of having my being outside, the feeling of being an object (Stanghellini, 2017). Thus, one's identity becomes reified by the other's gaze, and reduced to the external appearance of one's own body. When this way of apprehending one's body crystallizes, (and so becomes the only way to experience one's own body) it may become more and more difficult to have an experience of one's own body from within. The body, so to say, takes the shape that the others' gaze imposes upon it. This, on the one hand makes one feel shame or disgust for one's own body, but on the other hand helps one recover a sense of 'unity' and 'condensation' – as it is the case with people suffering from FEDs (Stanghellini *et al.,* 2012; Stanghellini and Mancini, 2019).
Persons affected by, or vulnerable to, FEDs often report their difficulties in perceiving their emotions and that they do not 'feel' themselves (Sands, 1991; Goodsitt, 1997; Malson, 1999; Piran, 2001). They have difficulties in feeling their own body in the first-person perspective and to have a stable and continuous sense of themselves as embodied agents. This entails a fleeting feel of selfhood and an evanescent sense of identity. Indeed, feeling oneself is a basic requirement for achieving an identity and a stable sense of one's self (Stanghellini *et al.*, 2012). The experience of not feeling one's own body and emotions involves the whole sense of identity. Indeed, we construe our personal identity on the basis of our feelings, that is, of *what we feel we like or dislike*. For persons with FEDs, since they can hardly feel themselves and their feelings are discontinuous over time, identity is no longer a real psychic structure that persists beyond the flow of time and circumstances. They also feel extraneous from her own body and attempt to regain a sense of bodily self through starvation (Stanghellini, 2017). In other words, the basic phenomenon seems to be that these people experience own body first and foremost as an object being looked at by another, rather than coenaesthetically or from a first-person perspective. Since they cannot have an experience of their body from within, they need to apprehend their body from without through the gaze of the Other. What they seem lack is the coenaesthetic apprehension of their own body as the more primitive and basic form of self-awareness. As a consequence of that, the way one feels looked at by other persons is the only possibility to feel oneself and define one's identity.

4. The Other

FED patients define themselves by the gaze of other persons. The way they feel, even the very possibility to feel themselves, depends on the way they feel looked at by others. In the life-world of these persons the other is reduced to his gaze. The other's look only seizes what is visible, that is, appearance. Also, it only seizes what is present here and now. The temporal dimension of the gaze is the present moment. The gaze does not even expand into the nearest future, as it might in the case of someone gazing at someone else while the latter replies with her own gaze. There is not a dialogue of gazes. The other is not a partner with whom one can dialogue.

Why I starve myself?
Because of all the people in my life who die of jealousy when they see the way I look.
(Source: thepronalifestyleforever)

What does the other's gaze express? It can simply express like or dislike, recognition or non-recognition. The other is a gaze and the patient is a body looking for visual recognition. The other is a gaze that may (or may not) like her. Feeling liked or non-liked helps recover a sense of selfhood and identity, at least in the aesthetic dimension as a here-and- now body object of the other's desire. The other is hardly an interlocutor with whom to engage an intersubjective co-creativity relationship. He is the one who confirms my existence, my being-in-the-world. The gaze of the other becomes the unique way through which one can be aware of one's own presence. It is the mirror in which to see oneself and feel oneself.
In this perspective, the life-world of persons with FED reflects the essential features of late modernity (Stanghellini, 2005): the experience of persons who feel they exist only through the eyes of the others. *Only what is visible really exists*. What we can't see doesn't exist. If no one can see what you have done, what you have done does not exist. The feeling of being a Self and having an identity can be so weak that one may feel one becomes real only when one is the topic of a discourse. Someone who is not relating to some other is in a liquid state; when faced with the other one becomes semi-solid, but at the expense of getting the form imposed by the gaze and the discourse of the other. Only being seen or being talked about gives substance to the Self. Being seen and being talked about by others take the place of the self-feeling of oneself.
These are the answers taken from a pro-Ana blog entitled "*I will finally feel skinny when …*", pinpointing that identity in persons with FED is closely related to appearance and to the others' gaze/discourse:

> *[I am myself] When I'm the 'skinny friend'; When people ask me if I've lost weight.*

To FED people the other is a means, the mirror through which one can apprehend oneself. No true dialectic exists between oneself and the other. The Self takes on the shape imposed by the other's gaze, or the shape of that which the Self believes are the other's expectations – or stubbornly tries to resist the shape the other wants to impose upon oneself. The relationship with the other is an instrumental one, aimed at obtaining a view on oneself. This also affects one's relation with one's own body. This parallels a kind of "industrialization of the body" (Rilke, 1910): the body is not the silent background from which one's own sense of selfhood and personal identity develops, but a *task*. There is a total symmetry between controlling and shaping one's body and controlling and shaping one's life. The body is a fetish taking the place of identity: body-building takes the place of the *Bildung* of oneself as a person.

5. Embodiment and identity

In persons with FEDs, the disturbance of the experience of their own body is interconnected with the process of shaping their personal identity. We appraise the value of things in the world through our body as we feel attracted or indifferent to them. This is the way we understand who we are and what we want to be. Difficulties in feeling oneself reflect difficulties in perceiving one's emotions. Indeed, feeling oneself is a basic requirement for achieving an identity and a stable sense of one's Self (Stanghellini, Trisolini *et al.*, 2014).
Bodily experience and the shaping and construction of identity are interconnected. The body shapes identity in the course of social situations. Sensations of attraction/repulsion, desirability/disgust, as well as all emotions as embodied phenomena (Stanghellini and Rosfort, 2013) are the basis to establish *What* I like and *Who* I am.
Research in this area has provided two main constructs pertaining disorders of identity as maintaining factors in FEDs: severe clinical perfectionism, and core low self-esteem (Murphy *et al.*, 2010). Clinical perfectionism is a system for self-evaluation in which self-worth is judged largely on the basis of striving to achieve demanding goals and success at meeting them (Shafran,

Cooper *et al.*, 2002). The patient's perfectionist standards applies to her attempts to control eating, shape and weight, as well as other aspects of her life (e.g. performance at work or sport).
The psychodynamic perspective underscores impairments in overall identity development and the failure to establish multiple and diverse domains of self-definition. In particular, Bruch (1979) suggested that the dissatisfaction and preoccupation with body image that characterises persons with FEDs reflect a maladaptive "search for selfhood and a self-respecting identity" (*ibidem*, p. 255). The basis for the development of the sense of a core subjective self is represented for Stern (2000) by the interaction between mother and infant in sharing affective states and experiences.
The experience of not feeling one's own body and emotions involves the whole sense of identity. If a person can hardly feel herself and her feelings are discontinuous over time, her identity is no longer a real psychic structure that persists beyond the flow of time and circumstances. This person will also feel extraneous from her own body and attempts to regain a sense of bodily self through coping strategies like starvation or quantification.
Therefore, abnormal bodily experiences and attitudes towards one's own corporeality, and related difficulties in the definition of one's own identity, have been proposed as the core features of FED (Stanghellini, Castellini *et al.*, 2012; Stanghellini, Trisolini *et al.*, 2014; Castellini, Stanghellini *et al.*, 2015; Stanghellini, Mancini *et al.*, 2018; Stanghellini and Mancini, 2018). Whereas most people evaluate and define themselves on the basis of the way they feel in various situations and perceive their performance in various domains, patients with FED judge their self-worth largely, or even exclusively, in terms of their shape and weight and their ability to control them.
Here is a typical narrative, expressing the need to resort to one's own body weight as a viable source of definition of the Self:

When I have doubts about who I am, I go to my old friend: the Scale.

According to Nordbø and colleague (2006), persons with anorexia nervosa may explain their behaviour as a tool for achieving a new identity since changing one's body is a tool to become another (see also Skarderud, 2007a; 2007b). They want to change, and changing one's body serves as a concrete and symbolic tool for such ambition. Thus, shaping oneself is a 'concretised metaphor', establishing equivalence between a psychic reality (identity) and a physical one (one's body shape). The shaping of one's own body becomes a substitute for the construction of one's own identity: body building is the replacement for identity *Bildung*. For persons affected by FEDs identity is a task, not a taken for granted datum (Stanghellini, 2017; Stanghellini and Mancini, 2018; 2019). They have the necessity to perpetually construct themselves. This construction is based on the way they feel seen and judged by other persons. In this perspective, they seem to share with the late-modern mind an aesthetic or *pornographic* conceptualization of the Self (Stanghellini, 2005) based on seeing and been seen and on the approval of Others. Another feature FED patients share with late modernity is the obsession with measures and numbers. These persons are constantly engaged in a sort of conceptual and mathematical process for establishing their own identity (Stanghellini and Mancini, *2019*).

Here is a paradigmatic narrative about self-definition through body digitization:

I can't tell exactly what the body is. I'm what the scale says about my body!

To sum up: in persons with FED the internal perception of one's embodied self (i.e. coenaesthesia) is troubled and, as a compensation to it, these persons experience their own

body as an object that is looked at by others. To FED persons, their body is principally given to them as an object 'to be seen'. The other's look serves as an optical prosthesis to cope with hypo- and dis-coenaesthesia. Identity impairments are related to the alienation from one's own body and the difficulties to experience one's own emotions as stable and reliable ways to establish a representation of oneself. Feeling extraneous from oneself is the core phenomenon in people with FEDs, from which several typical although secondary features derive, namely the need to feel oneself only through the gaze of the others (being a body-for-others), through objective measures and through self-starvation (Stanghellini, Castellini *et al.*, 2012).
All this is nicely encapsulated in the following narrative:

> *"My body" has always existed only on the scale, when I fast, in front of the mirror or in front of others.*

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EMOTIONAL DEPERSONALIZATION IN PERSONS WITH FEEDING AND EATING DISORDERS

abstract

In a previous paper, we discussed a model that considers abnormal eating behaviour epiphenomena of a more profound disorder of lived corporeality and identity (Stanghellini and Mancini, this issue). The core idea is that persons with FEDs experience their own body first and foremost as an object being looked at by another, rather than coenaesthetically or from a first-person perspective. In this paper, alienation from one's own emotions, disgust and shame for one's body of persons with FED, will be discussed in the light of the embodiment and identity model of FED.

keywords

disgust, emotions, feeding and eating disorders, identity construction, shame, values

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1. Emotions: what are they and how are connected to values and identity?

Emotions are the primordial medium in which I encounter the world as a set of affordances: a set of relevant possibilities that are my own possibilities as a person situated in this particular world. Being affected by a certain emotion allows me to see the things that surrounds me as disclosing certain (and not other) possibilities. The significance of an event or state of affairs is not merely a matter of its intrinsic properties, but rather of its relation to me and my current emotional engagement.

Emotions thus uncover my situatedness in the world – they are not merely passions of the mind that get in the way of rational thinking and action. Rather, they are the key for my self-understanding in a given situation. This means that the analysis of a person's emotions is the via regia for understanding this person. Emotions reveal how the world is *for me*. Emotions are closely tied to understanding. I can only understand myself and the world in which I am situated through the context of my practical engagement, and this engagement is primordially enveloped in a certain emotion.

But what are emotions? Emotions are kinetic, dynamic forces that drive us in our ongoing interactions with the environment. This definition focuses on the embodied nature of emotions. There is a close resemblance between an emotion (emotion comes from Latin *ex movere*, that is, what makes us move, the origin of movement) as the embodied motivation to move in a given way, and intentionality – a force that directs and connects (Husserl, 1912-1915a, b) to reality. Emotions can be understood as *embodied intentionality*. They provide my orientation in the life-world. Emotions orient my movement and my receptivity. They make me turn my attention in a given direction, to be absorbed by a more or less defined object, to move (or move away) in a given direction.

This definition of "emotion" rejects the reduction of the person to a biological mechanism (like visceral changes mediated by the autonomic nervous system). When I experience a given emotion, say anger, I as a human person am not compelled to act in a hostile way. As a human person, I can decide whether to behave aggressively or not, to evaluate whether my anger is good or bad, and finally to use my angry feelings as a means to understand myself in the situation in which I am engaged. I am not just passive with respect to my emotions. I can voluntarily relate myself to my emotions.

This definition also rejects the conceptualization of emotions as pure "mental" or disembodied phenomena because an emotion is not a purely and primarily cognitive phenomenon affecting the mind, but a phenomenon rooted in one's lived body, and it can to a certain extent be pre-cognitive and subconscious (Panksepp, 2005; Prinz, 2005).

Emotions are primarily embodied phenomena since they are characterized by their connection to motivation and movement. Emotions are bodily functional states, which motivate and may produce movements (Sheets-Johnstone, 1999a, 1999b). As functional states that motivate movement, emotions are protentional states in the sense that they project the person into the future providing a felt readiness for action (Gallagher, 2005). Emotions are closely connected to values through feelings, and through values to the process of constructing one's identity. Although what is valued is framed cognitively (it is thought, perceived, remembered, imagined, etc.), actually attaching value (valuing something as good, or bad, or with indifference) always involves emotions. Values are beliefs, but not cold beliefs. Valuing is a process rooted in the emotional dimension of life. "Values" is one of those terms that although familiar in everyday discourse has no settled meaning. Values are "what matters" or "is important" for a given person. Values are attitudes that regulate the felt-meanings of the world and the significant actions of the person, being organized into concepts that do not arise from rational activity but rather within the sphere of feelings. Thus, grasping the values of a person is key to understanding her way of understanding and representing herself and the surrounding world. In general, comprehending a person's values is a key to understanding her "form of life" or "being in the world," that is, the "pragmatic motive" and the "system of relevance" that determine the meaning structure of the world she lives in, and regulate her style of experience and action (Stanghellini, 2016; Stanghellini and Mancini, 2018). Emotions and values are fundamental features of the process of building one's identity. Comparative emotions are essential to the conative processes of deciding and choosing. Valuing entails comparative emotions since it is through comparing emotions that we value something as better or worse than something else. The value system of a given person, is, first and foremost, a matter of emotional experience, not a matter of general principles justifying pre-set rules of right conduct (Husserl, 1988).

2. Emotional depersonalization in persons with FEDs

In persons with FEDs the building of their identity is at jeopardy because their emotional life is characterized by feelings of depersonalization. They feel extraneous from their body and emotions and this experience affetcs their whole sense of identity. Their emotional depersonalization is not merely of a kind of apathy or unfeeling: person with FED indeed feel their emotions but these are discontinuous over time and often so intense that patients may feel scared by them (Stanghellini and Mancini, 2019).
The following can be considered typical narratives in people with FED related to their emotional experiences:

Chaos takes over me when I cannot control my emotions.

I've never understood anything about emotions. It's all a chaos!.

I feel the emotion of lightness of my bones.

This savage time blows in my face my uselessness ... Pure anguish!

Patients experience violent changes in their emotions, and more generally in body experience: they may feel invaded or overwhelmed by emotions, impulses or desires. They experience a state of loss of control on themselves and on the situation. These experiences are felt as a threaten to their sense of sameness over time and of personal identity and lead to a feeling of inner vacuum and isolation. Their inability to define what is happening throws them into

a state of confusion. We named this phenomenon 'sudden irruption of disturbing bodily experiences' - its basic core for the temporal experience is a discontinuity and suddenness related to body and emotional experience this is characterized by a disorder of the basic continuity of experience (Stanghellini and Mancini, 2019). Patients live the present as an urgency, and feel unable to define what happens and what they are feeling. When they have a feeling coming from their body, an emotion or bodily sensation, FED patients are surprised and upset by these experiences as they imply the frightening sensation of loss of control.
Next to this overall condition of emotional depersonalization, FED persons also show three specific emotions, namely disgust, shame, and anxiety. These emotions are all related to one's body: shame and disgust for the shapelessness of one's body, and anxiety related to the feeling of loss of control over the incessant changes in body shape and functions.
These feelings of shame and disgust derive from the fact that experiencing one's body as an object seen by another person – as it is the case with persons with FED (see Stanghellini and Mancini, *Body experience, identity and the other's gaze in persons with feeding and eating disorders*, this issue) reduces the body to mere anonymous matter. One feels deprived of the power of imagination, that is deprived of what one could imagine and desire to do with the 'whatness' of one's body (Gennart, 2011).
Disgust is the emotion that accompanies the separation of a part from the whole. All the parts coming from the disintegration of things become waste. Anything is disgusting when it loses the harmony of completeness. We are disgusted by the physiognomy of decay, whose central characteristic is the *un-form*. Seemingly, discontinuity over time of body perception can contribute to the emotion of disgust towards one's own body in persons with FED, but first and foremost it is the feeling that one's 'lower' bodily needs must be separated from and opposed to the 'higher' spiritual values that contributes to it (see Scheler, 1923).
Shame seems to share this origin with disgust in persons with FED. Shame is the emotion whereby I am aware of being seen by another person whose devaluating gaze and annihilating contempt uncovers a part of who I am, usually a part that makes me feel inadequate and dishonored. This part, in the case of FED persons is obviously their body. The origin of the feeling of shame is the feeling of a sort of imbalance and disharmony between the claim of spiritual personhood and embodied needs. Shame arises by way of the contiguity between higher levels of consciousness and lower drive-awareness. Disgust and shame for one's body are rooted in one's experience of one's own bodily values as uncoupled from one's spiritual values.
Next to this feeling of shame that is related to the human condition as such, another main category of shame in FED persons refers to a general sense of being unworthy: the shame of being the person one is. This nuance of shame is closely related to guilt feelings or other 'depressive' emotions like feeling insufficient, undeserving, contemptible and insignificant. Also, there are several specific or 'local' intentional objects of shame (what they feel ashamed for, the focuses of their shame) in persons with FED (Skarderud, 2007a; b): greed (related to food), envy (for the success of other persons), sadness (for one's own miserable condition and achievement failures), grandiosity (for challenging death through starvation), rage (against one's own fate). Other focuses of shame are one's body appearance and body function. FED persons may also feel ashamed for their lack of self-control and self-destructive behavior. Their shame can be related to sexual abuse or to experiences in which they were being made inferior. Finally, they may feel shame for suffering from FED and the related social stigma.
Shame is both a cause and consequence in FED. Shame constitutes an emotional point of departure for anorexic behavior. Individuals with negative or low self-esteem will seek ways to compensate such feelings. As we have seen, negative emotions in FED people are controlled

via the concrete body. The focus of coping is on body, weight, and dietary control. Shame can also be a consequence of anorexic behavior (for instance in terms of social stigma, or failure in achieving the anorexic value of self-control), hence inducing a shame-shame cycle.
Shame is also a very relevant concept for understanding therapeutic processes. Profound shame can complicate the therapeutic process by challenging its very foundation: dialogue and the therapeutic relationship itself as health promoting. Understanding the role of shame in the therapeutic relationship can be useful for enabling therapists to persevere, by gaining an understanding of the behavior which may be experienced as a rejection (Skarderud, 2007a; b).
Anxiety is a mood and as such has no specific intentional object – one single thing one can be afraid of. In anxiety one feels suspended over an inner bottomlessness, while notone single thing, but an atmosphere is felt as a menace. Narratives of persons with FED show that anxiety is the emotion that arises in them when they feel a pervasive lack of control over their body. Yet what may remain in the background is that this anxiety around food and gaining weight and the almost constant preoccupation with the control of shape and weight can be traced back to the experience of a body that has ceased to be a guarantee of selfhood and identity. Yet these feelings related to body and self mainly remain unfocused and persons with FED may be unable to make explicit the ultimate 'object' from which their concern arises.
Generalizing, we can say that specific emotions like anxiety as well as disgust and shame are secondary with respect to a global feeling of emotional depersonalization. They all point to the global lack of feeling of being that lies at the bottom of the FED life-world that we must focus on in greater detail. Disgust, shame, and anxiety for one's body are deep-rooted in a special kind of *feeling of incompleteness* that is better understood as shapelessness or lack of form. This is not simply the lack of form in an aesthetic sense as is the case with being fat, ugly, or deformed. Rather, this feeling refers to the incapacity to give a form or shape to one's existence and to the unpredictability and uncontrollability of one's bodily and emotional workings and reactions. At the bottom of the inquietude they experience their body as an incomplete source of foundation and of harmony between organic and spiritual values, and more as an insufficient ground for establishing one's identity and place in the world. This is a global *bad mood* related to facticity (the matter-of-factness) as such, primarily directed to one's body. The body as such elicits feelings of disgust, shame, and anxiety, but the meaning of this nebula of feelings must be understood at a more general level. It is the concern for being formless and inconstant in an existential sense, that is, featureless, characterless, chaotic, indeterminate as well as discontinuous, unsteady, inconstant, wavering in a temporal sense.

3. Differential phenomenology of emotions in FEDs and other psychopathological conditions

There are analogies as well as differences between the emotional life in persons with FEDs and in other severe psychopathological conditions.
Melancholic persons suffer from severe emotional depersonalization - a painful feeling of being unable to feel (Schulte, 1961). They are deeply concerned with their incapacity to feel, and feel guilty for that. Also, the kind of emotional depersonalization in persons with FED is different from depersonalization in persons with schizophrenia since in persons with FED we do not find the schizoid emotional ataxia or *psychoesthetic disproportion*, that is the presence of two, opposite aspects or tendencies: on the one hand, hypersensitivity, tenderness, nervousness or vulnerability; on the other hand, insensitivity, coldness, numbness or indifference - as described for instance by Kretschmer (1925) (see Sass, 2004). Also, acute states of perplexity in the sense of *trema* (Conrad, 1958) is extremely uncommon: FED persons do not live in an unfamiliar and uncanny world where the capacity to maintain a relationship with oneself and the world is threatened. Last nut not least, the disorder of self-affection in persons with schizophrenia is a much more

profound kind of ontological insecurity (Laing, 2010) or vulnerability than the feelings of shame and disgust for one's body that we find in persons with FEDs: in schizophrenia, it is the sense that one's very self is unstable and vulnerable to imploding or to being destroyed or annihilated by others.

Some analogies between the emotional life of FED and borderline persons can be drawn, as for instance they can both experience deep feelings of shame, but FED patients do not display the typical dysphoria–anger oscillations characterizing borderline persons (Rossi Monti and D'Agostino, 2014; 2019; Stanghellini and Rosfort, 2013). Also, borderline persons typically feel unquiet about their own body, but their concern is basically about their body as a locus of agency, that is, about what causes their body to behave in that given way (e.g. impulsively). Both borderline and FED persons may feel that their body is unable to feel, but the difference between the two is in the way they compensate or cope with this: borderline persons typically use strategies like self-harm, drugs, or promiscuity, whereas the kinds of coping strategy with respect to their emotional difficulties displayed by persons with FED (different in kind from all the other groups of patients) involve feeling oneself through the gaze of the other and defining oneself through the evaluation of the other, starvation, and quantification of one's body measures. These are the typical coping responses to the sense of alienation from oneself and fleeting selfhood and identity.

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NOT UNDERSTANDING OTHERS. THE RDOC APPROACH TO THEORY OF MIND AND EMPATHY DEFICITS IN SCHIZOPHRENIA, BORDERLINE PERSONALITY DISORDER AND MOOD DISORDERS

abstract

The Research Domani Criteria framework (RdoC) encourages research on specific impairments present across traditional nosological categories and suggests a list of biological and behavioral measures for assessing them. After a description of RdoC, in this article we focus on impairments of the ability of understanding others, specifically in Theory of Mind and empathy. We illustrate recent evidence on brain anomalies correlating with these deficits in Schizophrenia, Addiction Disorders and Mood Disorders populations. In the last section, we zoom out and consider this kind of research vis-à-vis the objection of being reductionistic that is, in favoring mechanistic accounts of mental disorders. We argue that metaphysical reductionism and explanatory reductionism are not conceptually entailed by the RdoC framework.

keywords

schizophrenia, addiction disorders, mood disorders, theory of mind, empathy, rdoc, reductionism, neuroimaging

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1. Introduction

Our social life, the possibility of having successful and fulfilling relations and exchanges with other people, depends on our capacity to understand their actions and emotions, and to adjust our behaviour accordingly. Alterations of such capacity are associated with a wide range of disabling and distressing mental conditions, including autism but also schizophrenia, mood disorders and substance abuse disorders.>
(Cotter *et al.*, 2018)

Psychology has coined two concepts for the capacity of Understanding Others, namely Theory of mind and Empathy, both grounded in philosophical tradition, and now employed in neuropsychology. In this article we illustrate their use as constructs in contemporary psychiatric research. One way to approach the problem of not understanding others is to study the variations of neural and brain correlates of Empathy and Theory of Mind, in experimental paradigms using neuroimaging techniques with behavioural or self - report controlled variables. The guiding hypothesis is that dysfunctions in the social cognitive mechanisms of the brain can become clinical markers for more precise diagnosis and treatment of people's impairments in social life. The first goal of this article is to provide a short narrative review of current studies, focusing on schizophrenia, drug abuse and mood disorders.
The general framework for this kind of studies is the RdoC (Research Domain Criteria) Project, launched in 2009 by the National Institute of Mental Health (NIMH) of the United States in order to "develop, for research purposes, new ways of classifying mental disorders based on dimensions of observable behavior and neuroblological measures" (Morris and Cuthbert, 2012). RdoC favours a bottom-up approach to research in psychopathology. Rather than considering traditional nosological categories, such as Schizophrenia or major Depression, individuated by signs and symptoms, and searching for the underlying pathophysiological mechanisms, it starts with selecting out broad domains of functioning of the human mind (eg., Cognitive processes and Social Processes) each containing subordinate constructs (e.g., Attention, Social Communication), which can be analyzed at different levels (e.g. brain circuits, behavior, self-reports). In the RdoC project, Theory of Mind and Empathy are precisely two subconstructs of Social Processes.
In the ten years from its launch, RdoC actively functioned as a matrix for new research, as we will see in the next sections. However, it also sparked a debate on both its structural characteristics (i.e. choice of domains and constructs) (eg. Lilienfeld and Treadway, 2016; Hofmann and Zachar, 2017), and on conceptual assumptions about the nature of mental

disorders[1]. In particular, it has been described as having a reductionist approach to mental disorders, as it identifies them with brain dysfunctions - a psychiatry without psyche (see eg. Parnas, 2014). The second goal of this article is to address, albeit briefly, the reductionist objection. As others have noted, RdoC has been often misunderstood on this issue especially in early comments (Cuthbert and Kozak, 2013; Faucher and Goyer, 2015; Lake *et al.*, 2017). In particular, we will argue that the objection can be blocked by pointing out that brain-behaviour correlations need not be taken as metaphysical identities, and moreover, even granting that metaphysical reductionism were assumed, that would still be compatible with the view that the explanation of any mental disorder or symptom ought to be multi-level. In fact, the methodological problem of RdoC, if any, is not reductionism, but dealing with a heterogeneity of constructs that call for the integration of different measures.
This is how the article is organized. Section 2 is dedicated to an introduction to the RdoC framework. Section 3 briefly illustrates the role of ToM and empathy as psychological constructs employed in brain studies. Sections 4, 5, and 6 show how similar ToM and empathy deficits reveal in three psychiatric conditions which are extremely heterogeneous in their clinical pictures: Schizophrenia and Mood Disorders, which reflect the Kraepelinian dichotomy between the major endogenous psychoses (Kraepelin, 1913), and which are still mutually excluding diagnoses in modern psychiatry, as defined by not-overlapping criteria in the DSM-5 classification (A.P.A., 2013); and Borderline Personality Disorder. Section 7 deals with the philosophical reductionist objection, and Section 8 is for the concluding remarks.

2. The RdoC framework

RdoC provides a matrix for organizing research, publicly accessible online (NIMH 2019). At the rows of the matrix are 6 domains of functioning: Negative Valence, Positive Valence, Cognitive Systems, Systems for Social Processes, Arousal/Modulatory Systems, and Sensorimotor Systems. Each domain is specified by subordinate ones, called "constructs". At the column of the RdoC matrix are the "units of analysis", the six different classes of variables that can be used to measure constructs and subconstructs. They are Genes, Molecules, Neural Circuits, Physiology, Behavior, and Self-Report (including patient verbal report). Circuits can refer to measurements of particular circuits as studied by neuroimaging techniques, and/or other measures validated by animal models or functional neuroimaging (e.g., emotion-modulated startle, event-related potentials with established source localization). Physiology refers to measures that are well-established indices of certain constructs, but that do necessarily not tap circuits directly (e.g., heart rate, cortisol). Behavior can refer variously to behavioral tasks or to systematic behavioral observations (e.g., a working memory task, a toddler behavioral assessment), while self-reports are interview-based scales, self-report questionnaires, or other instruments that may encompass normal-range and/or abnormal aspects of the dimension of interest. The word "construct" is here used in the typical psychological meaning, indicating a hypothetical entity, often not observable, which serves to organize a set of data (Cronbach and Meele, 1955). As for "units of analysis", the expression was preferred to "levels" as the latter suggested reduction on one kind of variable to the other (Stanislow *et al.* 2020). We will return to the issue of RdoC and reductionism in Section 7 below.
RdoC can be seen as a response to major criticisms directed at the two most widely used nosologies, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, APA 2013) and the International Classification of Diseases (ICD-11, WHO 2018), at least when employed as

1 We acknowledge that the conditions that some consider psychopathology or disorder, others consider neuro- or mental diversity. Since our article concern RDoC specifically, we will adopt the preferred terminology of the NIMH and APA, favouring "disorder" and "psychopathology", with no intention of arguing against the neurodiversity movement.

research blueprints. The first criticism concerns the possibility of integration with psychiatric research. Neuroscience, genetics, biology of the brain, and neuroimaging have undergone a tremendous progress in the last 30 years, but so far, they have failed to have a direct and significant impact on the diagnosis and treatment behavioural difficulties (eg. Casey *et al.* 2013). Critics within the discipline have long been pointing out that the two most used nosologies, namely the International Classification of Diseases, developed by the World Health Organization, and the Diagnostic and Statistical Manual of Mental Disorders, intrinsically do not favour the integration of psychiatric science and clinic, when used in research design. As DSM-5 and ICD-10 identify disorders for diagnostic purposes by signs and symptoms alone, the same diagnosis can happen to be applied to people with very different psychological and brain conditions, thus failing to reflect genuine uniformities of mechanisms at the psychological, neuroscientific, biological and genetic level (Hyman, 2007, 2010, Insel *et al.* 2010; Nesse and Stein, 2012; Stanislow *et al.*, 2010). The same issue has been raised by philosophers of psychiatry, who actively participate in the foundational debate on the psychiatric paradigm (Murphy, 2006; Zachar *et al.*, 2014; Tabb, 2015; Tsou, 2015). The research units individuated by the RdoC matrics, eg. subconstructs, are more fine-grained and homogeneous than traditional nosological categories, in order to facilitate integration of basic science findings with clinical psychiatry.

The second issue raised by critics of the DSM-5 concerns its categorical nature. DSM allows yes/no diagnoses only, and people who do not meet the required diagnostic criteria either do not receive a diagnosis or fall under the "not otherwise specified" categories. Categoricity is partially connected with the aim of the manual, namely, to classify patients for the needs of healthcare funding agencies, such as MediCare in the US, and thereby to facilitate decisions about who should be treated or reimbursed for their mental condition. Critics, however, have long been claiming that categoricity is unfit for research purposes, as it forces clear-cut boundaries on what appears to be a continuum of conditions from typical to atypical, or functional to dysfunctional behavior (eg. Cuthbert, 2014; London, 2014; Yee, 2015). Differently, in the RdoC framework - as we read on the official website - "constructs are studied along a span of functioning from normal to abnormal with the understanding that each is situated in, and affected by, environmental and neurodevelopmental contexts" (NIMH 2019).

The formation process of RdoC involved consensus meetings of experts (working groups), and its stages were made relatively open to the public - a procedure quite similar to that leading to the publication DSM-5, and common in scientific psychiatry (eg. Barch *et al.*, 2009; Stanislow *et al.* 2010). Each working group was assigned a domain and had to reach consensus on the constructs and subconstructs of such domain, and on their definitions. The criteria employed for individuating and defining the constructs were the following: sufficient evidence for its validity as a functional unity of behavior or cognitive process, sufficient evidence for a neural circuit or symptom that played a primary role in implementing the constructs function; and sufficient relevance for understanding some aspects of psychopathology (Cuthbert, 2015). However, the matrix is meant to be a work in progress, and constructs and even domains may change as new evidence is being considered. For example, the Sensorimotor System Domain was added in 2018 (Harrison *et al.*, 2019). It is important that RdoC research unities do not suffer the same fate as DSM and ICD ones, in becoming reified and resistant to change (Charney, *et al.*,2013).

Let us focus now on the Social Processes Domain more closely, in order to introduce the case studies of this article. The NIMH RDoC Working Group for the Social Processes Domain reached consensus on the definitions of four constructs: Affiliation and Attachment, Social Communication Perception and Understanding of Self, and Perception and Understanding of Others. The latter is defined as "The processes and/or representations involved in being

aware of, accessing knowledge about, reasoning about, and/or making judgments about other animate entities, including information about cognitive or emotional states, traits or abilities". It was organized into the following sub-constructs: Animacy Perception, the ability to appropriately perceive that another entity is an agent (i.e., has a face, interacts contingently, and exhibits biological motion); Action Perception, the ability to perceive the purpose of an action being performed by an animate entity; and Understanding Mental States, the ability to make judgments and/or attributions about the mental state of other animate entities that allows one to predict or interpret their behaviors. Here "mental state" refers to intentions, beliefs, desires, and emotions. As said above, the concepts needed to operationalize such ability come from developmental psychology and fall under the umbrella term "Theory of Mind" (ToM) and empathy. In the next section we briefly recap the main features of ToM and empathy from a neuroscience perspective, before proceeding to psychopathology research in section 4.

3. Theory of Mind and Empathy

Human social life critically depends on understanding the internal causes of behavior. ToM ability is considered to be crucial for successful social interactions (Samson *et al.*, 2007) and it is involved in affect regulation, impulse control and self-monitoring (Fonagy and Target, 1996). Two different subcomponent of ToM have been identified: the cognitive ToM (cToM) primarily concerns the representations of others' knowledge, beliefs, intentions and other neutral states, while the affective ToM (aToM) is involved in others' affective states (i.e., emotions, feelings and desires) and is supposed to require the appreciation of the emotional states of others. (Brothers and Ring, 1992; Shamay-Tsoory, 2011).

ToM deficits are key predictor of social function outcomes, mental health and quality of life (Milders *et al.*, 2006) and have been suggested to exert a crucial role in the developing and maintenance of different psychopathologies such as autism, anorexia, schizophrenia (SZ), borderline personality disorder (BPD) and bipolar disorder (BD) (Bora, 2009, Bora *et al.*, 2016, Lazarus *et al.*, 2014, Leppanen *et al.*, 2018).

A large body of research indicates that ToM starts in the first few years, in typically developing children, but continues to evolve across childhood and adolescence: environmental experiences and biological maturation of involved brain regions co-occur and interact in determining ToM development (Wolf *et al.*, 2010). In addition, children's developing language abilities (Milligan *et al.*, 2007) and executive functions (Moses *et al.*, 2010) play an important role in the acquisition of socio-cognitive skills. At the age of about 18–24 months, typically-developing children manifest self-awareness passing successfully the mirror test, where the ability of visual self-recognition is evaluated (Perner and Davies, 1991; Povinelli, 1993). The child is now able to distinguish between the representation of a real event and the representation of an hypothetical state, such as a thought, and thus starts to pretend and simulate in fictional game (Leslie and Keeble, 1987). Until the age of 3-4 years, a child is not able to explicitly distinguish between his or her own and others' beliefs, and so understand that someone may hold false beliefs, *i.e.* representations about the world that may contrast with reality (Perner *et al.*, 2011). The next step in ToM acquisition occurs at an age of about six or seven years, when children are able to use second-order attributions, involving the understanding of one person's beliefs about another person's beliefs about reality (Perner and Winner, 1985). At this age also metaphor, irony and the ability to reliably distinguish jokes from lies begins to mature (Gross and Harris, 1988, Sullivan *et al.*, 1995) This rather late development might indicate that children at first have to gain an understanding of others' beliefs in order to appreciate that beliefs guide others' emotions (Adrian *et al.*, 2005). Even more complex is the comprehension of a *faux pas* situation, which happens when someone unintentionally says or does something inappropriate in a social situation. Children

presumably start to understand faux pas from the age 9 to 11 years (Baron-Cohen *et al.*, 1999). This kind of situation has been demonstrated to rely on to both an affective ToM and second-order ToM (Baron-Cohen *et al.*, 1999, Meristo *et al.*, 2007), suggesting that affective ToM might have a prolonged developmental trajectory compared to cognitive subcomponent.
Several brain areas have been implicated in ToM processes. Functional neuroimaging studies on healthy subjects have found that during ToM reasoning a neural network that encompasses superior temporal sulcus (STS), temporal parietal junction (TPJ), Precuneus (PCun), posterior cingulate cortex (PCC) and medial prefrontal cortex (MPFC) (Van Overwalle and Baetens, 2009; Vogeley *et al.*, 2001). Less frequently, the amygdala (Amy) and the anterior temporal lobe have also been associated to ToM (Frith and Frith, 2007; Mar, 2011). A "core" ToM network, activated whenever we are reasoning about mental states, across a large range of tasks and stimulus-formats, seems to involve at least the MPFC, and the TPJ (Schurz *et al.*, 2014).
A key dimension which emerges from social cognition literature is the distinction between low-level perceptual processes necessary to decode social information from the environment, and higher-level cognitive processes which integrate and interpret it. Several studies have identified differential neural underpinnings of these different levels. The implicit automated operations (e.g. decoding facial expressions and biological motion) recruit fusiform face area, STS, inferior frontal gyrus (IFG), and premotor areas (Dapretto *et al.*, 2006; Malhi *et al.*, 2008), whereas the more demanding explicit mental state reasoning recruits the MPFC and the TPJ (Amodio and Frith, 2006; Saxe and Wexler, 2005).
There is emerging evidence that social cognitive deficits may represent a transdiagnostic issue, potentially serving as a marker of neurological abnormality across a wide range of clinical conditions (Bora *et al.*, 2016; Bora and Pantelis, 2016; Domes *et al.*, 2009; Kohler *et al.*, 2011; Kohler *et al.*, 2010). In a systematic review of meta analyses significant deficits in the ability to identify emotions from facial expressions and to successfully complete ToM tasks have been observed in several different developmental, neurological and psychiatric disorders, starting from early stages and getting more severe on conditions with longer disease duration (Cotter *et al.*, 2018). Described below are some example of how social cognition disabilities can shed light on different clinical conditions and potentially guide new-targeted treatments.

4. Schizophrenia

Social cognition abilities are severely impaired in schizophrenia (SZ) (Corcoran *et al.*, 1997, Kington *et al.*, 2000) and ToM in particular have been considered a stronger predictor of functional outcome than other social cognitive measures (Fett *et al.*, 2011). Evidence suggest specific deficit in aToM (Herold *et al.*, 2002; Kern *et al.*, 2009; Mo *et al.*, 2008; Shamay-Tsoory *et al.*, 2007), but impairments in cToM have also been repeatedly identified (Greig *et al.*, 2004; Horan *et al.*, 2009; Inoue *et al.*, 2006; Kelemen *et al.*, 2005). Several studies showed that SZ is characterized by abnormal neural response in areas deeply involved in ToM, such as MPFC, TPJ, STS (Brunet *et al.*, 2003; Ciaramidaro *et al.*, 2015; Walter *et al.*, 2009). However, results are still heterogeneous in terms of increased or decreased neural activation compared to healthy controls, especially for PFC and temporal regions. This is probably due to an intrinsic complexity related both to the disease, and to ToM itself, which requires the integration of several abilities (Bosia *et al.*, 2012). For example, the so-called positive symptoms of SZ (*i.e.* delusions, hallucinations and unusual or disorganized behavior) could be related to increased activation in the sensory and perceptual aspects of ToM, such as STS and SCX, but they could also be attributed to a reduced neural response in MPFC, the area involved in integrating this information with higher cognitive functions (Martin *et al.*, 2014). Paranoid symptoms of SZ have been linked to hyperactivity in the MPFC and TPJ/STS in ToM control conditions or in non-social situations; this could be related to an hyperactive intention detector that fails to deactivate when viewing socially neutral or intention-free scenes (Backasch *et al.*,

2013; Ciaramidaro *et al.*, 2015; Martin *et al.*, 2014; Walter *et al.*, 2009). On the other hand, hypoactivation of insula, thalamus and striatum during ToM task have been associated to reduced self-reference and awareness that could contribute to passivity symptoms, such as third-person auditory hallucinations or delusion of control (Brune *et al.*, 2008). A recent meta-analysis showed consistent neural correlates of ToM impairment in SZ: under-activation was identified in the MPFC, left orbito-frontal cortex, and in a small section of the left posterior temporo-parietal junction, while robust over-activation was identified in a more dorsal, bilateral section of the TPJ (Kronbichler *et al.*, 2017). In conclusion, SZ patients show less specialized brain activation in regions linked to ToM and increased activation in attention-related networks suggesting compensatory effects. Evidence showed that impairments in ToM ability develops across adolescence in young people with high clinical risk for psychosis, while it presents a normal age-related trajectory under antipsychotic and antidepressant medication (Davidson *et al.*, 2018). These processes seem to parallel a progressive gray matter reduction in superior temporal gyrus that precedes the first episode of psychosis and correlates with the severity of delusions at follow-up (Takahashi *et al.*, 2009). Additional extensive losses of both gray and white matter in lateral fronto-temporal regions and left anterior cingulate gyrus were observed over time (Farrow *et al.*, 2005) and functional and structural abnormalities in the same areas were associated with deficits in performance on tasks targeting ToM and empathy in SZ patients (Benedetti *et al.*, 2009).
A similar pattern of grey matter pathology, reduced performance and greater recruiting of neuronal resources has been observed in prefrontal cortex of SZ patients with working memory tasks, and parallel improvements in performance and reductions in neural activations have been reported after successful treatment (Callicott *et al.*, 2000). A similar "physiological inefficiency" could link the ToM and EMP deficits in schizophrenia with abnormal structure and function of the posterior temporal lobe, with the schizophrenic process specifically targeting these areas soon at the beginning of the illness and during its early course (Benedetti *et al.*, 2009). Thus, it can be surmised that a condition involving a general pattern of brain structural and functional abnormalities will impact human behavior with many subtle changes, including ToM and empathy deficits as defined according to the RDoC perspective; and that these single characteristics can be revealed one by one in experimental settings specifically designed to target them, and which all together lead to the multi-faceted phenotype of clinical Schizophrenia.

5. Borderline personality disorder

Borderline personality disorder (BPD) is a severe psychiatric condition, characterized by a marked instability in affect regulation, impulse control, social cognition skills and interpersonal relationships. Research reported an overall deficit in emotion recognition accuracy, especially for the negative emotions of disgust and anger (Unoka *et al.*, 2011). However, the largest deficit was observed for the identification of neutral facial expressions, suggesting that BPD patients tend to misattribute emotions, mainly negative, to faces that do not convey emotional information (Mitchell *et al.*, 2014). Previous studies which assessed ToM in BPD have yielded contrasting results, including impaired (Ghiassi *et al.*, 2010; Scott *et al.*, 2011), preserved (Murphy, 2006; Schilling *et al.*, 2012), or even superior abilities (Arntz *et al.*, 2009; Fertuck *et al.*, 2009; Franzen *et al.*, 2011) compared to healthy controls. This performance variability seems to be largely dependent on task demand in terms of ToM processing target (emotion or mental-state recognition and intentional attribution). A recent meta-analysis on more than 400 studies, pointed out the BPD patients are significantly impaired in their overall ToM capacities compared to HC, but with a relatively small effect-size. In particular, a poorer performance in mental state reasoning, such as faux pas, was found, in contrast to a relatively intact affective decoding and discriminating capacities (Nemeth *et al.*, 2018). A largely used

task to test brain regions involved in mental states decoding is the 'Reading the Mind in the Eyes task' (RMET) developed by Baron-Cohen and colleagues (2001). In this task, participants are required to match the mental state of a person, shown in a photograph of their eye regions, with one of four mental state words. Research on healthy controls frequently report a significant activation in inferior frontal gyrus (IFG) and middle temporal gyrus extending to posterior superior temporal sulcus (pSTS) during RMET task (Thye *et al.*, 2018). Compared to controls, BPD patients seem to differently activate the dedicated social brain networks. Indeed, decreased STS/STG and enhanced insula responses have been associated to reduced ToM abilities in BPD patients (Frick *et al.*, 2012; Mier *et al.*, 2013) and correlate with intrusive symptomatology and skin conductance measures of level of arousal (Dziobek *et al.*, 2011). Increased activation of insula in these patients has been linked to enhanced subjective negative emotional experience (Ruocco *et al.*, 2013), while PCun activation seems to play a role in BPD patients' tendency to become emotionally overinvolved in interpersonal situations (Cavanna and Trimble, 2006). Several brain imaging studies pointed out the particular importance of the amygdala for social-cognitive impairment in BPD. Amygdala hyperactivation was found during the presentation of negative scenes (Herpertz and Bertsch, 2014) as well as during the processing of neutral and emotional facial expressions (Donegan *et al.*, 2003; Minzenberg *et al.*, 2007). Finally, alterations in BPD in the mirror network system (MNS), which is crucially involved in intention recognition process, were observed in BPD. This system encompasses several areas, including inferior prefrontal gyrus, the inferior parietal lobe and the superior temporal sulcus (STS).
Overall, these altered neural responses observed in single studies are likely to reflect the result, in adult life, of a dynamic pattern of changes in cortico-limbic connectivity which mediates the relationship between the breadth of exposure to adverse childhood experiences, and the severity of adult psychopathology (Vai *et al.*, 2017). This in line with the fact that BPD patients are generally overwhelmed by automatic and affect-driven mentalizing, but fail to integrate the affective experiences with reflective and cognitive knowledge. Taken together, these data suggest psychotherapeutic interventions are most effective if they target BPD patients' mental state reasoning and cognitive ToM.

6. Mood disorders

Social cognition disabilities in major depressive disorder (MDD) are evident even in response to different types of ToM tasks (verbal/visual, cognitive/affective and reasoning/decoding) and are significantly associated to severity of depressive symptoms (Bora and Berk, 2016). Also bipolar patients, which alternate episodes of extreme euphoria, or mania, major depression, and euthymia, significantly underperformed healthy controls in ToM tasks. In this group, robust deficits were particularly reported during acute episodes of disease, while significant but modest impairments were observed in remitted and subsyndromal bipolar patients (Bora *et al.*, 2016) and in first-degree relatives of patients with bipolar disorder (Happe, 1994). In a study of Shamay-Tsoory and colleagues, euthymic BD patients showed significantly lower scores in the cognitive empathy subscale (perspective-taking), but scored significantly higher than comparison subjects on the affective empathy subscale (personal distress) (2009). These results suggest that ToM impairment may be an enduring correlate of bipolar disorder (BP), rather than a state marker of disease. This not surprising, considering that brain imaging meta-analyses and large-scale multisite studies have found that adults with BD had robust and replicable neurostructural alterations in both subcortical and cortical regions, including crucial mediating regions of ToM, such as amygdala, inferior frontal gyrus, precentral gyrus, fusiform gyrus and middle frontal cortex (Hibar *et al.*, 2018; Hibar *et al.*, 2016).
It has been suggested that social cognition impairments could be at least partly explained by cognitive deficits (Mitchell and Young, 2015). Indeed, ToM disabilities often co-exists alongside

cognitive deficits, particularly those relating to executive functions, such as inhibitory control and sustained attention (Van Rheenen *et al.*, 2014, Wolf *et al.*, 2010) and some of them correlate with, or predict, the degree of ToM impairment (Moriguchi, 2014). Longitudinal investigations are needed to assess the trajectory of socio-cognitive profile of BP across mood states and disentangle the effect of other clinical symptoms, such as cognitive functioning, from ToM ability. The presence of socio-cognitive deficits has significant clinical value, given evidence that such alterations constitute an important obstacle for social integration and predict the likelihood of future decline in social functioning (Purcell *et al.*, 2013). Moreover, monitoring of ToM impairment in euthymic states of BP might potentially prove a useful indicator of relapse (Barrera *et al.*, 2013). Altogether, these observations warrant interest in potentiating remediation program for social cognition in BD (Lahera *et al.*, 2013). And again, a clinical condition which has been associated to multiple biological disturbances, ranging from chronobiological abnormalities to brain white matter pathology (Wirz-Justice & Benedetti, 2020), involves ToM and empathy deficits which can reveal and be assessed in proper experimental settings, but which are also very closely related to the clinical phenotype of the disorder (e.g., to the wrong interpretations of others' attitudes as expression of reproach and contempt against oneself, during depression; or in term of approval and support, during mania).

As a general comment to the three clinical situations presented here, we can then conclude that independent of the specific psychobiological underpinnings and clinical manifestations of the disorders, the RDoC perspective can be useful in providing a new framework for the assessment of psychopathology. Rather obviously, this cannot be considered as the only useful perspective in approaching psychiatric conditions, but it specifically allows to study dimensions which are common to different psychiatric conditions, and to normal human behavior, thus linking experimental settings with the clinical dissection of complex psychiatric phenotypes, with the specific aim to explore their biological correlates in a neuroscience research perspective, and to (try to) provide operational definitions of manifestations at the behavioural and neuropsychological level. Confirming that this perspective cannot be limited to psychiatry, a systematic review of the literature found ToM and empathy deficits both, in other psychiatric conditions (eating disorders, obsessive-compulsive disorder, substance abuse), in neurological conditions (Alzheimer's disease and other dementias, Parkinson's disease, Huntington's disease, multiple sclerosis, amyotrophic lateral sclerosis, epilepsy), and in developmental disorders (autism, attention deficit hyperactivity disorder, intellectual disability, specific language impairment) (Cotter *et al.*, 2018).

7. Finding brain correlates or reducing?

The studies described above showed neural correlates of ToM and empathy deficits in people diagnosed with schizophrenia, BPD and mood disorders. In all cases, brain structural abnormalities were found to correlate with impairments measured at the behavioural level, suggesting a biological basis for social cognition deficits. Though the experimental samples were recruited on the basis of traditional DSM diagnoses, the research units of the studies were the more fine-grained constructs of ToM and cognitive and affective empathy, in line with the suggestions of the RdoC framework that we have illustrated in Section 2 above. In this section we briefly address a conceptual issue that has been raised towards research within this framework, namely, that it is based on a reductionist assumption, that mental disorders and symptoms are just brain disorders and dysfunctions, and or that psychology and psychiatry should be reduced to neuroscience. For example, Stanghellini *et al.* (2019) claim that psychiatry is undergoing a "new reductionistic wave". There are different versions of the objection in the recent literature, but an exemplar formulation of the problem can be found in Parnas (2014):

> The RDoC's theoretical underpinning appears to be a neurocentric "type-type" reductionism: specific chunks (types) of mental life (e.g. hallucination, anhedonia) are identical with, or nothing else than, certain specific chunks (types) of neural activity (say, a certain configuration of interactions between dysfunctional neural networks). It is hard to follow the logic of Cuthbert's assertion that the RDoC is *non*-reductionistic when he repeatedly emphasizes a "mechanistic understanding" as the RDoC's ultimate goal. "Type-type" reductionism is, of course, a legitimate theoretical position, but one that is far from being universally shared and is perhaps even obsolete. (Parnas 2014, 47)

In fact, Parnas has two targets in his critique of RdoC, the first is type-type reductionism, and the other is "mechanistic understanding". Let us see them in turn.
Type-type identity theories of mental states and brain states are metaphysical theories on the nature of reality. Parnas is right in signaling that they are "obsolete". They were thoroughly discussed until about 1980, and gradually abandoned when the "multiple realizability" objection was raised. The main idea behind multiple realizability is that in principle (and often also *de facto*) a psychological kind, i.e. pain, can be or instantiated by different kinds of physical brain states, whereas identity calls for a 1:1 relation (Fodor, 1974). Now the debate in the metaphysics of mind has shifted to more refined positions, like local reductionism or disjunctive kinds type-identity, and the multiple-realizability objection itself has been critically discussed (Clapp, 2001; Dizadji-Bahmani *et al.*, 2010; Esfeld and Sachse, 2007). The details of this debate, however, arguably exhaust the entire discipline of analytical philosophy of mind, and therefore far exceed the limits of this section (see eg. Van Riel and Van Gulick, 2019 for reference). However, let us suppose we choose one of the theses of metaphysical reduction available in the philosophical debate, the more coherent one – is the RdoC framework committed to it?
The answer is no. A research project aimed at finding correlations is not committed to specifying which of the domain of variables considered is at the more fundamental level of reality. For example, a diabetologist may study the correlations between diabetes and Socio-Economic Status and believe that socio-economic events are nothing but very complex physical events, with bosons and other particles as constituents, or either, she may believe that diabetes is just a kind of chemical state, metaphysically speaking. In either case, the metaphysics and the arguments for defending it need not be part of the research project. Coming back to RdoC, this has been expressed clearly by Cuthbert and Kozak (2013):

> Granted, as with any collection of scientists, one can readily find diverse philosophical and scientific viewpoints expressed in various statements from the NIMH. However, although a conscientious reader can detect in publications emanating from the NIMH varying language on reductionism and on the role of biology vis a` vis psychology, an essential point is that the RDoC initiative does not rely upon assumptions of eliminative reductionism, or even of biological fundamentalism (e.g., Sanislow *et al.*, 2010). In this regard, it is important to note that the RDoC initiative does not depend conceptually upon a claim of mind-brain identity. (Cuthbert and Kozak 2013)

In other words, one can surely ask whether RdoC advocates are individually committed to some version of reductionism. In fact, we know that some are, as Thomas Insel, former director of the NIMH, wrote on more than one occasion that "mental disoders are biological disorders" (eg. Insel 2013). This is surely not irrelevant as a socio-epistemological point, and we will return to this at the end of this section.
Let us go back to Parnas' second target in the passage quoted above, that RdoC is reductionist in aiming at a mechanistic explanation of mental disorders. Here we are switching from

metaphysical issues to epistemic issues. Given that RdoC is definitively committed to mechanistic explanations of disorders and symptoms, the point deserves some attention. Mechanistic explanation aims at answering the question "Why this phenomenon is happening?" by describing a mechanism whose parts and actions have the phenomenon to be explained as an output. It is widely used in biology, cognitive science and medicine, and has been examined by philosophers of science in the last 30 years (See eg. Craver and Darden, 2013). A mechanistic explanation can be a reductive explanation – for example, the illusion of a ghost entering my room at night can be explained away as soon as a mechanism is identified that involves a LSD dose, my digestive and neural systems as proper parts, and the production of a ghost-image in my visual system as an output. But mechanistic explanation *need not be* a reductive explanation. To employ a mechanistic explanation precisely with the aim of preserving the autonomy of "higher levels" is a common stance for philosophers of cognitive science, for example Bill Bechtel, who is convinced of the autonomy of psychological constructs, like working memory or visual cognition. On Bechtel's account, finding out mechanisms that explain psychological phenomena and capacities at the lower neuroscientific and possibly at the biological level, can constrain our knowledge of what happen at the psychological level: "With the advent of cognitive neuroscience, mechanistic explanations of mental phenomena have increasingly included identification of the brain parts responsible for the component operations . . . . The goal of such research is not just to learn where operations occur, but to use such knowledge to further constrain and revise proposed accounts of mechanisms." (Bechtel, 2007, p. 175)

On this view, a mechanistic explanation can be part of a pluralistic explanation, in which mechanisms at different levels constrain one another, with no assumption that parts and activities on one level be "explained away" - i.e. reduced - by reference to parts and activities on another level.

In psychiatry and philosophy of psychiatry, views of this kind are currently indicated as "explanatory pluralism". The idea is that a mental disorder or symptom, as an *explanandum*, can admit a heterogeneous *explanans*, involving mechanisms when known, but also statistical correlations when mechanisms are not available. For example, a pluralistic explanation of the social impairments of schizophrenia may feature a correlation with adverse childhood events, and the detailed mechanism of a dysfunctional brain network, as we have seen in Section 5 above. Pluralism has been defended in psychiatry by Kenneth Kendler (2012, 2019). In a recent contribution to JAMA, summarizing a meta-analysis, he writes:

> I identified 306 individual predictor variables from those papers, and the variables were widely distributed across the 12 levels. Our discipline, which includes individuals with expertise in molecular biology, neuroscience, genetics, imaging, cognition, personality, clinical and developmental psychology, epidemiology, and sociology, has provided rigorous evidence of potential and widely diverse causes of psychiatric illness. (Kendler 2019, 1086)

Cuthbert and Kozak (2013) - among the advocates of RdoC - endorsed Kendler's pluralism as a possible broad scope framework.

Another look at the constructs and dimensions of the RdoC matrix suggests a genuine interplay of "high-level" psycho-social variables and "low-level" biological and neurofisiological ones, and the basis for a pluralistic account. As said before, one of the constraints for choosing a construct orsubconstruct for the matrix was "high-level", namely, that there is sufficient evidence for its validity as a functional unity of behavior the Secondly, not all the dimensions of the matrix include verbal reports and behaviour, which are non-reductive psychological constructs. As the philosopher and psychiatrist Derek Bolton has

noted, the RdoC approach leaves open the possibility that not all the dimensions of analysis have the same weight and importance for all constructs:

> some conditions that might go into the rows of the RDoC framework will have no ticks under any boxes indicating causal processes at levels other than, for instance, the genetic or the neural, such as Huntington's disease or concussion, that is, no psychological or social factors make any difference (though they may do if the row had "adjustment to"). That is to say, reductionism might be right in some cases and in some cases it is already known to be right; in other cases, the psychosocial might be more important, account for more of the variance in incidence or outcomes, than, for instance, genetic factors. (Bolton 2013, 25)

So, is RdoC not reductionist at all, and is no "new reductionistic wave" coming at all? We have just briefly argued (following recent commentators) that the philosophical theses of metaphysical and epistemic reductionism are not part and parcel of the RdoC framework. However, RdoC, just as any other scientific endeavor, can be considered both abstractly - as a framework or "theory" with constructs and principles – and concretely, as a historically and temporally located event (in the US, beginning in 2009) with participants (the experts involved in the working groups), and connected with a funding agency such as NIMH. Considerations of context of this kind pertain neither to metaphysics nor to classical epistemology, but to the broader domain of social epistemology, which investigates the various practical and political reasons involved in a scientific project. For example, the social epistemology of DSM-5 has highlighted the influence of pharmacological companies and of patients' advocacy groups in creating or eliminating disease categories (Cooper, 2014; Solomon REF). From a socio-epistemological point of view, it matters, for example, that when the project started, Tom Insel was openly in favour of a reductionist approach, while others, like Bruce Cuthbert, now seem to be more inclined to pluralism. In fact, what some commentators have hinted is that RdoC can be reductionistic in that, once established as the main research framework for psychiatry, orienting NIMH grants and thereby journal publications, it will potentially marginalize research in areas where mechanistic explanation is not feasible, like phenomenology, psychoanalysis, psychotherapy and cultural psychiatry. For example, Herschenberg and Goldfried (2015), from the point of view of behavioural psychotherapy, worry that

> If we do focus our grants so as to be consistent with the new aims, the field runs the risk of again forsaking a more comprehensive conceptual model for a reductionistic model, this time with a focus on neural circuitry as being the ultimate method for understanding an underlying disorder. (Herschenberg and Goldfried)

Likewise, Kathrin Tabb (2017). These concerns are important and correct, in that they are grounded in facts about the context and development of RdoC. Nevertheless, they are external to the conceptual structure of the project and should better be discussed on ethical and evidence-based grounds together with governments' and scientific communities research policies.

8. Concluding remarks

In this article we provided an illustration of research on mental disorders within the RdoC paradigm. Our case study has been impairments in the social domain, in particular, difficulties in Theory of Mind and empathy. Such impairments can be studied across traditional DSM categories, as they are present in Schizophrenia, Addiction Disorders and Mood Disorders populations. We showed how evidence on relevant brain anomalies is accumulating

and paving the way for more accurate explanations of what is it to have difficulties in understanding others. In the last section, we zoomed out and considered this kind of research vis-à-vis the objection of being reductionistic that is, in favoring mechanistic accounts of dysfunctionalities. We argued on philosophical grounds, that metaphysical reductionism and explanatory reductionism are not conceptually entailed by the RdoC framework. However, the possibility of keeping psychiatry genuinely pluralistic is a question of research policy.

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IN WHAT SENSE ARE MENTAL DISORDERS BRAIN DISORDERS? EXPLICATING THE CONCEPT OF MENTAL DISORDER WITHIN RDOC[1]

abstract

Recently there has been a trend of moving towards biological and neurocognitive based classifications of mental disorders that is motivated by a dissatisfaction with the syndrome-based classifications of mental disorders. The Research Domain Criteria *(indicated with the acronym RDoC) represents a bold and systematic attempt to foster this advancement. However, RDoC faces theoretical and conceptual issues that need to be addressed. Some of these difficulties emerge when we reflect on the plausible reading of the slogan "mental disorders are brain disorders", that according to proponents of RDoC constitutes one of its main presuppositions. Some authors think that endorsing this idea commits RDoC to a form of biological reductionism. We offer empirical and theoretical considerations for concluding that the slogan above should not be read as a reductionist thesis. We argue, instead, that the slogan has a pragmatic function whose aim is to direct research in psychopathology. We show how this function might be captured in the framework of a Carnapian explication as a methodological tool for conceptual engineering. Thus, we argue that a charitable interpretation of the aims of the proponents of RDoC should be understood as an attempt at providing an explication of the concept of mental disorder in terms of brain disorder whose main goal is to provide a more precise and fruitful notion that is expected to have a beneficial impact on classification, research, and treatment of psychiatric conditions.*

keywords

conceptual engineering/explication, biological reductionism, DSM-5, ICD-10, mental disorder, natural kinds, Research domain criteria (RDoC), philosophy of psychiatry

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1. Introduction

Recently there has been a trend towards biological and neurocognitive based classifications of mental disorders (Brazil, van Dongen, Maes, Mars, & Baskin-Sommers, 2018; Insel & Cuthbert, 2015; Wiecki, Poland, & Frank, 2015). The *Research Domain Criteria* (RDoC), for instance, aims at determining categories of mental disorders that would reflect, to a greater extent, the biological underpinnings of psychological disturbances and health problems (Cuthbert & Insel, 2013; Insel *et al.*, 2010). The motivation of these approaches is replacing syndrome-based classifications as encapsulated in many diagnoses in classificatory systems such as the *Diagnostic statistical manual of mental disorders* (American Psychiatric Association & American Psychiatric Association, 2013, APA) or the *International classification of diseases* (World Health Organization, 1992, WHO). In these systems, mental disorders are categorised in terms of symptomatic behaviours, mental disturbances, and maladaptive personality traits, and not on the basis of their aetiology or underlying biological factors (Murphy, 2006; Tabb, 2015).

In this paper we aim at explicating and clarifying some methodological assumptions of RDoC and similar biologically based approaches to the classification of mental disorders. We focus on the issue of the correct interpretation of the slogan "mental disorders are brain disorders" that is often associated with such classifications (Insel & Cuthbert, 2015). We argue that this claim should not be read as a commitment to a form of biological reductionism, as, for instance, Borsboom, Cramer, and Kalis do in a recent target paper in *Behavioral and Brain Sciences* (2019). Instead, we maintain that the slogan has a pragmatic function that should direct research in psychopathology. We show how this function might be captured in terms of a broadly construed notion of explication as elaborated by Rudolf Carnap (1971) and contemporary scholars such as Catarina Dutilh Novaes (2018). We argue, thus, that the function of the explication of the concept of mental disorder in terms of that of brain disorder is to provide a more precise and fruitful notion that is expected to have a beneficial impact on the classification, research, diagnostics, and the treatment of psychiatric conditions.

The paper is structured as follows. In Section 2, we introduce RDoC and describe the main reasons that have motivated its creation and adoption. In Section 3, by means of an example concerning antisocial personality disorders, we argue that this type of approach is not committed to a classical form of reductionism. In section 4, we argue, instead, that the idea that mental disorders are brain disorders has a pragmatic function that should direct research in psychopathology. Finally, in the same section we show how this idea might be outlined in terms of a Carnapian explication as conceptual engineering. Here the explication of the concept of mental disorder as a disorder of brain circuits is expected to integrate psychiatry

with the rest of medicine with the final aim of improving research and clinical practice in treating psychopathology.

2. The RDoC approach to the classification of mental disorders

The Research *Domain Criteria* (RDoC) project is a recent, biologically oriented approach to categorization of mental disorders (see, e.g. Insel *et al.*, 2010). Its final goal is to develop new classification systems of psychiatric conditions based on data spanning from genetics and neurobiology to self-reports and behavioural tasks. Integrating new with already available biological data RDoC create more valid measures of disorders which would aid clinical practice and improve health outcomes (Cuthbert, 2014; Cuthbert & Insel, 2013; Insel *et al.*, 2010). While the long-term goal of RDoC is to develop personalised form of psychiatric treatment, the short term goal is to provide a platform for "research that can produce pioneering new findings and approaches to inform future versions of psychiatric nosologies" (Cuthbert & Insel, 2013, p. 7).
The main reason for introducing RDoC is to overcome serious problems in mental health research and clinical practice. In the last 50 years there has been a considerable advancement and impact of research in treating bodily illnesses that improved health outcomes and reduced mortality rates (Bethesda, 2011). However, in the case of mental disorders there are neither similar improvements in research and diagnosis, nor in treatment that led to a reduction of mortality rates and improvement of health outcomes (Cuthbert & Insel, 2013). The proponents of the RDoC project argue that some of the impediments to progress in clinical practice can be traced back to the currently dominant syndrome-based categorizations of mental disorders, as embodied in the DSMs (APA 2013) and ICDs (WHO 1992) (Buckholtz & Meyer-Lindenberg, 2012; Cuthbert & Insel, 2013; Lilienfeld, 2014). Let us consider some of these problems (for a thorough comparative analysis, see Clark, Cuthbert, Lewis-Fernández, Narrow, & Reed, 2017).
Syndrome based classifications that are based on DSM-5 and ICD-10 delineate categories of mental illnesses in terms of clusters of symptoms. Starting with DSM III (APA, 1980), the main goal of such approaches has been to devise reliable diagnoses which would enable communication between different researchers, epidemiological studies, psychiatric treatment, and practical applications, such as for insurance purposes (Cooper, 2005). It was thought that the best way to accomplish this was by building "a-theoretical" classifications, in the sense that categories would be based on observable symptoms and not on specific theories about the causal aetiology of mental disorders developed by different schools of thought in psychiatry (Tsou, 2011).
For instance, according to DSM-5, the core of the diagnosis of a major depression is stated as a list of symptoms:

> Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure (APA 2013, p. 160).
> Some of the symptoms are:
> 1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful).
> 2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation.)
> 3. Insomnia or hypersomnia nearly every day.
> 4. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
> 5. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide. (APA 2013, pp. 160–161)

Despite the research and practical virtues of an "a-theoretical" system of classification, in recent years the syndrome-based approach has been criticised for its many misgivings, including the fact that it disregards the causal underpinnings of diseases in their classification (Murphy, 2006; Tabb, 2015). The problems with syndrome-based approaches to mental disorders as captured by DSM-5 and ICD 10 are numerous and already well known (see, e.g. Buckholtz & Meyer-Lindenberg, 2012; Lilienfeld, Smith & Watts, 2013). To summarize the gist of these difficulties, we can cast them by using the notion of natural kind. This concept is generally taken to refer to a good scientific category (see Brzović, 2018).

Many philosophers of psychiatry agree that mental disorder categories purport to capture natural kinds (see, e.g. Beebee & Sabbarton-Leary, 2010; Brzović, Hodak, Malatesti, Šendula-Jengić, & Šustar, 2016; Samuels, 2009; Kendler, Zachar, & Craver, 2011; Tsou, 2016; cf. Tabb, 2019a; Haslam, 2014). On these views, natural kinds should not be seen as possessing biological essences, in the sense of possessing necessary and sufficient conditions that determine when a particular instance falls under the kind term. Rather, natural kinds are construed as denoting clusters of properties or causal structures that enable reliable predictions and explanatory generalizations about its instances (Boyd, 1991; Khalidi, 2013; Slater, 2015; for a review, see Brzović, 2018). In the context of research and clinical practice in biomedicine, having such kinds should enable us to develop classifications which would capture the causal underpinnings of different illnesses and their characteristic trajectories, with the aim of successfully treating them (Brzović *et al.*, 2016; Brzović, Jurjako, & Malatesti, 2018; Brzović, Jurjako, & Šustar, 2017; Kendler *et al.*, 2011). In order to serve these explanatory, inductive, and clinical purposes, the kinds or classifications in psychiatry should enable reliable diagnosis, predict temporal trajectories of illnesses, and enable preventive interventions and the design of effective therapies.

The basic complaint against the categories in currently dominant syndrome-based classification systems is that in many cases they do not capture natural kinds and thus that psychiatric practice might benefit from revising them (Brzović *et al.*, 2017; Murphy, 2006). This complaint is expressed by claiming that the current syndrome-based classifications, for the most part, have low validity. "Validity" can mean different things in biomedical research. In this context it refers to the idea that a good category of a mental disorder will denote a specific set of symptoms that differentiates it from other disorders, correlates with different behavioural, cognitive and biological measures, has a specific development trajectory and a specific response to treatments (Aboraya, France, Young, Curci & LePage, 2005). In other words, a valid psychiatric category should provide grounds for inductive generalizations and explanatory information characteristic of natural kinds that can be used in clinical practice for prediction, interventions, and treatment.

Current categorizations are not valid in this sense because they cover heterogeneous groups of people which undermines reliable prediction and treatment outcomes (Lilienfeld, 2014; Lilienfeld *et al.*, 2013). Moreover, different categories in DSM and ICD show extensive comorbidity. For instance, studies indicate that around 20% of individuals who received a diagnosis on DSM-IV also satisfy criteria for three or more other disorders in the same manual (see Lilienfeld *et al.*, 2013). Such comorbidity indicates that the diagnostic category is not well formed. This also precludes successful treatment, given that a clinician does not know which therapy to administer. In general, the fact that different DSM and ICD categories share symptomatology creates difficulties in investigating biological correlates of mental disorders and using such information for devising new research and clinical studies.

Bruce Cuthbert and Thomas Insel indicate how the problems with DSM reflect on scientific and clinical research:

> Decades of research have increasingly revealed that neural circuits and systems are a critical factor in how the brain is organized and functions, and how genetics and epigenetics exert their influence. However, this knowledge cannot be implemented in clinical studies as readily as might be hoped. Any one mechanism, such as fear circuits or working memory, is implicated in multiple disorders as currently defined; it is difficult to know which diagnostic category to select first to explore any promising leads, and a positive result immediately raises the question of whether the demonstration of efficacy must be extended to all similar disorders (a time-consuming and expensive proposition). (Cuthbert & Insel, 2013, p. 3)

In addition, studies show that most categories in DSM-IV do not have a categorical structure (Haslam, Holland, & Kuppens, 2012), rather they denote disorders whose symptom severity is dimensional. Thus, there is not a clear boundary between people suffering from a mental disorder and those who are not. DSM 5 is, thus, often criticized for presupposing that mental disorders have a categorical structure (Buckholtz & Meyer-Lindenberg, 2012; Lilienfeld, 2014). This is another sense in which DSM categories do not designate unified clusters of symptoms that might be viewed as natural kinds (Haslam, 2014).

The RDoC presents a serious and in some ways radical response to the problems mentioned above (Cuthbert & Insel, 2013; Insel *et al.*, 2010). Its aim is to replace the old schemes of psychiatric classifications and build, almost from scratch, new systems of classification that should have beneficial and far-reaching consequences for research and treatment of mental illnesses. The basic idea is to reconfigure psychiatric categories by creating research platforms that would enable researchers to gather and integrate already available genetic, neurobiological, cognitive, self-report, and behavioural data in addition to producing new data. This would help psychiatry devise valid categories of groupings that are more homogenous and providing grounds for developing therapies that are more effective.

In this sense, one could say that the goal of the RDoC project is to rebuild psychiatric categories in order to reflect natural kinds regarding mental disorders which might at first glance seem incorrect since, in contrast to the syndrome-based approaches, RDoC takes a dimensional approach to classifying psychiatric disorders (see Buckholtz & Meyer-Lindenberg, 2012; cf. Haslam, 2014). However, this issue is resolved by emphasizing that the cluster view of natural kinds (as expounded earlier in the text), does not presuppose that kinds have clear-cut boundaries. Rather, the main claim is that natural kinds, or in other words, good scientific classifications, are those that support explanations and inductive inferences that play a role in specific domains of research or practice (see Slater, 2015).

The RDoC's emphasis on biological factors in devising classifications is a built-in feature of this approach. Thomas Insel and colleagues, who initiated the RDoC project, indicate that RDoC has three assumptions:

> First, the RDoC framework conceptualizes mental illnesses as brain disorders. In contrast to neurological disorders with identifiable lesions, mental disorders can be addressed as disorders of brain circuits. Second, RDoC classification assumes that the dysfunction in neural circuits can be identified with the tools of clinical neuroscience, including electrophysiology, functional neuroimaging, and new methods for quantifying connections in vivo. Third, the RDoC framework assumes that data from genetics and clinical neuroscience will yield biosignatures that will augment clinical symptoms and signs for clinical management. (Insel *et al.*, 2010, p. 749)

Emphasis on the biological factors and the claim that mental disorders are brain disorders and the philosophical issues that it raises will become important in the next section. In the rest of the section we will outline how RDoC is expected to be and already has been implemented in practice. Insel and Cuthbert explain that:

> (t)he approach proceeds in two steps. The first step is to inventory the fundamental, primary behavioral functions that the brain has evolved to carry out, and to specify the neural systems that are primarily responsible for implementing these functions. [...] The second step then involves a consideration of psychopathology in terms of dysfunction of various kinds and degrees in particular systems, as studied from an integrative, multi-systems point of view. (Cuthbert & Insel, 2013, p. 4)

The first step led to defining, on empirical grounds, 6 major domains that are further divided into measurable dimensions (see table 1 below). These dimensions are neuropsychological constructs that provide the backdrop for conducting research in the next step. As such they are subject to continuous scientific validation and revision.[1]

Negative Valence Systems	Positive Valence Systems	Cognitive Systems	Social Processes	Arousal and Regulatory Systems
Acute Threat ("Fear")	Reward Responsiveness	Attention	Affiliation and Attachment	Arousal
Potential Threat ("Anxiety")	Reward Learning	Perception	Social Communication	Circadian Rhythms
Sustained Threat	Reward Valuation	Declarative Memory	Perception and Understanding of Self	Sleep-Wakefulness
Loss		Language	Perception and Understanding of Others	
Frustrative Nonreward		Cognitive Control		
		Working Memory		

Table 1: *The research domain criteria, November 2019 based on RDoC*
https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/constructs/rdoc-matrix.shtml

The envisioned new research design based on RDoC domains and constructs can be seen as also involving two steps (Cuthbert & Insel, 2013, p. 5). The first concerns the selection of the target group of people. Standardly, this group would be delineated by symptoms comprising a mental disorder category in the DSM-5 or ICD 10. Given that RDoC is not constrained by such diagnostic categories, the target sample could be delineated by using other criteria. For instance, these could include all patients at a clinic exhibiting anxiety symptoms or even inmates in a forensic

1 See https://www.nimh.nih.gov/research-priorities/rdoc/index.shtml.

institution exhibiting externalizing behaviour (Brazil *et al.*, 2018; Cuthbert & Insel, 2013).
In the next step an independent and a dependent variable would be chosen from dimensions relating to the constructs that need to be measured from the six domains. These dimensions can be defined on "different levels of analysis, from genetic, molecular, and cellular levels, proceeding to the circuit-level [...], and on to the level of the individual, family environment, and social context" (Insel *et al.*, 2010, p. 749). See, for instance table 2 below, for these levels in relation to the construct Acute Threat "Fear".

Construct/Sub construct	Genes	Molecules	Cells	Circuits	Physiology	Behavior	Self-Report
Acute Threat ("Fear")		BDNF CCK Cortisol/ Corticosterone CRF family Dopamine Endogenous cannabinoids FGF2 GABA Glutamat...	GABAergic cells Glia Neurons Pyramidal cells	autonomic nervous system BasAmyg Central Nucleus d-hippocampus ...	Elem BP Context Startle EMG Eye Tracking Facial EMG Fear Potentiated Startle ...	Analgesia approach (early development) Avoidance Facial expression ...	Fear survey schedule SUDS

Table 2: *Levels of analysis in RDoC, November 2019 based on RDoC*
https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/constructs/rdoc-matrix.shtml

Thus, in devising constructs that should augment clinical practice and research there are no privileged levels of analysis, although there is an invitation to tend more to the neural circuits that can be seen as playing the mediating role between the lower genetic and molecular levels and higher cognitive/affective functions and behavioural symptoms.

3. In what sense mental disorders are not brain disorders

Given that one of the presuppositions of RDoC is that mental disorders are brain disorders, it might be assumed that this approach endorses a form of reductionism (see, e.g. Borsboom *et al.*, 2019). Traditional forms of reductionism in philosophy of psychiatry purport to reduce or identify mental disorders with neural disorders (see, e.g. Szasz, 1974). If such a reduction could be made to work, the imperative would be to ground classifications of mental disorders on classifications of brain disorders. In this case, the role of biological or neurological variables would be constitutive of the classification.
However, we think that RDoC should not be associated with this type of reductionism (see, also, our manuscript Jurjako, Malatesti, & Brazil, 2019a). Traditionally, reduction is conceived as a relation between theories T_1 and T_2 where theory T_1 is reduced to T_2, if it is possible, by means of bridging principles that characterise the concepts in T_1 in terms of the concepts of T_2, to logically derive the statements of T_1 from those of T_2 (Nagel, 1987). A classic example is the reduction of thermodynamic theory of gases to the molecular kinetic theory of gases. There, the crucial element is the bridging principle that identifies the thermodynamic concept of temperature with mean kinetic energy, which allows a reduction of the equations describing the behaviour of macroscopic gases to the equations of statistical mechanics describing the behaviour of microscopic molecules that compose gases.
The classical view of reduction seems to presuppose that theoretical roles of the terms that are being reduced can be specified independently from the terms that play similar roles in the reductive theories. When translated to the present context, the idea would be that a reduction requires providing independent identification criteria for symptoms that define a syndrome

of a mental disorder and features that individuate its neural reductive base (Borsboom *et al.*, 2019).

As we have seen, however, the RDoC project is principally motivated by the dissatisfaction with syndrome-based categorizations of mental disorders as captured in different versions of DSM and ICD (Buckholtz & Meyer-Lindenberg, 2012; Cuthbert & Insel, 2013; Lilienfeld, 2014). Accordingly, the aim of RDoC is to revise our current classifications of mental disorders by including a dataset from genetic and neurobiological to cognitive and behavioural factors, rather than reducing them to unique neurobiological mechanisms (Cuthbert, 2014; Cuthbert & Insel, 2013; see, also, Tabb, 2019b). Moreover, in these revised data-driven classifications the focus is on the newly available neurobiological data that are *correlated* with different behaviourally defined disorders, but not to the exclusion of other behavioural, psychological, phenomenological, social and even normative factors (Insel & Cuthbert, 2015). The aim of this reclassification is to find cognitive, genetic, neurobiological or even behavioural differences that might be conducive to better diagnosis, treatment, and prediction of health outcomes.

A recently proposed RDoC type of approach to antisocial personality disorder and psychopathy illustrates these points (we develop these points in more detail in Jurjako *et al.*, 2019a). Antisocial personality disorder (ASPD) is in the DSM-5 characterized as a pervasive disposition towards violating social and moral norms, that starts before the age of 15 and is underpinned by hostile attitudes and lack of remorse for persistent antisocial behaviour. Psychopathy, which should not be confused with the general diagnosis of ASPD, can be seen in forensic manifestations as an especially severe form of ASPD (Hare, 2003). Psychopaths are characterised by callous attitudes, lack of empathy and remorse, complete disregard for other people's interests and safety, manipulative and conning interpersonal styles that tend to be accompanied by different forms of aggressive and generally antisocial behaviour (for a review, see Brazil & Cima, 2016).

Given that standard measures of ASPD and psychopathy are grounded in syndrome-based approaches to psychiatric classifications (see, e.g. Međedović, Bulut, Savić, & Đuričić, 2018) they inherit all of the problems related to such classifications (see section 2 above). They include heterogeneity and low construct validity which lead to forming groups of people that often do not share meaningful cognitive, biological, or aetiological underpinnings (Cooke, 2018; Jurjako, Malatesti, & Brazil, 2019b; Međedović, Petrović, Kujačić, Đorić, & Savić, 2015; Rosenberg Larsen, 2018). In that sense they fail to fulfil the standards for being a biomedical natural kind (Brzović *et al.*, 2016, 2017; Maibom, 2018). It is assumed that these problems explain the lack of successful therapies for reducing antisocial behaviour and devising coherent policies for regulating the social response to these individuals when they offend (Jurjako & Malatesti, 2018b, 2018a; Jurjako *et al.*, 2019b).

The concrete proposals, in the spirit of RDoC, to overcome the problems that afflict syndrome-based classifications of antisocial personalities, involve revisions of these categories in accordance with the already available and expected new cognitive and biological data underpinning antisocial behaviour (see Brazil *et al.*, 2018; Jurjako *et al.*, 2019a, 2019b). In accordance with RDoC, attempts to stratify and rebuild categories of persistent antisocial behaviour start with behaviourally defined criteria for individuating groups of antisocial individuals (Jurjako *et al.*, 2019b). In practice this will involve going to clinical and forensic facilities in order to investigate individuals who show extremely aggressive, maladaptive, and generally antisocial behaviour. Once we have individuated such groups we can investigate the genetic, neurobiological, cognitive, psychological, environmental, self-reports, neuropsychological, and other behavioural correlates to form inductively more robust groupings, in the sense that such groupings would enable better predictions regarding group inclusivity for research purposes, and finally treatment outcomes. From this procedure it

should be clear that antisocial behaviour and its psychological concomitants will not be reduced to genetic and neurobiological mechanisms because environmental, behavioural, and psychological criteria provide data points whose epistemic value is on a par with other more biological factors that help to determine the revised groupings. This procedure is just an example of how RDoC is supposed to be applied in practice. Therefore, there is nothing in the RDoC approach to psychiatric research that presupposes classical reductionism and the ability of identifying different levels of description independently from each other.
It remains, thus, to be explained how we should understand the slogan that "mental disorders are brain disorders" if not in the classically reductionist sense. Addressing this problem requires, preliminarily, distinguishing different important theoretical issues to which the slogan might apply. We begin next section by drawing these distinctions.

4. Engineering the concept of mental disorder

Jerome Wakefield (2014) usefully distinguishes between conceptual validity and construct validity of disorder categories. In this context, construct validity refers to explanatory factors that delineate one disorder category from another. For instance, it is expected that two different disorders will have different risk factors, causal antecedents, development trajectories, and so on. Conceptual validity refers to criteria that determine when a category designates a disorder as opposed to a normal variation. In other words, conceptual validity pertains to offering criteria about what confers a disorder status to a condition. With respect to this distinction, a category might have construct validity, but not conceptual validity, and *vice versa*. For instance, if psychopathy is not a mental disorder then it is not conceptually valid although it still might be valid as a construct because it delineates a scientifically relevant cluster of personality traits (Jurjako, 2019). Alternatively, psychopathy might be a mental disorder and thus conceptually valid, but lack construct validity, because, for instance, it is comprised of a group of people that are too heterogenous (Brzović *et al.*, 2017).
There are different philosophical views on what confers a "disorder" status to a mental or a bodily condition. According to Thomas Szasz (1974; see, also, Boorse, 2014) for a mental disorder to be real, it must consist of a neural deviance from "objective" standards of brain anatomy and physiology. From this, Szasz concludes that mental illnesses, although legitimate problems of living, are either mythological medical entities or neurological disorders. Other views adopt a more normative approach, indicating that the concept of a mental disorder cannot be defined without some reference to social norms or value judgments (see Kingma, 2013, 2014). These approaches would admit the importance of neural causes and markers in the categorisation and explanation of mental illnesses but would not require that what confers an illness status is a disorder of the brain specified independently from any normative considerations about the role that the brain plays in cognitive, behavioural, and social matters. Several contemporary authors endorse this position by arguing that the disorder or illness status must partly (Wakefield, 1992) or completely (Bolton, 2008; Fulford, 1989) be a matter of societal or other type of evaluations (for a recent discussion of this issue in the context of DSM, see Amoretti & Lalumera, 2019b, 2019a; Cooper, 2013).
The supporters of RDoC seem to be silent on the issue of conceptual validity. According to Cuthbert and Insel:

> RDoC is committed to studying the 'full range of variation, from normal to abnormal.' In some cases, only one end of a dimension may involve problem behavior (for instance, one is seldom likely to complain of an outstanding memory or keen vision), but often both extremes of a dimension may be considered as 'abnormal' [...]. (Cuthbert & Insel, 2013, p. 5)

Investigating variations from normal to abnormal brain function indicates that RDoC is not primarily about determining what makes some set of properties symptomatic of a mental disorder. Thus, they allow that there might be some other criterion, beside the independently specified brain function that determines whether some condition is a psychiatric disorder worth treating. Moreover, given that Cuthbert and Insel (2013) hold that brain functions could be specified by behavioural functions the brain evolved to implement, it is not reasonable to expect that the assumption that mental disorders are brain disorders will be specified by independently identifiable biological causes. In this spirit, Anneli Jefferson (2018) has argued that brain dysfunctions are sufficient to confer a disorder status to a brain state, however, what provides the normative criterion for deciding when a brain is dysfunctional might rely on mental or, more generally, social considerations. In this sense, we might identify mental disorders with brain disorders by mentalizing the brain, so to speak. This is compatible with Cuthbert and Insel's idea that we might determine the function of different brain areas and neural circuits by investigating what cognitive, behavioural or social functions the brain evolved to implement.

Thus, RDoC seems to be compatible with normative and strictly naturalistic ideas about what confers a mental disorder status to a condition, be it characterized as mental or bodily. Accordingly, we agree with Wakefield (2014) that RDoC does not offer a criterion for conceptual validity for categories of mental disorder. However, we do not see this as its weakness because RDoC is first and foremost a research project, while offering an account of what makes a mental condition a disorder as opposed to a normal variation belongs to perplexing conceptual issues of the philosophy of psychiatry.

So, if RDoC does not offer a criterion for conceptual validity, and is even compatible with views that would determine when a brain is disordered by reference to social criteria, we might again ask why is one of the assumptions of RDoC that mental disorders should be thought of as brain disorders? We think that this claim has a descriptive and a prescriptive dimension. Regarding the descriptive claim, some proponents of RDoC indicate that with new discoveries about the biological and neuroscientific underpinnings of many psychiatric conditions and their implementations in practice we will, as a matter of fact, start to see mental disorders as brain disorders (see, also, Murphy, 2017 for relating this claim to eliminativism in philosophy of psychology). Here is an indicative statement of this descriptive reading:

> recently psychiatry has undergone a tectonic shift as the intellectual foundation of the discipline begins to incorporate the concepts of modern biology, especially contemporary cognitive, affective, and social neuroscience. As these rapidly evolving sciences yield new insights into the neural basis of normal and abnormal behavior, syndromes once considered exclusively as "mental" are being reconsidered as "brain" disorders—or, to be more precise, as syndromes of disrupted neural, cognitive, and behavioral systems. (Insel & Cuthbert, 2015, p. 499)

In this sense, the descriptive claim concerns an empirical question for which time will show whether mental disorders will be reinterpreted as disturbances of brain networks underpinning cognitive and behavioural functioning.

The more interesting reading of the slogan that mental disorders are brain disorders is the one that highlights its prescriptive dimension. Among the proponents of the RDoC type of approach to classification there is a sense that progress in psychiatry will be achieved only if we reconceptualise mental disorders as brain disorders. Here the emphasis is on the *reconceptualization* of mental disorders as brain disorders and not on their *reduction*.

The RDoC approach to psychiatric classification and research can be conceptualised as

recommending a *co-evolutionary model, instead of a reductive one, of the relation between top-down descriptions and explanations of mental phenomena and bottom-up descriptions and explanations pertaining to neurobiological mechanisms* (Churchland, 2006; see, also, Bermúdez, 2005 ch. 5). In this case, top-down considerations would specify behavioural and psychological functions the brain is supposed to carry out, and the level of genetics and neural circuits would be accordingly used to specify normal and abnormal ways of their functioning (see section 2 above). In the present context, to discuss the details of how such a co-evolutionary model could apply to the overall RDoC approach is beyond the scope of this work. In fact, that would require addressing, amongst other issues, difficult problems concerning explanation and causation between the different levels touched upon by the different type of considerations described above (Bermúdez, 2005). We limit ourselves, instead, to discuss and clarify a conceptual dimension of the co-evolutionary way of thinking that we think can be plausibly related to RDoC.

We think that the plea for reconceptualization embedded in the slogan that "mental disorders are brain disorders" associated with RDoC might be interpreted as a plea for *explicating* the concept of mental disorders in terms of disturbances or dysfunctions of the neural networks (see Insel & Cuthbert, 2015; White, Rickards, & Zeman, 2012).

In recent discussions of philosophical methodology, explication is often understood as a process of conceptual re-engineering (Brun, 2016). The main aim is to make an imprecise or vague everyday concept (technically called *explicandum*) into a more precise concept (technically called *explicatum*) that is more suitable for theoretical, scientific or even pragmatic purposes (Brun, 2016; Dutilh Novaes, 2018).

Rudolf Carnap (1971), who provided one of the first systematic expositions of explication, gave four requirements that an adequate explication should satisfy:

1. Similarity: the *explicatum* should be similar to some degree in meaning to the *explicandum;*
2. Exactness: the *explicatum* should be more exact in meaning than the *explicandum*;
3. Fruitfulness: the *explicatum* should be fruitful with respect to accomplishing the aims of the research project (for example, for formulating theorems in logic or empirical laws in natural sciences);
4. Simplicity: it is expected that a vague concept could be explicated in more than one way. If two or more possible explications satisfy the above criteria than simplicity could be used to choose among the alternative explications (see Brun, 2016, p. 1215).

Successful explication does not have to satisfy all of the requirements of adequacy to the same degree, rather "an explicatum counts as adequate just in case it meets these criteria to a sufficient degree" (Brun, 2016, p. 1215). Here we will concentrate on the requirement of fruitfulness, because it has been argued that this is the "the crucial requirement for a successful explication" (Dutilh Novaes, 2018, p. 202; see, also, Carus, 2009; Dutilh Novaes & Reck, 2017).

Carnap originally explained a successful explication by using the example of Fish as an explicandum that can be adequately explicated in terms of the *explicatum* Piscis:

> When we compare the explicandum Fish with the explicatum Piscis, we see that they do not even approximately coincide [...]. What was [the zoologists'] motive for [...] artificially constructing the new concept Piscis far remote from any concept in the prescientific language? The reason was that [they] realized the fact that the concept Piscis promised to be much more fruitful than any concept more similar to Fish. A scientific concept is the more fruitful the more it can be brought into connection with

> other concepts on the basis of observed facts; in other words, the more it can be used for the formulation of laws. (Carnap, 1971, p. 6)

According to Carnap, the pre-theoretical or ordinary concept of Fish is replaced by a more precise concept of *Piscis*, which is more fruitful in scientific contexts because it allows us to formulate general (or empirical law-like) statements that in turn underpin successful explanatory practices, increase predictive power and empirical testability. For instance, although whales and dolphins might have fallen under our pretheoretical concept of Fish, they do not fall under the concept of Piscis, because the latter excludes mammals.

In addition to the more theoretical reading of fruitfulness, some authors emphasize that fruitfulness of an *explicatum* can be generally related to our research purposes, whether they be strictly scientific/theoretical or more broadly practical/political. Thus, in general we can say that the fruitfulness of an *explicatum* can be related to its ability to systematize a domain of inquiry according to our purposes or aims (Carus, 2009; Dutilh Novaes, 2018). In this respect, explication is a process of conceptual re-engineering where the criteria of successful explication will depend on what we need these concepts to do for us relative to some project or inquiry we find valuable.[2]

In the context of RDoC, we argue that its assumption that mental disorders should be reconceptualised as brain disorders can be plausibly justified as a plea for making the concept of mental disorder more fruitful in conducting psychiatric research and devising more effective therapies. The aim is to improve psychiatric practice and devise more effective treatments by theoretically and practically unifying knowledge about the biological, cognitive and behavioural systems underpinning what we currently call mental disorders (Insel & Cuthbert, 2015).

The kind of problems that proponents of RDoC see regarding current psychiatric classifications and how to address them testify the explicatory aim of these approaches. Insel and Cuthbert are rather clear about what propels their view that mental disorders should be redefined as brain disorders. First, they state that:

> before research on the convergence of biology and behavior can deliver on the promise of precision medicine for mental disorders, the field must address the imprecise concepts that constrain both research and practice. (Insel & Cuthbert, 2015, p. 499, emphasis added)

Further they emphasize that imprecise concepts:

> like “behavioral health disorders” or “mental disorders” or the awkwardly euphemistic “mental health conditions, ”when juxtaposed against brain science, invite continual recapitulation of the fruitless “mind-body” and “nature-nurture” debates that have impeded a deep understanding of psychopathology. (Insel & Cuthbert, 2015, p. 499)

They see the imprecision of the concept of mental disorder as impeding psychiatric research, and thus replacing this imprecise concept with a concept of brain disorder as referring to

2 That is why Dutilh Novaes (2018) argues that Carnapian explication can be viewed as a methodology similar in spirit to ameliorative analysis as expounded by Sally Haslanger (2012), where the method of ameliorative analysis refers to an exercise of engineering concepts that is shaped by our political ideals and aims, such as correcting social injustices. These approaches to philosophical methodology are currently discussed under the heading of conceptual engineering. See Cappelen (2018) for a book length discussion of these issues.

"syndromes of disrupted neural, cognitive, and behavioral systems" (Insel & Cuthbert, 2015, p. 499) is expected to transform for the better diagnostic procedures and eventually improve health outcomes.

Similarly, Peter White, Hugh Rikards, and Adam Zeman's (2012) plea for redefining mental disorders as dysfunctions of the central nervous system could be charitably read as suggesting an explication of the concept of mental disorder in terms of brain dysfunctions. They argue that mental disorders should not be grouped separately from the disorders of the brain. Keeping separate categories for mental and brain disorders creates an illusion that psychological functions have a different ontology than brain functions. To ground a division between mental function and brain function is like treating heart function as fundamentally different and disconnected from heart anatomy. If this is implausible in the case of the heart, then it should be implausible in the case of the brain and psychological function.

The negative consequences of this division are, according to them, particularly noticeable in the "bizarre double accounting". For instance, in ICD-10 "dementia in Alzheimer's disease" is classified as a mental disorder (F00), while Alzheimer's disease is classified under neurology (G30)" (White *et al.*, 2012, p. 2). Furthermore, this conceptual division has negative practical consequences on institutional division between psychiatry and the rest of medicine. Thus, White and colleagues argue that "changing the classification" by reconceptualising mental disorders as disorders of the nervous systems "will epitomise an intellectual shift with far reaching beneficial consequences" which are expected to include research, medical, and social benefits (White *et al.*, 2012).

Thus, construing mental disorders as brain disorders should invite a more integrative perspective by thinking about the brain as the seat of psychological and behavioural functions (Jefferson, 2020). Given these facts, currently unsuccessful attempts at treating mental disorders and prospects for advancement in devising treatments and improving health outcomes is likely premised on our (in)ability to take into consideration the wealth of current and future knowledge of the biological factors that underpin our psychological and behavioural functions and their characteristic patterns of malfunctioning.

The idea that we should reconceive mental disorders as brain disorders should not be read as endorsing crude versions of explanatory reductionism. Instead, it should be read as an invitation to avoid the pitfalls of drawing arbitrary wedges within the field of medicine and engage the promising projects that aim at improving research, treatment, and health outcomes by readily integrating psychiatry with the rest of medicine.

5. Conclusion

There are several theoretical and empirical considerations for moving beyond syndrome-based classifications of mental disorders. RDoC represents a bold but a systematic attempt to foster this advancement. Besides the considerable empirical difficulties that this approach faces (Lilienfeld, 2014), there are important theoretical and conceptual issues that need to be addressed. Some of these difficulties emerge upon reflection on the plausible readings of the slogan "mental disorders are brain disorders", that is often associated with biologically grounded approaches to classification of mental disorders.

We have offered conceptual and theoretical considerations for concluding that the slogan above should not be read as an explanatory reductionist thesis. Moreover, current formulations of the biologically based classifications do not appear to involve commitments on the issue of conceptual validity. In these approaches there is no explicit or strictly logically required statement about what confers a disorder status to the investigated conditions.

Finally, while a descriptive reading of the thesis that "mental disorders are brain disorders" is an interesting prediction about our future conceptual and medical practices, we think that the most important reading is a prescriptive one. This is the idea that the categorisation of mental

disorders should be motivated by the assumption that they are brain disorders.
We have shown how a prescriptive reading of "mental disorders are brain disorders" slogan should be viewed as recommending a revisionary project for conceptually reconfiguring the categories of mental disorders. Such a plausible and promising project of reconfiguration confers to biological variables a deserved, although not exclusive, role in the classification of mental disorders. We have further clarified this conceptual reconfiguration in the terms of a notion of explication, that, firstly formulated by Carnap, has an increasingly influential currency in contemporary philosophy.

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MAPPING THE PATIENT'S EXPERIENCE: AN APPLIED ONTOLOGICAL FRAMEWORK FOR PHENOMENOLOGICAL PSYCHOPATHOLOGY

abstract

Mental health research faces a suite of unresolved challenges that have contributed to a stagnation of research efforts and treatment innovation. One such challenge is how to reliably and validly account for the subjective side of patient symptomatology, that is, the patient's inner experiences or patient phenomenology. Providing a structured, standardised semantics for patient phenomenology would enable future research in novel directions. In this contribution, we aim at initiating a standardized approach to patient phenomenology by sketching a tentative formalisation within the framework of an applied ontology, in the broader context of existing open-source Open Biomedical Ontologies resources such as the Mental Functioning Ontology. We further discuss a number of prevailing challenges and observations bearing on this task.

keywords

patient phenomenology, symptomatology, applied ontology, big data, classification

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If psychopathology is reduced to a list of commonsensically derived and simplified operational features, further progress of pathogenetic research will be seriously impeded. What is needed is a complex psychopathology capable of mediating between symptom level and process level, and of developing models of the inherent structure and possible disturbances of conscious experience.
(Fuchs 2010, p. 269)

1. Introduction

Disabilities related to mental health are among the overall fastest growing threats to global health (Patel, *et al.* 2018; Whiteford, *et al.* 2013). According to the World Health Organization, depression is "the leading cause of disability worldwide" (WHO 2017). While the growing challenge of mental health is evidently perpetuated by a number of complex and unique variables, such as limited access to efficient treatments (Wainberg, *et al.* 2017), recent observations also point to a more fundamentally troubling aspect of the problem, namely, a stagnation of scientific progress in understanding mental disease and disorder, paralleled by a halt in treatment innovation (Cuthbert & Insel, 2013; Frances, 2014; Nemeroff, 2013).

This stagnation of research progress is arguably attributable in part to unresolved issues pertaining to the diagnosis and classification of conditions and symptoms affecting mental health (Insel, *et al.* 2010; Lilienfeld, Smith & Watts, 2013; North & Surís, 2017). There is widespread disagreement on how to define and delineate psychiatric illness in general (e.g. Kendler, Zachar & Craver, 2011; Lilienfeld, Smith & Watts, 2013), how to classify individual diagnoses and symptoms (e.g. Clark *et al.*, 2017), and there is even disagreement on whether psychiatric phenomena can at all be reliably defined (e.g. Kendler, 2016; Wrigley, 2007). Aside from these unresolved issues, the current practice is to use operationalized or utility-driven tools to demarcate the scientific and clinical subject-matter, but these are contested as to their validity, i.e. their ability to reliably pick out real shared pathology (e.g. Kendell & Jablensky, 2003). If uncertainty exists on how to classify an instance of, say, depression and its individual symptoms, how would it then be possible to find a proper research sample for scientific experimentation or treatment development? Trivially, the quality of research and psychiatric efforts is directly dependent on the quality of diagnostic classification and symptomatology. One aspect of improving diagnostic classification in psychiatry is determining how to reliably and validly account for, and do justice to, the subjective side of patient symptomatology, that is, the patient's intimate experiences of her/his symptoms, often referred to as *patient*

phenomenology (e.g. Fuchs, 2010; Parnas & Zahavi, 2002; Parnas *et al.*, 2013; Patrick & Hajcak, 2016). Indeed, although psychiatric illness must be assumed to be robustly rooted in biological processes (and researchers are right to include such aspects in diagnostic classifications as far as they have been determined), psychiatric illness is qualitatively different from purely somatic illnesses in that the details of the patient's subjective experience is an unavoidable source of evidence relevant for etiological research and treatment innovation (e.g. Fernandez, 2018; Messas, Tamelini, Mancini & Stanghellini, 2018; Stanghellini & Rosfort, 2013). Put simply, where the experiences of nausea, headache and fatigue can be important indicators for the diagnosis of diabetes, they are not in themselves considered fundamental for diabetes research or treatment. By contrast, meticulous attention to qualitative differences in patient symptoms and experiences are central in demarcating the severity of a mental health condition (e.g. *how* depressed is the patient?), or to distinguish one type of disorder from another (e.g. differentiating between neurosis and psychosis).

While some aspects of patient phenomenology are included as symptoms in diagnostic classifications, the focus is usually on tracking outwardly observed behaviours. But more fundamentally, as some researchers have noted, the presiding approach to psychiatric classification is to describe its subject-matter in a third person perspective, that is, through the eyes of the healthcare professional or clinical observer (e.g. Fernandez, 2018; Fuchs, 2010; Pallagrosi, Picardi, Fonzi & Biondi, 2018; Parnas, Sass & Zahavi, 2013). So even when a diagnostic classification includes patient phenomenology, it usually does so in a simplistic observational manner that is poorly representative of the patient's actual, subjective experience (e.g. Høffding & Martiny, 2015).

According to Thomas Fuchs (2010), a consequence of lacking a sufficiently detailed description of patient phenomenology in research settings is that the gap between *symptom* and *explanation* widens. Effectively, this means that the diagnostic terminology and causal explanations that the mental health sciences yield become increasingly unrelated and detached from the patient experience, and in turn these sciences are then faced with an even harder problem of lacking tools to reliably and accurately sample patients with shared phenomenology; the very sampling cohesiveness that is necessary for genuine research development and progress. What is needed, Fuchs argues, is a precise and accurate framework that can "integrate single symptoms and neuropsychological dysfunction into a coherent whole of altered conscious experience." (Fuchs, 2010, p. 269)

In light of this consistent call for more patient phenomenology in psychiatric classification, we might ask why a systematic patient phenomenology remains somewhat peripheral in both research and clinical practices? One possible answer could be that this lack simply illustrates the underlying impossibility of developing a ready-made, systematic framework of patient phenomenology (e.g. Häfner, 2015; Ramos-Gorostize & Adán-Manes, 2013). Another answer could be that what has impeded the inclusion of patient phenomenology is not so much its practical and theoretical challenges, but instead the relative shortage of *actual* systematic standardisation and implementation efforts. Indeed, while there have been notable developments of such frameworks (e.g. Giorgi, Giorgi & Morley, 2017; Nordgaard, Sass & Parnas, 2013; Parnas *et al.*, 2005; Stanghellini, 2016; Stanghellini, Castellini, Faravelli & Ricca, 2012) these remain relatively peripheral contributions in mental health research and practice. If what is needed is a larger collaborative effort towards research and practical implementation, providing an overarching structured, standardised semantics for patient phenomenology would seem to be a step in the right direction.

In this contribution, we aim to initiate a standardised formalisation of central entities and relationships in patient phenomenology, applicable across the sciences and disciplines in mental health research and practice. We approach this standardisation effort with the method

of *applied ontology*, drawing on existing open-source resources from the Open Biomedical Ontologies (OBO) Foundry (Smith *et al.*, 2007), such as the Mental Functioning Ontology (Hastings *et al.*, 2012).

2. Background: Applied Ontologies in Interdisciplinary Research and Practice

In this section, we outline some general aspects of applied ontology, the method we propose for developing a standard for the semantics of patient phenomenology. To motivate the use of applied ontologies as a suitable method for a standardisation of patient phenomenology, we will remark on some of the interdisciplinary complexities and challenges facing the field of mental health research and practice; features that, in our opinion, make applied ontologies particularly appealing.

Mental health research and practice is a thoroughly *interdisciplinary* field. What this essentially means is that clearly demarcated scientific *objectives* such as mapping etiological processes or developing patient care programs will not necessarily rest on correspondingly clearly demarcated scientific *disciplines*. For example, uncovering the etiology of mental diseases is not a task exclusive to neurobiology, but involves insights from many other sciences, e.g. genetics, endocrinology, immunology, molecular biology, psychology, etc. Likewise, developing treatment strategies is not a task exclusively reserved for psychiatry, but must eventually be informed by the relevant aforementioned natural and behavioural sciences.

As a result of this interdisciplinarity, a shared semantics (e.g. diagnostic vocabularies) and general scientific consensus across the disciplines is needed in order for these researchers to work practically and efficiently together, insofar as these collaborations entail facilitating intercommunication and integration of research efforts. Many such standardisation efforts already exist, for example, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), which aims at delineating discrete classes of psychiatric signs and symptoms. The core strength of the DSM-5 is that it makes it possible for two (or more) researchers from different disciplines to communicate clearly about instances of, say, Major Depressive Disorder, given its defined signs and symptoms in the DSM-5. Thus, when empirical testing is carried out on patient samples with this diagnosis, researchers from different disciplines can then be certain (to the degree the DSM-5 is clinically reliable) that they are, as a minimum, testing people with the same type of signs and symptoms; and research results can therefore be meaningfully aggregated and analysed.

However, much of the existing interdisciplinary standardisation and consensus in the field is both imperfect and contested (e.g. Sullivan, 2017), causing real practical problems for research communication and integration (e.g. Bluhm, 2017). Indeed, in the absence of a scientific consensus, fundamental hurdles for scientific progress necessarily occur. For example, if one discipline understands the term "disorder" as an evolutionarily defined abnormality in organic tissue, and another discipline understands "disorder" as a type of clinical diagnosis, the effective result is a creation of potential misunderstandings when these two disciplines are working together. When enough of these non-shared, discipline specific idiosyncrasies are manifest in a specific subject-matter, it will eventually impede interdisciplinary efforts in various ways.

The problem of non-shared, non-standardised semantics might seem trivial and solvable insofar as one could suggest that researchers simply need to be more mindful about the uniqueness of their professional lingo when communicating outside their traditionally defined disciplinary boundaries. Such a response, however, drastically underestimates the real practical scope of the problem. The more developed and detailed individual scientific disciplines become, the more large-scale and heterogeneous the resulting scientific data output also becomes. In light of this expansion, the problem of navigating the complexity within and across disciplinary boundaries becomes not so much a challenge for scientists to

be *mindful about*, as it becomes a challenge practically impossible for any one single human researcher to solve (e.g. Poldrack *et al.*, 2017).

In many research domains today (e.g. brain anatomy), the quantity and complexity of the data output is increasing with exponential pace, and researchers must now implement and base their research efforts on an extensive and fundamental use of computational software (e.g. Gorgolewski *et al.*, 2016). So, where researchers used to share and integrate knowledge through traditional communicative means such as research publications, contemporary research is becoming digitalized, transforming some aspects of scientific conversations into algorithmically driven operations on large data models. For example, in order to fully account for the basic processes in the central nervous system involved in, say, emotion processing, a computational model must be built that can include and integrate data from neurobiology, endocrinology, behavioural sciences, and so forth.This *digitalization* of contemporary research necessitates standardisation, as in order for data to be properly handled by computational processes, data must be annotated with consistent, pre-established semantics. And it is exactly in this process that semantic inconsistencies potentially migrate into scientific efforts with ensuing negative effects. Certainly, where two conversing individuals may be able to notice and correct misunderstandings, for instance, that they each meant slightly different things when they used the term "disorder", this type of ad-hoc semantic flexibility is simply not tenable when using computational processes.

Consider, for instance, two independent groups of researchers studying the same *phenomenon A* in a population sample. The first group of researchers decides to digitally label this phenomenon as "anxiety" and the other group of researchers annotate the same *phenomenon A* with the label "fear" (i.e. two different terms/labels for the same phenomenon). These two research projects would then, according to the underlying algorithm, be dealing with two different phenomena. Consider now thousands of researchers across hundreds of research groups dealing with datasets consisting of millions of labels and trillions of data points, with similar uniqueness in their annotation scheme as just described. In such a case, automatic integration and aggregation of data output (across research efforts) will then either be impossible (due to idiosyncrasies creating algorithmic errors) or, at best, require an extremely laborious post-hoc gerrymandering of individual datasets (e.g. manually detecting where datasets factually overlap, but are annotated with differing labels, a process often referred to as *harmonisation* [Spjuth *et al.*, 2015]).

These are some of the fundamental problems that mental health research and practice is facing. One ideal way to get around this problem is for all researchers to operate with a shared semantics, agreeing on what differentiates one label from another (e.g. what makes "fear" different from "anxiety"). In such a scenario, the datasets will be straightforward to integrate. Scientists are recently becoming more conscious of this data integration problem, which has led to large scale initiatives aiming to create standardised semantics beyond the DSM-5 classifications. For example, the *National Institute of Mental Health* (NIMH) Research Domain Criteria (RDoC) project is largely motivated by such standardisation objectives (e.g. Insel *et al.*, 2010). Through its many funding opportunities, the NIMH directly encourages (and to some extent requires) research efforts to be structured according to predefined semantic definitions from this framework, the goal being that interdisciplinary research becomes more integrated, and therefore may yield a more detailed understanding of psychopathology, with expected positive outcomes for treatment development (e.g. Clark *et al.*, 2017).

It is within this interdisciplinary landscape that applied ontologies offer a promising approach to improving research procedures. Applied ontologies are computational tools for the organisation, structuring, and standardisation of terminologies for data annotation, used in a broad range of different fields for both research and practical purposes (Hastings, 2017; Munn

& Smith, 2008; Arp, Smith & Spear, 2015). In essence, applied ontologies are computational structures which formally capture the definitions and meaning of terminology used in a given field, including logical relationships between terms. In turn, this formalisation makes applied ontologies powerful tools for use in diverse applications, from end user software (e.g. clinical information systems) to data aggregation (e.g. shareable data repositories) to applicable research purposes (e.g. data mining algorithms for research and precision medicine) (see also Haendel, Chute and Robinson, 2018). Applied ontologies are already widely implemented across sciences that face some of the same (interdisciplinary) complexities we find in mental health research and practice (biology being the most prominent example, e.g. Ashburner *et al.*, 2000), making the method a *de facto* sound point of departure.

Each applied ontology serves a particular semantic scope or *domain*, and has an integrative purpose. Thus, it is developed not so much with reference to specific *theories* (say, of what mental disease *is*), but, to the greatest extent possible, as an *a-theoretical* consensus taxonomy of clearly defined entities and their relationships (Figure 1). At the heart of efficient and applicable ontology development is the aim of enabling different scientific disciplines to harvest the benefits of ontologized, semantic standardisation regardless of what *theory* individual researchers subscribe to, by following careful methodological principles (e.g. Smith & Ceusters 2010). Applied ontologies are developed with the goal to delineate and define *all relevant* entities and their relations within a specific domain. Content is structured both hierarchically and through the use of formal relationships.

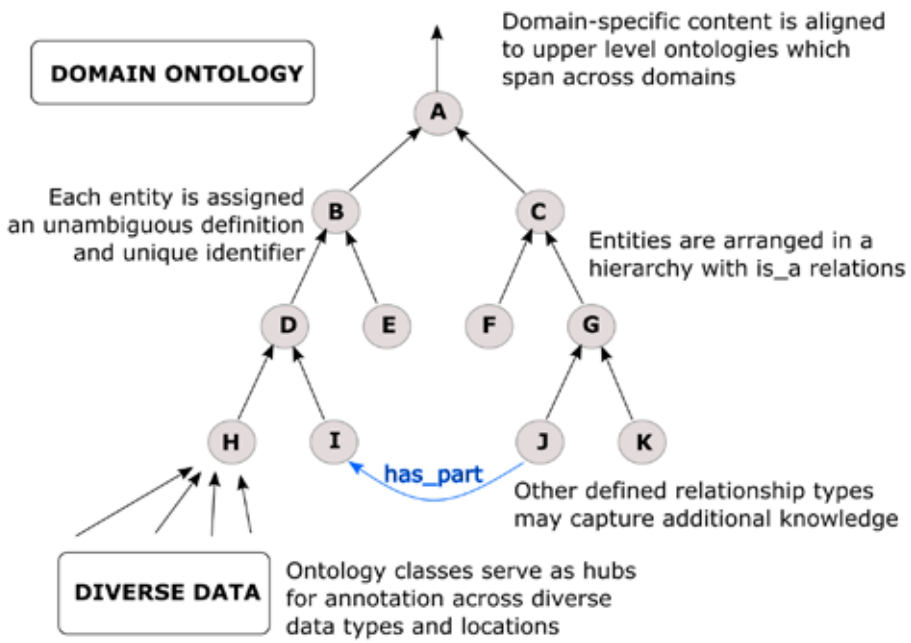

Figure 1. A generic example of the taxonomic structure of an ontology. The ontology captures entity definitions and relations in a hierarchical structure underpinned by a logical language. Many different semantic relationships may be used to define and interconnect entities, and domain-specific ontologies exist for different domains, yet are unified through alignment with common upper level ontologies. Ontologies serve as hubs for data annotations.

The structure of applied ontologies offers multiple advantages. For example, entities are arranged hierarchically such that, logically, everything that is true about an upper-level entity is also true about a classified lower level entity (e.g. A vs. B in *Figure 1*). Furthermore, what distinguishes the lower-level entity from the immediate upper-level (e.g. what makes B different from A in *Figure 1*) is also formulated in logical terms: B is an A that Cs. This logical structure enables algorithms to make efficient automated inferences across large-scale datasets. Ontologies also include other logical relationships between entities, as indicated by the blue arrow (i.e. has_part) in *Figure 1*, allowing for additional inferences within and between ontologies (e.g. Larsen & Hastings, 2018).

One relevant benefit of how ontologies make relationships between entities explicit in and across domains, is that it allows for mapping together different scientific *levels* or *granularities* (Bittner & Smith, 2003). For example, an ontology of neurobiological entities can be mapped explicitly onto entities in an ontology concerning subjectively experienced emotion processes; or a gene ontology may map entities (e.g. gene products) onto specific entities in a mental disease ontology (e.g. specific symptoms of Alzheimer's Disease). This is appealing because the method is interdisciplinary by design, allowing for sufficiently complex interconnections of the subject-matter within an entirely dynamic framework; one of the central qualities lacking in current data structuring methods (i.e. a criticism that has been directed at the aforementioned RDoC project, e.g. Ceusters, Jensen & Diehl, 2017; Larsen & Hastings, 2018; Lilienfeld, 2014; Lilienfeld & Treadway, 2016; Parnas, 2014).

These integration efforts are especially eased when ontologies are developed in accordance with a shared so-called *upper-level* formal ontology, for instance, such as the open-source *Basic Formal Ontology* (BFO) (Arp, Smith & Spear, 2015). An upper-level formal ontology is essentially a metaphysical framework, which, when used for building applied ontologies, streamlines or categorises the subject-matter of a domain onto this basic metaphysical structure. For example, the BFO explicitly distinguishes between *continuants* and *processes*, and when an applied ontology is developed, say, of mental health entities, we can then speak of etiology as a *process* and the presence of a disease in the organism as a *continuant* (for a review of the metaphysical backbone of BFO, see Smith & Ceusters, 2010).

Developing applied ontologies under a basic metaphysical structure may seem to contradict the earlier claim about ontologies being *a-theoretical*. Of course, a metaphysical description of the world is indisputably a theory about the world. However, by referring to ontologies as *a-theoretical* we are emphasising the way ontologies aim at describing all relevant entities in a domain, and by doing so, try to avoid making such a description theoretically dependent. That is, ontologies aim to account for entities in a domain, in a way that is independent of the truth value of any one theory (e.g. Hennig, 2008; Smith, 2008). To give an example of this, the *Emotion Ontology* (Hastings, Ceusters, Smith & Mulligan, 2011) aims to describe all the entities relevant for human emotional phenomena, e.g. motor behaviour, physiological signs, subjective feelings, etc., entities which researchers in the field would be generating data about, regardless of whether they adhere to *cognitive* or *non-cognitive* theories of emotion. To the extent that data are able to be integrated through ontological mapping regardless of which theoretical paradigm they arise from, the more it becomes possible to amass empirical evidence towards the broader objective of determining which theory is the most valid. Obviously, though, as soon as researchers start describing *entities*, they have already taken a metaphysical standpoint, whether they explicitly reveal this or not (this is trivially true since the mere claim that entities exist is a metaphysical standpoint). But the upside of building applied ontologies on upper-level formal ontologies is that the (unavoidable) metaphysical framework is explicitly disclosed, and therefore, may also be revised through a common peer-review process. For example, the BFO was launched in 2004 (Grenon, Smith & Goldberg, 2004), and has been revised in a community process culminating in the release of BFO 2.0 in 2012 (Arp, Smith &

Spear, 2015). By bringing this process out in the open, so to speak, we not only ensure that the underlying metaphysical backbone is being debated, we may also hypothesize that scientists in general will become more mindful about their underlying metaphysical commitments.
Aside from these positive side effects, it should be emphasized that the general incentive behind using upper-level ontologies is that if one domain has already been sufficiently described with the use of such a framework, this will then allow similarly structured ontologies to import relevant content where domains overlap, reducing the duplication of effort, and more importantly, allowing one domain to harvest the work already carried out in another. An example of such a network of collaborating ontologies (grounded in BFO) can be found in the OBO Foundry platform (Smith *et al.*, 2007), which currently includes more than 250 different domain-specific applied ontologies.
With respect to the present contribution, we suggest that a standardisation effort of patient phenomenology would benefit from connecting with already pre-existing efforts in the OBO community. Though the complete development of an *ontology of patient phenomenology* eventually can and ideally must draw on several OBO contributions, we can at this initial stage of the project point to the *Mental Functioning Ontology* (MF)[1] as among the most relevant pre-existing ontologies (see *Figure 2*).

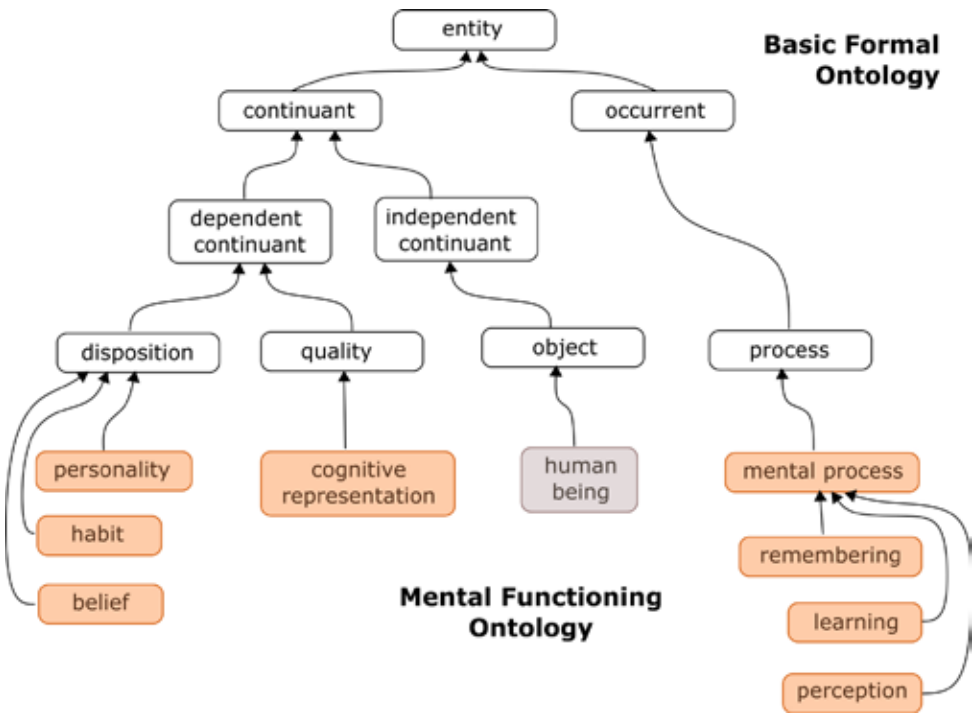

Figure 2. Excerpts from BFO and the MF. Black arrows indicate an *is_a* relationship. White boxes indicate entities from the upper-level BFO (shared with many ontology efforts), while orange boxes indicate entities from the MF.

1 The MF ontology can be downloaded in full from https://github.com/jannahastings/mental-functioning-ontology/, and is available for searching and browsing via ontology library interfaces such as the Ontology Lookup Service at https://www.ebi.ac.uk/ols/.

The MF is developed specifically for the domain of *subjective* mental functioning (Hastings *et al.*, 2012). It includes, for example, entities such as consciousness, perception, thinking, and believing, emphasizing primarily the *first-person* or *experiential* perspective of human mental functioning. However, many of the phenomenological entities that are typically perturbed in psychiatric conditions are currently not described in the MF. We will address this lack in what follows.

3. Patient Phenomenology in Psychiatry: Delineating the Subject Matter

Before we begin to address how to initiate and structure an ontology of patient phenomenology, we must first address what exactly is meant by patient phenomenology, and which aspects of this subject matter should be included in an applied ontological framework. The ideal way the subject matter of any ontology is delineated is through a community-wide discourse, but since this type of conversation (to our knowledge) has not yet taken place within the context of the development of an ontology (or similar semantic structure) for this domain, we can here only suggest a tentative outline, which we hope will be seen as an invitation to instantiate a more organized collaborative effort through, for example, workshops and conferences, as well as published proceedings and special issues in relevant academic journals.

The use of the phrase "patient phenomenology" refers to using the method of *phenomenology* when accounting for mental health phenomena. Phenomenology is a philosophical method developed by Edmund Husserl in the early 20th century (Zahavi, 2003), and refined and expanded by Husserl's students and followers such as Martin Heidegger, Edith Stein, Max Scheler, Maurice Merleau-Ponty, and others (e.g. Zahavi, 2012; 2018a). Phenomenology as a method has a longstanding tradition of psychiatric application, i.e. *phenomenological psychopathology* or *phenomenological psychiatry*, which grew out of the expansion of early Husserlian phenomenology to include more qualitative aspects of perception and lived experience (e.g. Jaspers, 1913; Minkowski, 1970). Analogous to the use of phenomenology in philosophy and cognitive sciences as a method for mapping the formal structures of consciousness (e.g. Gallagher & Zahavi, 2012), the application of phenomenology in psychiatry aims at describing and accounting for both the *basic structural* and *qualitative introspective* aspects of the patient's *first-person* experience with regards to mental health or clinical phenomena (e.g. Fuchs & Pallagrosi, 2018; Parnas, Sass & Zahavi, 2013; Stanghellini *et al.*, 2018; Zahavi, 2018b).

Phenomenology is appealing as a psychiatric method due to its overarching framework of both providing a formal representation of how consciousness universally or canonically operates, and a detailed qualitative analysis of how human beings relate to the content of consciousness (e.g. Gallagher & Zahavi, 2012). The framework of phenomenology attempts to give a universal picture of how human beings formally process their sense-impressions into meaningful perceptions (i.e. structures of consciousness), and how these perceptions are qualitatively experienced (i.e. *what it is like* to have such perceptions). This overall framework, then, allows psychiatrists to perform many different analyses, of which we can highlight two with obvious psychiatric utility:

First, it makes it possible to form intelligible hypotheses about whether a specific phenomenon is psychiatrically *abnormal*. For example, if the way a person is processing their perceptions deviates from what phenomenologists believe to be universally true about human consciousness, we might then hypothesize that this is due to a pathology. Consider if a person is experiencing problems with retracting episodes from short-term memory, phenomenologists may then posit that this is abnormal insofar as short-term memory plays a central and reliable (i.e. canonical) role in the way humans experience and perceive the world (e.g. Bortolotti, 2010; Gallagher & Zahavi, 2012; Matthews, 2006).

Secondly, the phenomenological framework makes it possible to formalise a significantly more detailed understanding of the qualitative aspect of a patient's suffering by meticulously mapping and paying attention to the entirety of a specific mental health issue. For example, if a person has experienced a specific traumatizing episode that seems to be the root cause of a prolonged mental disability, phenomenologists will then take into consideration a network of different qualitative aspects such as: *how* was the trauma experienced as opposed or in addition to *what* caused the trauma; has the trauma affected the patient's *self-awareness* as opposed or in addition to merely mapping superficial symptoms; and so on. Because a phenomenologist understands consciousness as a vast network - as opposed to mere *rationality* - the phenomenological analysis of the qualitative aspect is therefore also described in similar network-like detail (e.g. Parnas, Sass & Zahavi, 2013; Rosfort & Stanghellini, 2014; Stanghellini & Rossi, 2014).

It is apparent that phenomenological psychopathology can be contrasted with two widely accepted paradigms in traditional descriptive psychiatry: the first paradigm being the clinician's external perspective on patient behaviour and experience (i.e. how the clinician diagnostically classifies the patient), and the second paradigm being how a scientific discipline is measuring physiological processes related to the pathology (e.g. how a neurobiologist would search for neurofunctional and/or neurostructural patterns underpinning specific diagnosis) (e.g. Fuchs & Pallagrosi, 2018; Wiggins & Schwartz, 2011). In contrast to these two paradigms, patient phenomenology aims at doing justice to, and describing in greater detail the *first-person level* of subjective experiences.

As mentioned, phenomenological approaches are typically under-emphasised in contemporary research and practice (e.g. Parnas, 2014), yet they hold the promise to reveal novel insights into the shared and distinguishing features of psychiatric conditions (e.g. Messas, Fulford & Stanghellini 2017). What a thorough patient phenomenology aspires to accomplish is multifaceted and complex, and we do not have the space to review this in full in the present contribution (but see, e.g. Fernandez, 2018; Giorgi, Giorgi & Morley, 2017; Parnas & Zahavi, 2002). However, Fuchs (2010) gives us some central pointers. He sees patient phenomenology as a cornerstone in achieving a long-standing, general aspiration in mental health research, the goal of creating a complex model of "psychopathology capable of mediating between symptom level and process level, and of developing models of the inherent structure and possible disturbances of conscious experience." (Fuchs, 2010, p. 269) In other words, by representing the complexity of first-person experiences, phenomenologists (such as Fuchs) hypothesize that more robust patterns in symptomatology will emerge, which in turn will inform and guide research and treatment efforts (for similar views, see Gallagher, 2003; Lutz & Thompson, 2003; Stanghellini & Rossi, 2014).

So, how do we achieve this ambitious goal set forth by phenomenologists? In our opinion, one foundational aspect that is needed is a *semantic framework* that makes it possible to sufficiently describe the main subject matter of phenomenology, namely: (1) the universal basic structures of *how* human consciousness functions, and (2) the content, or the *whatness* of lived, introspective experience. On a more *practical* or *operational* note, the objective is to provide a logically coherent, uniform, shared language - an applied ontology - for developing data annotation frameworks to capture psychiatric phenomenology, which in turn can form a basis for psychiatric assessment tools and patient tracking systems. Ideally, once a patient enters the clinic or a research facility, a mental health clinician can, with the use of purposely developed phenomenological interviewing methods and assessment tools (e.g. Høffding & Martiny, 2015; Parnas *et al.*, 2005) describe in detail the patient's lived experience for diagnostic and research purposes. And as long as these tools are developed using the same set of ontologized semantics (i.e. the same underlying applied ontology), data aggregation and analysis will be substantially eased compared to current practices.

By developing and making available such an applied ontology, phenomenologists will thereby be constructing the open-source backbone for the development of tools and resources that make it possible for practitioners and researchers to capture data about patient symptomatology in *uniform ways*, a prerequisite for contemporary interdisciplinary science (Figure 3).

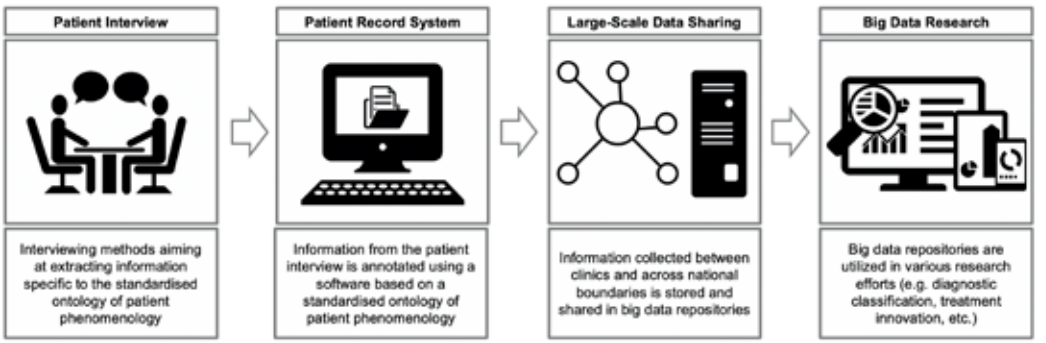

Figure 3. The process from patient interviewing to big data sharing and research initiatives. When data is collected using tools build on a shared applied ontology, data aggregation and analysis is substantially eased.

Standardising the domain of patient phenomenology will play a key role in weaving together the clinical subject matter and the research processes in order to further our understanding of mental health and developing new treatment strategies. For various reasons, none of the phenomenologically oriented data-structuring standards developed thus far (e.g. Parnas *et al.*, 2005) have been developed to the extent that they are able to sufficiently describe the various patient phenomena we encounter in the clinic, as often these approaches have been preliminary in nature, or explicitly developed for one type of disorder. Unlike existing tools, applied ontology offers a flexible and adaptable approach to standardisation that is well suited to capture the subject matter. In what follows, we offer a first step towards capturing such a standard, and discuss how this relates to other types of standards in psychiatry.

4. Ontology of Patient Phenomenology: A Tentative Prototype

In this section, we aim to give a brief, tentative sketch of some ontological entities and their relations for the domain of patient phenomenology. When building an applied ontology, a number of practical steps are necessary (e.g. Arp, Smith, & Spear, 2015). One crucial aspect is that the entities (i.e. terms and relationships) included in the ontology must ultimately be selected and defined by domain experts, ideally in the context of a community-wide conversation. In the domain of patient phenomenology, these experts are philosophers, psychologists, and psychiatrists with theoretical and practical knowledge about phenomenology. The reliance on domain experts is to ensure that the selected entities make up the best representation of the current (peer-reviewed) knowledge. What follows in this section is therefore only a *tentative first-step* in this process.

Our approach towards initiating this process was to survey the literature on applied patient phenomenology in an effort to identify existing attempts to standardise patient phenomenology. We worked from the assumption that the standardisation efforts we located reflected proper patient phenomenology entities, which we then categorised in the context of the broader grouping of mental functioning entities in the MF. Through this approach we

intend to demonstrate two things: First, how the semantics of patient phenomenology can be ontologically structured, and second, how existing tools (and existing practices surrounding these tools) in phenomenological psychiatry can be harnessed to achieve the aim of building an ontology of patient phenomenology.

Messas and colleagues (2018) provide an overview of some of the basic entities of lived, first-person experience typically included in a phenomenological framework, namely, the experience of *lived time*, *lived space*, *lived body*, *intersubjectivity* and the sense of *selfhood* (Messas *et al.*, 2018, p. 2). In a phenomenological psychiatric framework, these entities refer to basic structures of first-person experience, which are easily overlooked when they are functioning normally, but are related to the most obvious, profound psychiatric disturbances when they malfunction. For example, we may understand our sense of having *selfhood*, that is, a specific core identity, as a trivial fact of our lived experience. But in some psychopathological instances, it can be this very notion of experienced *selfhood* that is abnormal, for instance, the feeling of disintegrated identity (e.g. Parnas *et al.*, 2005).

According to the MF, all mental processes give rise to cognitive representations, that is, they are *intentional*. In the MF, consciousness is an inseparable part of mental processes (Hastings *et al.*, 2012), and it is consciousness that confers intentionality. However, mental processes include further structural parts, which are not separable but are nevertheless distinguishable from the conscious (or representational) *content* of a mental process, capturing the ways that the representational content is presented, shaped or organised to its bearer. Table 1 lists relevant entities from the MF ontology which form the basis for our annotation of entities of relevance for a phenomenological framework.

Entity	Parent	Definition	ID
mental disposition	bodily disposition	A bodily disposition that is realized in a mental process.	MF:0000033
mental process	bodily process	A bodily process that is of a type such that it can of itself be conscious.	MF:0000020
mental quality	bodily quality	A bodily quality that inheres in those structures of the extended organism that are essential for mental functioning.	MF:0000075
intentionality	mental quality	The fundamental quality of conscious mental processes of always having content (i.e. mental processes are always directed towards, or about something).	MF:0000073
consciousness	mental process part	Consciousness is an inseparable part of all mental processes. It is that part of the mental process that: a) confers a subjective perspective, a phenomenology, an experience of the mental process of which it is a part; and b) intends the object or event that the mental process is about, should such exist; i.e., it confers intentionality on the mental process.	MF:0000017

Table 1: Entities in the MF ontology of relevance for phenomenology. Column descriptions: "Entity" includes the ontology entity label; "Parent" the ontology entity's semantic parent relation; "Definition" is the definition of the entity as it is included in the ontology; "ID" is the unique identifier for the entity.

We then included the entities from Messas *et al.* (2018) in the MF as further structural parts of mental processes. For example, we added the entity *Time Awareness* to MF, defined as "The subjective experience of time as a coherent process inhabited by oneself as an embodied thinking being." Another example is *Body Awareness,* which is defined as "The subjective experience of being an embodied entity". Furthermore, each entity is classified beneath its respective *parent entity*. For example, *Time Awareness* is a subtype of *Higher Order Consciousness*, which is defined as "consciousness of one's own mental states, a self-reflexive consciousness of the experience of being conscious, of having mental processes ongoing". Table 2 (below) lists examples of entities that have been added to the MF to represent the structural aspects of conscious mental processes.

Entity	Parent	Definition	ID
time awareness	higher order consciousness	The subjective experience of time as a coherent process inhabited by oneself as an embodied thinking being	MF:0000072
space awareness	higher order consciousness	The subjective experience of the spacial surroundings one inhabits as an embodied entity.	MF:0000077
body awareness	higher order consciousness	The subjective experience of being an embodied entity.	MF:0000078
inter-subjectivity	higher order consciousness	The subjective experience of other beings as self-aware entities.	MF:0000079
consciousness of self (selfhood)	consciousness	The subjective experience of having a time persistent personal identity.	MF:0000067

Table 2: New entities added to the MF. Column descriptions: "Entity" includes the ontology entity label; "Parent" the ontology entity's parent entity; "Definition" is the definition of the ontology entity; "ID" is the unique identifier for the entity.

These basic structures of phenomenology have been added to the MF ontology, as opposed to including them in a separate ontology of patient phenomenology, since they are parts of ordinary mental functioning and are thus within MF scope. On the other hand, for those aspects of patient phenomenology that concern *disturbances* of MF entities (i.e. disturbances of mental functioning), we suggest the creation of an Ontology of Patient Phenomenology separate to the MF, but semantically and logically connected to it.

To identify examples of such entities (i.e. disturbances of mental functioning entities), we surveyed the literature and found a number of existing efforts in applied patient phenomenology. Two clinical tools were of obvious relevance: *The Examination of Anomalous Self-Experience* (EASE) scale, and the *Identity and Eating Disorders* (IDEA) self-report measure. Both are clinical assessment tools developed by phenomenological psychiatrists and philosophers for the standardised capture of psychiatric phenomena. The EASE aims to assess disturbances of *self-experience* (Parnas *et al.*, 2005), and the IDEA targets experiences related to *embodiment* and how this shapes *personal identity* (Stanghellini *et al.*, 2012). The items from the EASE scale are listed in *Appendix A*, and items from the IDEA scale are listed in *Appendix B*. We used the items from the EASE and IDEA scales to derive initial examples of entities to be included in the Ontology of Patient Phenomenology.

For example, the entity *Thought Block* (EASE scale entity 1.4) can be defined as "the subjective experience of a sudden blocking of, or inability to feed with new thoughts, the stream of

consciousness". In the MF we have defined the entity *Stream of Consciousness* as "the cognitive structural capacity to experience one's thoughts as a coherent, uninterrupted process".
The MF and patient phenomenology entities are differentiated in a fairly straightforward manner: The MF entity suggests that the process of having a *coherent stream of consciousness* is a universal capacity in the human organism that should, all things considered, be functioning (i.e. processing) reliably. So, when a patient is undergoing an instance of *Thought Block*, then, this would be characterised as a disturbance of said MF capacity.
Consider also semantically and logically similar examples: the entity *Body Estrangement* (EASE scale entity 3.3) could be defined as a type of disturbance of the MF-entity *Bodily Awareness*; the entity *Self Awareness by Others* (IDEA Factor 1) could be defined as a disturbance of the MF-entity *Self Awareness*; the entity *Identity Confusion* (EASE scale entity 2.9) could be defined as a disturbance of the MF-entity *Self-Awareness*; and so forth. In *Figure 4* (below), we illustrate how selected entities from BFO, MF, and the (prototype) Ontology of Patient Phenomenology may be linked.

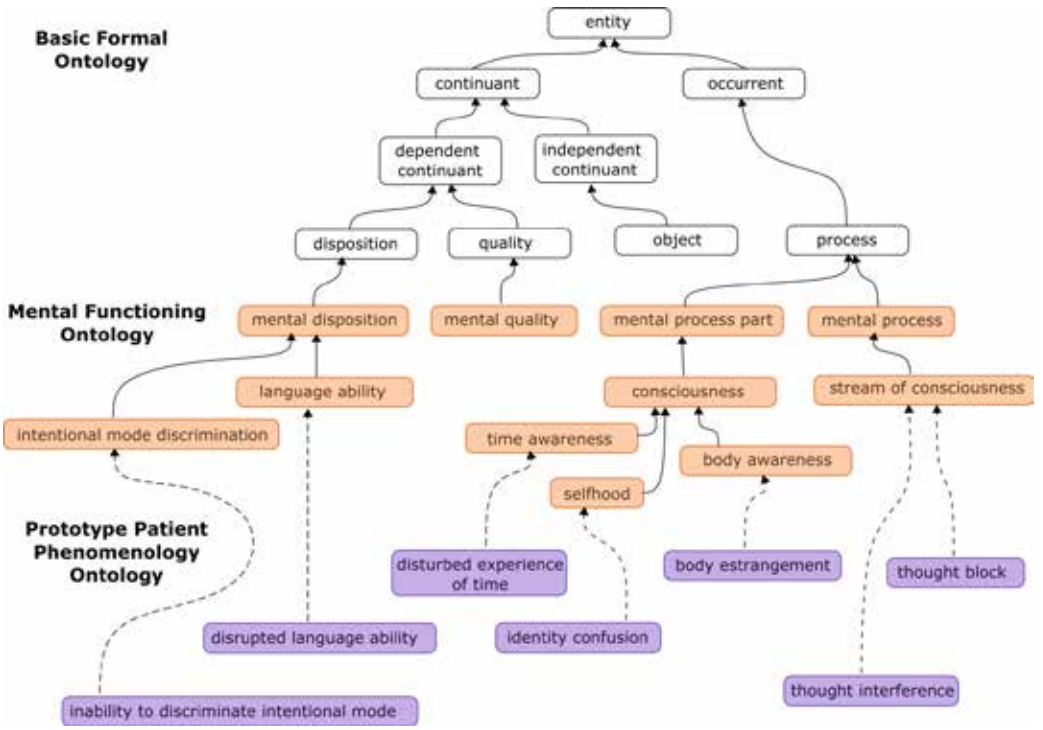

Figure 4. Illustration of entities in the prototype Ontology of Patient Phenomenology: Black boxes represent BFO entities, orange boxes MF entities, and purple boxes candidate entities from the prototype ontology of patient phenomenology. Solid arrows represent 'is a' relation, while dashed arrows represent the relation 'disturbance of' which links between the patient phenomenology entities and the corresponding MF entities.

As emphasised earlier, the final ontological mapping and definition of these entities must be worked out through a community-wide participatory process, which is an ongoing effort. This process is being guided by the well-established standards for building ontologies with BFO (Arp, Smith, & Spear 2015), as well as best practices for creating ontological definitions (e.g.

Seppälä, Ruttenberg & Smith, 2017). Finally, the Ontology of Patient Phenomenology will be maintained through a transparent editorial work of community-wide contributions, which includes introducing new entities (i.e. terms and relationships) into the ontology when these have been conventionally defined, as well as carrying out modifications to already existing entities when these have been agreed upon (for article on how this work in practice, see Dessimoz & Škunca, 2017).

5. Discussion and Conclusion

In this paper we have sketched a preliminary outline of an approach to standardise the semantics of patient phenomenology as an applied ontology. One of the advantages of using an applied ontological framework, we argued, is the utility, flexibility and adaptability of ontologies in general, but also the existing basis in already developed ontologies (e.g. the MF) alongside the computational infrastructure designed for open source sharing and reuse of content. Alongside the formal task of developing an applied ontology, there will be a substantial number of issues that need to be sorted out through the usual scientific and philosophical discourses. In this section, we shall briefly address some foreseeable questions, limitations and challenges.

Data-driven *researchers* may see an applied ontological standard as a general blessing insofar as it is implementable in any psychiatric clinic and thus facilitates a potentially much more detailed data collection. But ontologies are not always unproblematic for *practitioners*. Standardised semantics may, if not developed in close connection with practitioners, disrupt operational standards that practitioners have been accustomed to using. Therefore, in developing an applied ontology, contributors must include interests from stakeholders across the professional spectrum. An ontology is only useful if it is broadly endorsed and applied. Implementation, with good interfaces and systems designed for ease of use with the end-user in mind, will be key.

Alongside these implementation issues, there exists a suite of challenges regarding proper clinical use and application. The development and use of a semantic framework does not guarantee that data collection or assessment is *reliable*. For example, annotating reliably (and validly) that a patient is experiencing, say, *Thought Block*, will fall predominantly on the shoulders of the practitioner. It is therefore imperative that the development of an applied ontology is supplemented with a likewise serious effort in clinical training to maintain a high level of reliable data annotation. These challenges are not unique to assessing and annotating patient phenomenology entities, but are well-known problems in data handling in mental health practice and research (e.g. Lilienfeld, Smith & Watts, 2013). Indeed, just because a domain has been standardised (e.g. diagnostics in the DSM-5) it does not follow that its entities are also appropriately applied. Challenges pertaining to clinical reliability will call for further standardization in patient interviewing and reporting practices, for which the EASE and IDEA scales provides a relevant starting point (see also, Høffding & Martiny, 2016; Stanghellini, 2016).

Relatedly, advocates of patient phenomenology can at times be read as if they suggest that *first-person* perspectives must substitute or replace the *third-person* perspectives that dominate the existing clinical standards (e.g. the DSM-5, RDoC, etc.). However, this view is inherently problematic. Psychiatric patients may, for various reasons, not always be the best interpreters of their own situation, and known disconnects may arise between patient self-reports of experience and clinician's observations of the same phenomena. For example, a person suffering from bipolar disorder may have episodes where, from their own perspective, they are experiencing an uncanny calmness and lucidity, while a clinician may observe that they are outwardly acting as if they are undergoing a manic episode. Ceusters and Smith (2010) highlight the need to annotate and be mindful of these different *levels* of description, namely,

the patient's own experience (e.g. lucidity), the clinician's assessment (e.g. manic episode), and the relation between these two data points. In contrast to existing diagnostic systems, applied ontologies can provide the methodological framework to enable the annotation of such a complex (multi-level) phenomenon.

As mentioned, existing clinical standards (e.g. DSM-5, RDoC, etc.) already include some (though few) references to patient phenomenology. One advantage of an ontology of patient phenomenology is that it can be used to draw logical relationships between already existing clinical standards, e.g. between entities in the EASE and the DSM-5 category of schizophrenia (see also, Larsen & Hastings, 2018). This integrative ability has a number of advantages, of which we may highlight two:

First, often when a new standard is introduced, it will typically mean that former, older standards must be disregarded in favour of the new one. This naturally leads to inconsistencies and discrepancies in the field as not all researchers and practitioners will favour the new standard and decide to stick to former practices. However, by introducing a new standard in form of an applied ontology, this allows for the incorporation of the existing data sets that are based on former standards, by simply *semantically bridging*, or creating cross-references between, these data points/sets into the new standard. The fact that applied ontologies have this flexibility seems to be an especially strong aspect allowing for synthesising and building on already existing research efforts, as opposed to "starting from scratch", so to speak.

Second, the integrative ability of applied ontologies may ease the clinical implementation effort insofar as when introducing new standards there will not only be straightforward overlapping elements, but practitioners will be able to utilize pre-existing tools as long as they please due to their semantic bridging into the new standard. While some practitioners might find the new standard more appealing and intuitive, other practitioners might disagree. With an applied ontological framework, the explicit use of a new standard is not mandatory; moreover, what is essential is that earlier standards are - below the surface - semantically connected, something that an applied ontological framework is developed to facilitate.

It should be re-emphasized that one of the central challenges will be to practically implement the new semantics so it is used by both practitioners and researchers in mental health in a joint effort to collect and share large-scale, quality data through data repositories. As mentioned, an applied ontology is only useful if it is actually used for what it is designed to do (i.e. taxonomizing domain-specific data into a logical and relational structure). If only researchers, and not practitioners, decide to use these standards; or even worse, if only some individuals from different groups choose to do so, an applied ontology is bound to generate just as much confusion as it offers to clarify. One way to ease and facilitate the implementation of an applied ontology is to keep it as an open-source resource, which software developers can then use when creating patient data, tracking and record systems for practitioners, or automated data annotation programs for various disciplines (e.g. neurobiology, genetics, etc.). For example, when a neurobiology research group conducts an experiment on patients with, say, Major Depression Disorder (from the DSM-5), software can then be developed that utilizes the Ontology of Patient Phenomenology allowing for a much more detailed capturing of the patient's symptoms. That is, instead of tracking neurological functioning (e.g. fMRI) in people with five or more of the nine third-person described symptoms in the DSM-5 classification (or any other similar scale), research software built on the Ontology of Patient Phenomenology will then allow for a much more detailed account of the patient that is performing or undergoing the neurofunctional testing; which in turn is a much more detailed representation of the phenomenon, making it possible to execute much more profound statistical analysis of symptom patterns (see also Gallagher, 2003; Stanghellini & Rossi, 2014).

Lastly, and as mentioned earlier, the phenomenology community will play a crucial role in

developing the first full version of the Ontology of Patient Phenomenology. Mirroring the complexity of mental health research, patient phenomenology is too complex for any one researcher to fully and sufficiently map, and quality is therefore dependent on community-wide participation. Moreover, an operational version will, due to this complexity, always be viewed as an *adequatist* product, aiming for a pragmatic solution to the task of representing patient phenomenology. Importantly, an ontology is in this sense never complete, but must undergo constant revisions based on appropriate community feedback. In this contribution, we discussed the moderate goal of initiating the building of an applied ontology, which we aim to follow up by facilitating extensive community-wide participation through workshops and conferences.

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SECTION 3

SECTION 3

SOCIETY, POLITICS AND THE BODIES OF MENTAL DISEASE

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TRAUMA ACROSS CULTURES: CULTURAL DIMENSIONS OF THE PHENOMENOLOGY OF POST-TRAUMATIC EXPERIENCES

abstract

In this paper, I enquire into the nature of the influence culture has on the experience of trauma. I begin with a brief elaboration of the dominant conceptualization of post-traumatic experiences: the diagnostic category of PTSD as it can be found in the DSM. Then, I scrutinize the nature and extent to which cultural factors may influence the phenomenology of the experience of certain events as traumatic and subsequent symptoms of post-traumatic stress. It seems that cultural circumstances alter the way in which trauma is experienced; it is not clear whether there is in fact a core pathology of PTSD, as the DSM assumes, or whether the structure of the experience of trauma is too multifaceted to be summarized in one diagnostic category. Finally, I show that phenomenological enquiry promises to identify the structural similarities that would justify the delineation of a distinct diagnostic category.

keywords

phenomenological psychopathology, post-traumatic experience, diagnostic categories, culture, DSM

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1. Introduction

The upcoming publication of the *Oxford Handbook of Phenomenological Psychopathology* highlights the significance of this research area in current academia. Phenomenology has become an important lens through which psychopathological experience is scrutinized, focusing on the first person perspective of the affected. However, phenomenological psychopathology has often been inattentive to cultural factors. I shall scrutinize cultural dimensions of the phenomenology of post-traumatic experiences, as the phenomenological literature on the latter is still relatively scarce and promises to yield interesting insights. I will enquire into the nature of the influence cultural factors have on the experience of trauma. I shall begin with a brief elaboration of the dominant conceptualization of post-traumatic experiences: the diagnostic category of Post-Traumatic Stress Disorder (PTSD) as it can be found in the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM). I will then scrutinize the nature and extent to which cultural factors may influence the phenomenology of the experience of certain events as traumatic and subsequent symptoms of post-traumatic stress. While the frequency of PTSD varies cross-culturally, it is not clear whether the structure of experience differs, too. Phenomenological psychopathology promises to be a valuable approach to further enquire into the nature of post-traumatic experience and the extent to which it is influenced by cultural context. Finally, I shall apply Sass's account of phenomenological implication to show that structural similarities can be found in the phenomenology of trauma across cultures.

2. Trauma in the DSM

The definition of PTSD that can be found in the DSM has become, since its inclusion in the third edition of the manual in 1980, one of the major ways in which post-traumatic experiences are conceptualized. The DSM is an immensely influential work. Its main goal is to provide a comprehensive register of mental disorders and their respective symptoms. It promises to be universally applicable by psychiatrists worldwide, in order to reliably diagnose psychopathologies. The handbook in general, as well as the PTSD category in specific, have been widely criticized for being inapt. Their validity and specifically their applicability to individuals from non-western[1] cultures have been challenged (Timimi, 2014). I will not, however, argue that PTSD is a mere fiction (Summerfield, 2001; 2004), or question

1 I am aware that "western" is far from being a unitary concept and dichotomizing into west/non-west is problematic. I shall only use this terminology when referring to other authors' work and in line with their argument.

the usefulness of the DSM (Frances, 2013; Parnas & Gallagher, 2015; Stolorow, 2018). What is of interest here is the extent to which cultural factors influence the experience of trauma and whether this challenges the DSM's assumption that the core psychopathology is equally applicable to individuals from all cultural backgrounds.

PTSD, according to the DSM, is diagnosed when an individual has experienced at least one traumatizing event and subsequently develops a range of symptoms of psychological distress. The DSM defines traumatic events as involving "actual or threatened death, serious injury, or sexual violence" (APA, 2013), such as exposure to war, torture, sexual violence, or natural catastrophes. These events are assumed to be traumatic in and of themselves and to provoke symptoms of post-traumatic stress in a large number of individuals exposed to them, directly or indirectly.[2] Symptoms of post-traumatic stress include, but are not limited to: intrusion of memories of the event such as flashbacks and nightmares; avoidance of stimuli associated with the event; negative alterations to cognition and mood, e.g. partial amnesia concerning the event, negative beliefs, loss of trust, *etc*.; and alterations in reactivity, e.g. heightened startle response (APA, 2013, pp. 271–272). A diagnosis of PTSD is made if these symptoms prevail for more than four weeks after the traumatizing event.

The DSM entry on PTSD, like many other of the pathologies, includes a section on Culture-Related Diagnostic Issues. It emphasizes that the risk of exposure to certain kinds of traumatic events and the subsequent onset and severity of PTSD may vary across different cultural groups. It furthermore acknowledges that the expression of symptoms may differ across cultures (APA, 2013, p. 278). It seems, however, that these cultural variations in the risk of exposure and the expression of symptoms which the PTSD category allows for do not apply to the experience of the core pathology, the structure of which is assumed to remain the same across cultures.

The DSM thus attempts to demonstrate its validity independent of the cultural background of psychiatrist or patient. As mentioned above, it has been widely criticized in this regard, not only concerning the PTSD category. In case of the latter, it remains unclear why and how an event that is supposedly traumatic in and of itself should lead to PTSD in some of the exposed individuals but not in others. Wells *et al.* point out that what is valid in one cultural context may not be valid in another. Symptoms might not carry the same significance in different cultures: hopelessness experienced by a healthy, young, upper-middle class individual has a very different significance than the hopelessness experienced by an individual in the grip of an oppressive system that denies all personal freedom (Wells *et al.*, 2015). Hassan *et al.* emphasize the importance of cultural competency in offering mental health and psychosocial support (MHPSS) to individuals from non-western cultural backgrounds. A failure to do so can result in misdiagnoses due to a misunderstanding of the ways in which distress is expressed, despite the DSM's warning. Consequently, the ill-informed intervention offered is likely to be unsuccessful or, in the worst case, do more harm than good (Hassan *et al.*, 2016; Timimi, 2014, p. 212).

The difficulty of applying the DSM's diagnostic categories to individuals from diverse cultural backgrounds is emphasized by the significant fluctuation of PTSD prevalence rates across countries. Differences in the expression of distress and the significance ascribed to experiences, as well as methodological variability, are only two possible explanations for

2 According to the WHO Surveys, up to 20% of trauma victims develop PTSD, depending on the type of exposure (Kessler *et al.*, 2017). Other factors may increase resilience or vulnerability, thus altering individual risk of developing PTSD. These can be of temperamental, environmental, or physiological/genetic nature, according to the DSM (APA, 2013, pp. 277–278).

rates ranging from 0.2% in metropolitan China to 3.5% in the United States (Hinton & Lewis-Fernández, 2011, p. 787). The question at hand is, however, not the cross-cultural variability in the *frequency* of PTSD, but the nature and extent to which cultural context influences the very structure of experience. In the following, I shall scrutinize whether it is likely that there are, in fact, cultural differences on a phenomenological level, i.e. whether traumatic events and post-traumatic experiences are in fact experienced in significantly different ways across cultures.[3]

3. Cultural Influence on the Experience of Trauma

Phenomenology offers an additional perspective on the question of cross-cultural applicability of the PTSD category. While cross-cultural differences in the experience of post-traumatic stress do not necessarily pose a problem for the validity of the diagnostic category, they might help to inform our understanding of the nature of the influence cultural circumstances have on the experience of trauma. In the following, I shall elaborate on the phenomenological differences in the experience of trauma across cultures before scrutinizing phenomenological similarities in part (4).

Phenomenological differences across cultural contexts can be determined in the experience of both the traumatic event and the subsequent psychological distress. Beyond the DSM, traumatic events are described as 'shocking', 'shattering', or 'rupturing', as being utterly incomprehensible (e.g. Brison, 2013; Herman, 1992). In phenomenological terms, one could say that trauma violently disrupts the individual's anticipations of what is experienced as possible: it inflicts upon the individual's horizon of possibilities ("*Erwartungshorizont*" (Husserl, 1966, p. 186)). Anticipation and the experience of possibilities have been thoroughly treated in phenomenological literature, from early phenomenologist Edmund Husserl to recent academic research (Fuchs, 2007; Husserl, 1931, 1966; Ratcliffe, 2018). From a phenomenological perspective, the individual is seen as an embodied and embedded subjectivity (Krueger, 2016). Their lifeworld, that is, the individual world of experience, involves corporeality, spatiality, temporality, and intersubjectivity, affordances and potentialities (e.g. Fuchs, 2017; Zahavi & Salice, 2017).[4] Experiencing some things as possible, given one's embeddedness in the life world, entails the experience of affordances: I can experience the light switch as being out of reach, but my pencil as within reach. This experience is pre-reflectively informed by my sense of corporeality, i.e. being embodied, and spatiality, i.e. being in a certain spatial relation to the light switch and pencil in question. In other words, I experience the light switch as not affording to be flicked, but the pencil as affording to be reached and, by extension, to be written with. If I were agraphic, the latter would not be the case. I would be, presumably painfully, aware of the lack of affordance the experience of the pencil would entail. Following a similar pattern, a close friend affords the possibility to be spoken to in a low voice about my insecurities and fears, while a stranger might be experienced as entirely impossible to address, e.g. due to a language barrier. The experience of affordances is not limited to what I can or cannot do, but also includes what other people and things can and cannot do. Moreover, the experience of affordances brings with it an experience of anticipations: I anticipate to feel the shape and mass of my pencil when reaching for it. This anticipation would be disappointed were my fingers to go right through what I thought to be my pencil but what turned out to be a very convincing image thereof. The entirety of my experience of affordances and anticipations is enclosed in a horizon of possibilities. To some degree, this horizon is shaped by

3 I use culture in the sense of context, including "all of the socially constructed aspects of life that shape neurodevelopment, everyday functioning, self-understanding, and experience in illness and health" (Kirmayer & Gómez-Carillo, 2019).

4 Due to the brevity of this paper, I shall only give a short overview of the respective theories. For a more detailed account of Husserl's phenomenology, cf. e.g. Dan Zahavi's *Husserl's Phenomenology* (Zahavi, 2003).

my social relations and, most importantly for the examination at hand, cultural context, as I will illustrate in the following.

Across cultural contexts, there is a difference in the phenomenology of what is experienced as normal and possible and what disrupts this horizon of possibilities.[5] An event such as a missile destroying a house may be experienced as utterly unimaginable in one context while being a daily occurrence in another. Seeing a lone house standing amongst the rubble of what used to be a neighborhood is likely to entail the experience of the possibility of the house's destruction, or even the anticipation thereof. Frequency does not make an event like this less disruptive; it does, however, influence the way in which it is experienced and the kind of distress the experience entails. An event that violently disrupts the individual's horizon of possibilities is likely to be experienced as rupturing and shocking, and thus traumatic, while a disruptive event that has become part of the individual's habitual life world is more likely to result in feelings of helplessness and depression. The 2006 war in Lebanon can serve as an illustration of this. The destruction of houses, subsequent displacement, serious injuries, and death of family members had already been a sad part of everyday life in Lebanon for 15 years, during the South Lebanon Conflict from 1985–2000. A study with 991 participants from south Lebanese villages conducted one year after the 2006 war found a prevalence rate for PTSD of 17.8%. Interestingly, half of these individuals that qualified for a diagnosis with PTSD - a total of 9% - was found to also meet criteria for Major Depressive Disorder (MDD).[6] Only 8.8% were diagnosed with PTSD alone (Farhood, *et al.*, 2016). This high prevalence rate of co-occurrent PTSD and MDD points to a different kind of experience: it appears that the horrendous events of the war were not merely experienced as shocking, but also as disillusioning. This example illustrates that the context in which an event occurs plays a significant role for how it is experienced by those affected by it.

Several authors claim that there are, furthermore, differences in the way in which the symptoms following potentially traumatic events are experienced; differences that are, at least in part, culturally informed. Not only the expression of mental disturbances and the significance ascribed to them varies, as I have pointed out earlier; there is some evidence for deviations in the phenomenology of psychological distress (Hassan *et al.*, 2016, p. 135; Kirmayer, 2012, p. 149; Lewis-Fernández *et al.*, 2010). Catastrophic cognitions, i.e. the catastrophic misinterpretation of sensations as aversive, dangerous, or more severe than they are, increases the experience of psychological distress (Clark, 1986, p. 462). Lewis-Fernández *et al.* point out that individuals are inclined to search for specific symptoms that are prevalent in their respective culture. Through attentional mechanisms and positive feedback mechanisms, these symptoms become enhanced. Thus, the cultural context influences the experience of distress, by emphasizing certain symptoms.[7] Furthermore, cultural particularities of grouping symptoms into clusters may lead to individuals experiencing the co-occurrence of symptoms that are supposed to belong to the same cluster as the distress experienced (Lewis-Fernández *et al.*, 2010, pp. 5–6).

Whether the experience of depression and post-traumatic stress is more closely linked in some cultures than in others must remain a matter of speculation for now. What can be said is that the high comorbidity of PTSD and MDD that was found in the Lebanese context and beyond poses the question of whether drawing a hard line between the two distinct diagnoses is

5 For a concise account of Normality in Husserl's Philosophy, cf. Zahavi, 2003, pp. 133–135.

6 Shalev *et al.* found that 44.5% of PTSD patients also met criteria for MDD at 1 month after trauma (Shalev *et al.*, 1998).

7 Catastrophic cognitions have been studied in regard to anxiety and panic attacks and would have to be specifically applied to the study of PTSD.

legitimate. It seems that cultural circumstances alter the way in which trauma is experienced; it is not clear, however, whether there is in fact a core pathology of PTSD, as the DSM assumes, or whether the structure of the experience of trauma is too multifaceted to be summarized in one diagnostic category. Further research in phenomenological psychopathology that pays close attention to the ways in which cultural circumstances may influence individuals' experience of disruptive events and subsequent psychological distress is needed. Phenomenology, which has the tools to scrutinize the very structure of experience, promises to yield interesting results and might grant insights as to why some events are experienced as traumatic, while others are not.

4. Phenomenological Implication

Despite the phenomenological differences in the experience of traumatic events and subsequent distress across cultures, there are also similarities in the structure of the experience of trauma. I have explicated above how the experience of an event as traumatic depends on the horizon of possibilities, shaped by the cultural context. A core pathology of PTSD would require significant similarities in the structure of experience across cultures. In other words, the relation between a traumatizing experience and the subsequent development of symptoms of post-traumatic stress would have to follow a pattern that is independent of cultural influence and universally applicable. Louis Sass's account of phenomenological implication, which he developed in regard to the study of schizophrenia, might also be applied to scrutinizing the structure of traumatic experiences. I shall give a brief account of the phenomenological implication that links the experience of a traumatizing event to the experience of post-traumatic stress, drawing on Sass's account.

Trauma is primarily understood as a diachronic relation between a cause (the traumatic event) and an effect (the symptoms of PTSD). I have shown above that both the cause and the effect can be experienced in different ways, influenced by cultural circumstances. Sass suggests that there are not only multiple kinds of diachronic, but also several synchronic relations at play (Sass, 2010; 2014). The experience of a symptom of post-traumatic stress is not only a direct consequence of the event that is experienced as traumatizing; it can furthermore be understood as standing in a more intricate relation to the event. The disruption of the individual's assumptions about what is possible and to be expected implies that the individual will no longer hold these assumptions.[8] An individual that never took them for granted would not experience an event that is contrary to these assumptions as disruptive or traumatic. To illustrate this: torture is said to imply a loss of trust.[9] That is, people hold assumptions about each other that involve a certain basic trust, a "habitual confidence" (Ratcliffe, Ruddell, & Smith, 2014) in people. When receiving a manual treatment from my physiotherapist, I assume that the pain inflicted is to my benefit and that I could ask them to stop anytime. My trust would be broken if, instead, they tied me down and increased the pain to extract valuable information from me. If I assumed from the start that they were going to torture me, the physical pain I experience would not be lessened (and my fear of physiotherapists merely confirmed); however, I would not experience the event as shocking or disruptive in the same way. The experience of losing trust only occurs if the event itself involves a breaking of my habitual patterns of trust, of what I conceive of as possible for someone to do to me. Who I trust and in which way depends on my cultural context. The relationship between having these expectations violently shaken and my subsequent psychological distress follows a

8 Assumptions, i.e. the things "...that one habitually presupposed, took for granted, and came to depend upon" (Ratcliffe, 2018 n.n.).

9 For a detailed phenomenological account of trust, cf. Ratcliffe, Ruddell, & Smith, 2014.

pattern that surfaces in the development of post-traumatic stress following events that are experienced as traumatizing across cultures.

5. Conclusion

The DSM offers a diagnostic category for post-traumatic stress, namely PTSD, that aims to be cross-culturally applicable, which is a matter of debate. An enquiry into the nature of cultural influence on the experience of trauma showed that the experience of events as traumatic is shaped by culturally-informed habitual patterns of anticipation and possibilities. Furthermore, the experience of subsequent symptoms of distress varies, influenced by cultural circumstances. A core pathology would require significant similarities in the structure of experience across cultures and it is not clear whether these are present. Phenomenological enquiry identified a structural similarity: phenomenological implication presents a link between the experience of an event as traumatic and the kind of subsequent psychological distress. Pursuing further phenomenologically informed research thus promises to shed light on further question: why are only some disturbing events experienced as traumatic? Why do they lead to the development of post-traumatic stress in some, but not all, individuals? And, is PTSD a cross-culturally applicable diagnostic category, if a distinct pathology at all? Further research is needed.

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NETWORKS OF ANXIETY – FROM THE DISTORTIONS OF LATE MODERN SOCIETIES TO THE SOCIAL COMPONENTS OF ANXIETY

abstract

The article aims at exploring the social constituents of anxiety, which is considered to be a phenomenological cost of late modern social distortions. Firstly, the social theoretical background is elaborated based on a network theoretical synthesis of Bourdieu's and Habermas' phenomenologically grounded social theories, which aim at elaborating the social suffering caused by unfair competition and distorted communication. Secondly, an attempt is made to identify the key phenomenological characteristics of anxiety: based on psychoanalytic and cognitive psychological descriptions, it is defined as a non-reactive, non-targeted fear, resulting in the generalization of worry. These two approaches are connected in order to identify those social distortions, which contribute to the emergence of such diffuse fear. The most typical examples are networks characterized by unstable competition and non-transparent and volatile competition or collective traumas, distrust or inefficient systems.

keywords

social phenomenology, anxiety, critical theory, late modernity

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It is a commonplace in contemporary social theory that late modernity is characterized by the increase of social contingencies and unpredictable risks, which result in new ways of social integration and new phenomenological burdens as well, including the general increase of anxiety (Giddens, 1991). However, despite these grandiose diagnoses, related sociological explanations are characterized by several shortcomings. While social theories rely on over-generalizing structural transformations without paying attention to the phenomenological details (Wilkinson, 2001), empirical analyses either neglect or fail to operate within comprehensive social theoretical frameworks (Tudor, 2003). In this sense, when it comes to analyse the causal relation between modernization and anxiety, the empirical evidence and the theoretical conclusions seldom go hand in hand. The main obstacle of such synthesis is the lack of a clear sociological conceptualization of anxiety, that is the elaboration of those social constellations, which are responsible for the emergence of anxiety disorders. In order to fill this gap, anxiety needs to be reintroduced on the fundamental level of intersubjectivity, as a consequence of distorted integration mechanisms.

However, this task is easier said than done, as sociological and psychological approaches are divided by epistemological differences originating from incommensurable disciplinary ontologies. Therefore, a common denominator is needed capable of bridging such distances. As the original intention of phenomenology is to provide a pre-disciplinary clarification of ontological and epistemological structures (Husserl, 1970), it seems to be a perfect candidate for the task. Accordingly, the article attempts to link the psy-descriptions of anxiety to the sociological theories of interpersonal relationships on a phenomenological level.

This synthesis enables the exploration of the links between the contemporary structural transformations and the increase of anxiety, which is explained as a phenomenological cost of various social distortions.[1] Classic phenomenology focuses on the notion of lifeworld, which is defined as the domain of the 'taken for granted' (Husserl, 1970). The interpretations born in intentional and pre-intentional processes outline a horizon of the world framing the actors' relation to the things, the others and the self. Sociological theories from the beginning aimed at similar goals by describing the horizon of 'taken for granted', even if they did not always refer to phenomenology. However, unlike classic phenomenology of the consciousness, 'social

1 For a similar project aiming at elaborating a social phenomenological analysis of depression, see Sik 2018.

phenomenology' explains the construction of lifeworld with intersubjective processes.[2] By understanding one's relation to the world, as a fundamentally intersubjective phenomenon, its pathologies, such as anxiety, can also be explained, as the consequences of a distorted social environment.
In the first part, the social theoretical tools are introduced. Bourdieu and Habermas are probably the two most impactful critical theorists, who also provided original contributions to social phenomenology along their original diagnosis of social pathologies. While their theories focus on different dimensions of social suffering (competition vs. communication), both of them provide important insight for understanding the social components of anxiety. In order to reach a more comprehensive social phenomenological ground, their ideas on action coordination are reintroduced as network dynamics with the help of White's theory. In the second part, this network phenomenological framework is applied in order to reinterpret anxiety. As a preparatory step, an attempt is made to identify the key phenomenological characteristics of anxiety based on psychoanalytic and cognitive psychological theories: anxiety is explained by referring to non-reactive, non-targeted fear, which results in the unconditional, diffuse and general expansion of worry. These insights are combined with the concepts of 'network phenomenology': those various social distortions are identified, which contribute to the emergence of such fear.

1. Towards a network phenomenology of competition and communication

According to Parsons, it is a basic task of any social theory to answer the question, how is 'double contingency', that is the mutual unpredictability inherent in every social interactions, handled?[3] From this perspective, the history of sociological thought can be described as various attempts of identifying those mechanisms, which are capable of coordinating social action, thus enable cooperation. Social theories since Parsons attempted to conceptualize the substantive and formal characteristics of action coordination. While classical theories tended to focus on specific levels of action coordination (e.g. the markets in case of Marx, or the system of division of labor in case of Durkheim), contemporary theories elaborate a more comprehensive approach. According to them, double contingency inherent in every social action situation is either handled on 'pre-intentional' level (by mutually shared or compatible motivations unreflected by the actors); or on intentional level (by mutually accepted interpretations of the world); or on structural level (by social constraints reproduced as unintended consequences of social action). Social theories analyzed below are variants of pre-intentional, intentional and structural integration mechanisms.
In Bourdieu's approach, action coordination can be understood through the notions of habitus, illusion and field. According to his concept, social practices are embedded in the multidimensional *field* of material and symbolic capitals, which are responsible for structuring the space of actions. Each type of capital outlines a set of goals and values orienting those being involved in their pursuit and accumulation. While the intention of acquiring the specific capital is shared by everyone involved in a field, the chances of success are unequal: as the rules of the game are defined by those in privileged position, the competition contributes to the reproduction of existing hierarchies (Bourdieu and Passeron, 1994). As a consequence,

2 Examples such as rites reproducing collective consciousness (Durkheim), symbolic interaction reproducing universes of meanings (Mead), discursive power reproducing naturalized discipline (Foucault), mediatized communication reproducing system semantics (Luhmann), actor-networks reproducing inter-objective order (Latour) are just a few examples of understanding the reproduction of the 'taken for granted' as a social process.
3 Every social action may be described as a situation where actors perceive each other as a 'black box', mutually incapable of predicting the reactions of the other. Solving this mutual unpredictability is the presupposition of every social action (Parsons–Shils, 1951: 16).

fields are characterized by inevitable tensions between actors sharing the same goals, but having different chances of realizing them. This tension is lessened on the one hand by those interpretations, which legitimize the existing social relations by introducing the social inequalities as consequences of 'natural' differences. These interpretations transmitted in the process of symbolic violence maintain an *illusion*, that is the veiling of power relations by framing them as natural differences (Bourdieu, 1998). Beside the mutually accepted illusions, the social practices are also coordinated by those personal experiences, which are attached to the different field positions. As structural positions outline the space of action, they also indicate the accessible set of experiences. By being socialized in a certain class position, one experiences the limitations of action and practices strategies functioning within the given frames. These incorporated strategies are prior to reflection; they orient practices on the level of dispositions, as a *habitus* (Bourdieu, 1990).

In Habermas' approach, action coordination can be understood through the notions of lifeworld, communicative action and social system. *Lifeworld* refers to the natural understanding of the world, which outlines the horizon of actions. As long as it provides a similar enough interpretation for everyone, it remains unreflected. However, if the actors' interpretations differ so much that their interaction is hindered, then the natural attitude gives place to intersubjective reflection. This *communicative action* can be described as an attempt of reaching mutual understanding in a series of speech acts (Habermas, 1984). Besides the mechanisms of action coordination relying on a shared interpretation of the world, integration is also ensured by mechanisms independent from the actors' lifeworld. Such mechanisms are the symbolically generalized communication mediums (e.g. money or law). These mediums rely only on a very specific set of common knowledge, namely the affirmation of the mediums. With the help of the mediums, a limited, but at the same time widespread communication becomes available, which connects distant actors, while creating specialized, autonomous subsystems of social action. These *social systems* are detached from the moral-communicative ground of the lifeworld and follow the logic of instrumental rationality (Habermas, 1986).

In sum, Bourdieu and Habermas introduces two different types of sociability. According to Bourdieu, social units are integrated by material and symbolic capitals (as mutual goals), illusions (as biased, but legitimate sets of rules) and habitus (as interiorized class position capable of naturalizing inequalities). According to his approach, social units are always characterized by latent conflicts, as their basic dynamics is a zero sum struggle for capitals. According to Habermas, integration is secured by the mutual lifeworld potentially renewed in communicative action, or by mediated communication originating from social systems, such as economy or politics. In this sense, social units are based on a latent, explicit or institutionalized consensus. By outlining different answers to the question of social integration, these two theories also elaborate their own phenomenological frameworks. In Bourdieu's approach, such framework is determined by the redistribution and competition for material and symbolic capitals. As the interpretation of the world is never a disinterested process, it is affected by the often unperceived, hidden struggles for material advantage or symbolic recognition. Thus, meaning construction is characterized by various perceptual blindspots and hermeneutic distortions, which depend on one's position within the structure of fields. Based on Habermas' theory, there is a chance for mutual understanding based on argumentative debate. However, such democratic ideal is on the one hand threatened by dogmatic speech acts implying meanings considered to be undebatable. On the other hand, meanings being born in linguistic interactions are also threatened by mediatized communication. Mediums such as money, law, mass media or information technology distort the interpretation of the world by narrowing its contents. This results not only in the homogenizing, but also in the loss of meanings.

Inevitable conflict and potential consensus express two divergent traditions in social theory. Despite their complementary character, the framework of Bourdieu and Habermas are seldom used simultaneously: the same interaction can be either interpreted as the expression of latent class struggle, or as an attempt of reaching mutual understanding via linguistic and mediatized communication. In order to overcome such theoretical incompatibility, a meta-theoretical framework is required, which is capable of incorporating both approaches. The network theory of Harrison White is considered to be a model having such potential, as it provides an alternative approach to integration (White, 2008). This theory attempts to dismantle general mechanisms of action coordination elaborated by conflict or consensus based theories (such as lifeworld or habitus) and rebuild social integration from below, based on the close observation of how actors, institutions and objects relate to each other (Fuhse, 2015). From this perspective, the morphological network characteristics, the structure of relations, the position within a network, the dynamism of connecting and disconnecting gets special attention, as they determine the frames and extent of social action.

In White's approach, the basic dynamic of social action is the attempt of gaining control over a certain situation. The control may be secured in different ways for actors in different positions. The way of securing control outlines the identity of the actors, in a given network configuration. If the network is expanded or lessened, the relative balance is replaced by uncertainties implying the formation of new identities elaborated according to the new patterns of control. In this sense, the basic dynamic of social action is the mutual adaptation to the continuously changing networks, that is an endless attempt of controlling new configurations by connecting or disconnecting, while also elaborating new identities. Based on these premises, the task of social theory is to identify those mechanisms, which are capable of stabilizing the control patterns (creating 'network domains') and consequent identities in certain network configurations.

Such mechanisms, on the one hand include *stories* about the networks, which exemplify the previous ways of controlling the situation by different actors. Stories constitute the fundamental level of stabilizing a network, as they are capable of covering controversial issues and identities as well. Besides of the general stories clarifying the basic features of a network, the stabilization also relies on *disciplines*, which are responsible for outlining various set of rules. Different rules – grounding an interface (instrumental action), a council (communicative action) or an arena (expressive action) type network – provide opportunity for different control attempts, thus enable different identities. Disciplines are complemented by *styles* providing detailed paradigms of identities and mechnisms of control (e.g. the concepts of rationality or personality). Stories, disciplines and styles are fundamental in networks constituted of direct ties. However, solely they are not capable of explaining the stabilization of networks constituted of actors not being in personal interaction, affecting each other only indirectly. These networks rely on institutions legitimized by a certain rhetoric appearing in the public sphere and *control regimes* regulating interactions according to hierarchical roles, such as expert-client, or patron-employee (White, 2008).

White proposes a paradigm shift: instead of focusing on the question of double contingency inherent in every social action, he focuses on an extended space of contingencies inherent in the networks. In this sense, he does not attempt of modeling mechanisms capable of solving 'double contingency', but mechanisms capable of solving 'network contingency'. This paradigm shift reveals the limitedness of the model of double contingency: as social actions are embedded in networks, their coordination depends on the interference of every constituent actor, not only those who are directly involved in a situation. Those models of action coordination, which neglect the network embeddedness, inevitably miss a fundamental element of explanation: in their eyes, the always changing, complex web of interactions,

which directly or indirectly affects the action situation is considered to be driven by a homogenous logic of integration. The basic difference between the approach focusing on action coordination and the network approach is the extent of social relations taken into consideration: by taking network theories seriously, the idea of a single logic of action coordination is replaced by the need for theorizing the inevitable clash of heterogeneous logics.

Such paradigm shift has implications for social phenomenology as well. While Habermas and Bourdieu postulate general mechanisms of meaning construction and consequent definitive frameworks of relating to the world (such as habitus shaped in latent and manifest competition or lifeworld based on mutual understanding), they fail to operationalize the coexistence of these modalities within the same network and the potential shift between these ways of relating to the world. By reintroducing theories of action coordination as network ties, these shortcomings can be overcome. More importantly, a network phenomenology becomes accessible, which is characterized by the dynamic shift of various integration logics implying various phenomenological textures in the same network depending on the broader dynamics of connecting and disconnecting. Below Bourdieu's and Habermas' theories are reinterpreted from this perspective.

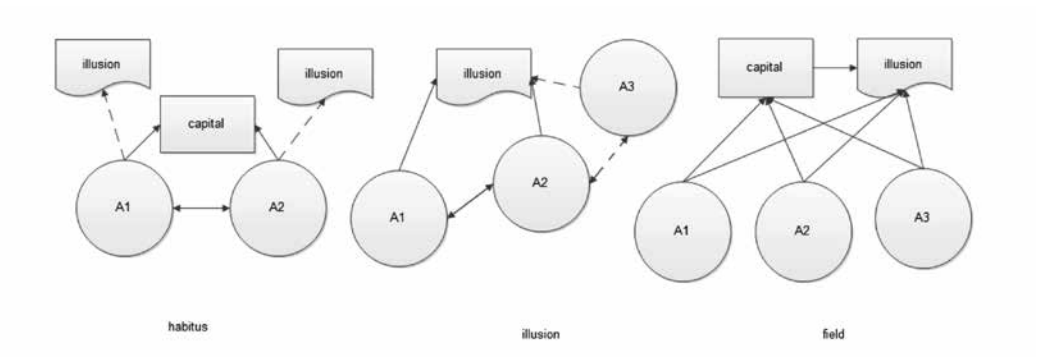

Figure 1. Network characteristics of habitus, illusion and field[4]

The habitus orients social practices by providing corporeal strategies of relating to the other and structuring desires based on the logic of a certain capital. Networks being integrated according to the logic of habitus are characterized by actors oriented to the same material or cultural capital, while being disconnected from intentionality. In this constellations, the actors focus solely on the capital and act according to their pre-intentional strategies in order the acquire it. Illusion orients social practices by providing a mutually accepted, naturalized interpretation of worthiness. Networks being integrated by an illusion are constituted of actors identifying with a certain set of goals and rules of acquisition, which is considered to express the natural state of the world. In this constellation those, who do not accept the illusion are excluded from the networks. Fields are macro networks, which integrate actors indirectly, by determining interpretations of the world and providing desirable goals. In this constellation the actors are not necessarily interacting with each other, instead they aim at

4 Lines indicate connection, dashed lines indicate the lack of connection. Circles symbolize actors, rectangles symbolize structural elements of the network, and wavy rectangles symbolize intentional elements of the network.

the same target and act according to the same illusion. However, this adds up and the network operates on the basis of latent structural constraints expressing the overall distribution of capital.

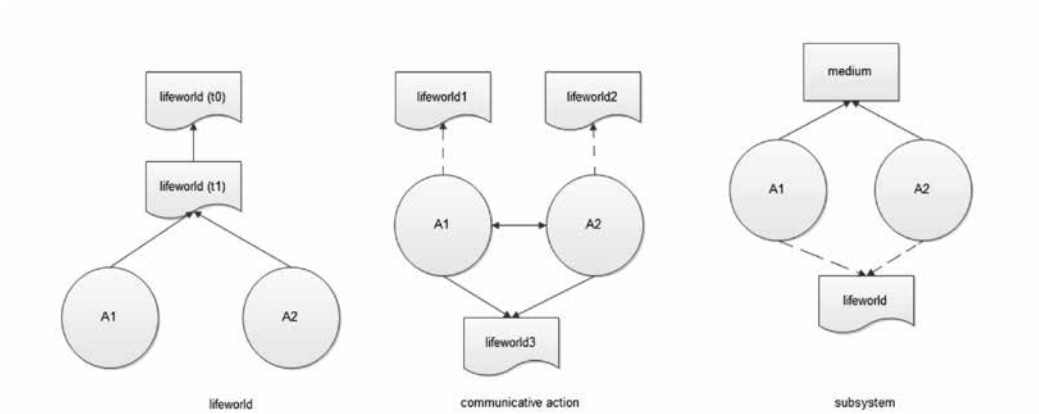

Figure 2. Network characteristics of lifeworld, communicative action and subsystems

Lifeworld orients social action by providing frames for a mutual interpretation of the world. Networks being integrated by a common lifeworld are centered around a collective set of meanings being transmitted as a 'tradition' from generation to generation. Such a traditional horizon of action transcends any individual perspectives. Furthermore, once internalized, the set of collective recipes of inhabiting the world connects actors without the need for continuous interactions. Communicative action is the process of reestablishing the mutual interpretation of the world through speech acts. Networks of communicative action are characterized by the actors' disconnection from their original lifeworlds, while focusing on each other's interpretation of the world in order to reach consensus. These constellations are flexible in a sense that they enable the free reformulation of the broader network by solely relying on the actual intersubjective processes. Subsytems are coordinated by mediums, enabling a limited but easily accessible form of communication. Networks integrated by mediums are characterized by the actors' disconnecting from the lifeworld and each other, that is an exclusive attention to a certain medium. Similarly to fields, this results in automated paths of social action: mediums also function as indirect ties transcending time and space, however instead of organizing a competition, they enable functional refinement.
From a phenomenological point of view, these models imply that an actor's relation to the world is never only characterized by the struggle for capitals or by direct or mediatized communication aiming at cooperation. The phenomenological texture of the world is continuously shaped by these various effects depending on the broader network dynamics. In order to understand those distortions of social integration, which may contribute to the emergence of anxiety, all of these different types of social networks need to be taken into consideration simultaneously. On the one hand, specific distortions may emerge on the level of habitus by creating a problematic relation with certain capitals (e.g. being deprived from them); on the level of illusion by experiencing discredited interpretations of the social hierarchies and inequalities (e.g. disillusionment with meritocracy as a consequence of the lack of equal chances); also on the level of fields by biased structure of the capitals (e.g. dominance of a particular capital). On the other hand, specific distortions may emerge on

the level of lifeworld, as a consequence of a controversial space of experiences (e.g. collective traumas); on the level of communicative action, as a result of unpredictable communication (e.g. speech acts based on dogmatic meanings); also on the level of systems, as a consequence of dysfunctions (e.g. corrupted mediums of communication). While Bourdieu and Habermas provide a general overview of the negative consequences of social dysfunctions, they did not elaborate a specified analysis of the interrelatedness of social distortions and particular forms of suffering, such as anxiety. Before we could proceed into this direction, the phenomenological characteristics of anxiety needs to be clarified.

2. From psychological descriptions of generalized anxiety to the social phenomenology of detaching fear from experiences

As any other psychopathologies, generalized anxiety can be explained from the perspective of several psychological traditions. However, two are particularly important for a phenomenological analysis: psychoanalysis is capable of highlighting its pre-intentional aspects, while cognitive theory can help to explore its intentional level.[5] A classic psychological analysis of generalized anxiety can be found in the works of Freud, who differentiated between realistic (facing actual danger), neurotic (systematic prevention of acting out id impulse) and moral anxiety (punishment for expressing id impulse). Generalized anxiety is the result of being exposed to the latter two: if children are punished for their id impulses, they learn to relate to them as being extremely dangerous. As even experimenting with them is considered to be too risky, any empirical contact with them is avoided, so the experience of a terrifying object is born, which is disconnected from the logic of trial and error (Freud, 1933).

The psychoanalytical approach is complemented in many ways by the cognitive, which focuses on irrational automatic thoughts exaggerating the threat of negative events, lack of social recognition or personal incompetence. Based on such assumptions, ordinary situations are perceived as particularly dangerous ones, which distorted interpretation leads to overcautious defense strategies (Beck *et al.* 1985). In many case, unpredictable negative events are the formative force behind such irresistible automatic thoughts: as they are irregular and uncontrollable, they motivate suspicion and overprotective attitudes. Recent theories emphasize both the positive and negative evaluations of worrying as equally important factors contributing to the emergence of a continuous, undifferentiated fear. 'Precaution' is considered to be beneficial for avoiding risks, so responsible actors may feel to be motivated to seek signs of danger (worry because of the threats). However, 'overreaction' is considered to be dysfunctional, which makes responsible actors seek the signs of exaggerated worries in order to avoid them (meta-worry because of worries). In sum, both paths lead to the emergence of a continuous, diffuse worrying: either because of the extreme precaution, or because of the fear from overreaction, a generalized pattern of anxiety may be born (Wells, 2005). Finally, behaviorist theories emphasize that in case of people having increased basic level of bodily arousal, the rituals of worrying itself may provide comfort: as discomforting situations are handled by reorienting one's attention to the well-known attunement of worry, such practice is reinforced and becomes a general attitude (Borkevic *et al.* 2004).

Based on these analyses we may argue that the phenomenological structure of generalized anxiety is characterized by the detachment of fear from the concreteness of actually dangerous events. On the one hand, such process can be described as a distorted process of socialization based on the hiding of fear from a relevant other and the self: if the parent forbids its children to experiment with their id impulses, a zone of taboos is created, which is terrifying and empirically inaccessible at the same time. On the other hand, such process could

5 For a broader overview of various approaches see Comer, 2010.

be understood as a result of maladaptative self-discipline: either because of the exposure to unpredictable events, or because of the ritualization of worrying, constant fear may seem to be an adequate general strategy of distancing the self from the world. As fear is disconnected from empirical feedback, it loses its concrete boundaries and starts to expand unlimitedly. The whole lifeworld is built around it, especially after becoming indifferent to opposing impulses: as too much worry leads to meta-worries, there seem to be no easy way out from the spiral of generalization. At this point fear starts to exist on its own: it is no longer operating as reaction to negative events, but as basis of the horizon of expectations.

While the psychological descriptions of anxiety explain it mainly as an inner process, it is worthy to note, that a latent, unexplored element of the social also appears in them: in case of psychoanalysis, the impact of the other is explicit (as they motivate the suppression of id impulses); in case of cognitive-behaviorist theory, it is implicit (anxiety originates from the lack of collective interpretations providing alternative for the ritualization of worry). This provides an opportunity for bridging psychological and social phenomenologies of anxiety. While psychological discourses describe a distorted pattern of relating to the world with a latent reference to the social, sociological theories provide opportunity for exploring this crucial aspect by adding network phenomenology to the formula. In what follows the question is raised: how do distorted social networks constituted of rivalries and communicative processes contribute to the emergence of such a non-reactionary, non-targeted pattern of fear?

In those networks, which are built around the struggle for material or symbolic capital, the fear from losing the competition represents a realistic aspect of threats. In a trial and error process actors may experiment with various strategies, seeking the ones, which promise the best chance of success. However, such constellations can be distorted by many factors. These factors can be systematically identified by referring to the network components introduced in *Figure 1*. Firstly, in those networks, which are primarily organized by competitive strategies based on the actors' dispositional habitus, it is the long term socializing experiences of the relevant capital, which play a crucial role. It is not the inequalities of chances or the exclusion from the competition, which matters, but rather the atmosphere of the social struggle: if competition includes the element of intimidation, then fear becomes the basic attunement of these situations, independently from the dynamics of winning or losing. In networks characterized by arbitrary power structures there is no opportunity for adapting to the constellation, developing strategies based on the differentiation between the dangerous and the harmless – thus fear becomes an untargeted, diffuse feeling.

Secondly, in those networks, which are based on the shared intentional framework of an illusion defining worthiness, it is the quality of the narratives of legitimacy, which matters. Even if illusions veil and naturalize often unjust hierarchies, they play a crucial role in establishing a stable interpretation of the values and rules. In this sense, besides their substantive content, illusions can also be characterized by their stability. If the complete annihilation and rewriting of the dominant values and rules are repeated so often that such events become the basic experiences, not only the actors become disoriented, but also a general atmosphere of unpredictability emerges. The basic trust in the possibility of a long term collective narrative of legitimacy is required for developing any sense of security. If it is lacking, then the social relations inevitably include the element of a threat as a result of their indefinite nature. Therefore, in networks characterized by constant local revolutions fear becomes a basic emotional structure, independently from the actual ongoing activities.

Thirdly, in those indirect networks, which are organized according to the logic of distributing capitals, the correspondence between the rules of the game and the actual practices of accumulation plays a key role. What matters in particular is the credibility and convertibility of the capitals. If they may lose their value unpredictably and become unchangeable to other

types of symbolic or material capitals, then the very structure of social existence becomes threatened. Careers, life strategies built around the accumulation of certain type of social recognition become questioned and the ground of everyday existence loses its stability. In macro networks invaded by an aggressive external regime of worthiness, not only the attacked field loses its autonomy, but also those become vulnerable, who have invested in it. As these actors experience the contingency of a formerly naturalized value, the very structure of reality is transformed in their eyes: it loses its taken for granted character and becomes a subject of continuous suspicion. Within such social environment, fear is gradually detached from actual losses. Instead of being a reaction to harmful experiences, it becomes a diffuse, free-floating, general horizon of expectation.

In those networks, which are built around linguistic and mediated communication, fear from dissent and failure of cooperation represent realistic fears. These threats can be handled by the improvement of communication, through attempts of clarifying the divergent background assumptions. However, such basic dynamics can be distorted by several factors, potentially resulting in the decontextualizing of fear (see *Figure 2*). Firstly, in those networks, which are based on shared background assumptions serving as an implicit mutual ground of relating to the world, it is the content of the lifeworld, which matters. If the mutual horizon is constituted of frightening collective memories (either in the form of collective traumas or in the form of untreatable risks or harms), then the basic assumptions themselves will imply a world full of unpredictable hazard. Within these networks, fear is generalized as a result of socialization, which can be changed only at the cost of disconnecting from the community.

Secondly, in those networks, which are constituted of speech acts aiming at mutual understanding, it is communicative competence (that is the capability of convincing and being convinced), which plays a crucial role. If it is distorted in a way that the very process of argumentation becomes discredited, then the chance for a shared lifeworld is lost. In those networks, where the actors cannot trust each other, not even at a minimum level, the very act of socially constructing the world will be tainted by fear. If the others are perceived as being suspicious (e.g. they seem to be manipulative), the space of actual communication is suddenly narrowed. No one can be sure anymore, if those meanings, which were seemingly born as a result of an argumentative process are mutually considered to be valid or they are part of some greater scheme. In networks characterized by persistent crisis of confidence fear is detached from any particular situations and becomes a basic attunement defining the everyday existence.

Thirdly, in those networks, which are organized by communicative mediums capable of transcending the boundaries of local lifeworlds, the functionality of the systems plays a key role. In those networks, where the experiences of participating in mediatized communication do not meet the expectations of efficiency, the actors lose their motivation for relying on mediums instead of linguistic communication. Such chance of dysfunctionality grows particularly high, if the systems are incapable of securing an easily accessible, predictable way of automatized communication. This could happen, if the increase of complexity is faster, than the capability of information processing. If the channels of transmitting information and getting orientation are changed too fast, then the very essence of system integration is damaged: instead of providing efficient shortcuts for cooperation, mediums burden interactions with extra contingency. In these networks mediatized communication becomes an independent source of danger, as it unpredictably threatens interactions with failure. Thus, these lagging networks of subsystems contribute to the emergence of generalized fear, whenever communicative mediums are involved.

The following table summarizes the various idealtypical network distortions resulting in the experience of anxiety as an expression of social suffering.

	pre-intentional	intentional	post-intentional
Distorted networks of competition (Bourdieu)	Intimidated habitus	Over-contested illusion	Invaded fields
Distorted networks of communication (Habermas)	Collectively traumatized lifeworld	Distrusting communicative action	Lagging systems

1. Table. Network distortins implying anxiety

Of course, these various networks affect the actors not separately, but in parallel.[6] This means that the sociologically accessible phenomenological constituents of generalized anxiety emerge in those situations, where both the competitive and communicative networks are distorted the same way. If on the one hand, struggles for capitals take place in a frightening game, the values and rules are never settled and the autonomy of the fields is also under constant attack; while on the other hand, collective memories are haunted by unresolved traumas, communication is based on suspicion and systems are incapable to process their own complexity, then fear is detached from frightful events and becomes a general sentiment characterizing social situations. In this sense the phenomenological pattern of anxiety is born when the very social basis of giving sense to the world is embedded in a homogenously distorted, distressing network.

By approaching the phenomenology of anxiety from a sociological perspective not only our understanding of the potential treatments can be widened, but also the increase of anxiety in late modernity can be explained more precisely (Sik 2019). Thus, such analysis may facilitate a social criticism providing practical conclusions for social policies. Even if it requires further elaboration, besides of these sociological conclusions, a network phenomenology of anxiety may have implications for therapeutic practice as well. On the one hand, it may provide new diagnostic possibilities: analysis of network types and dynamics within biographical ego-network reveals the micro and macro social constituents of anxiety. On the other hand, it could contribute to the development of interventions targeting the network of the patient beside of its cognitive or behavioral attributes. The goal of such enterprise could be the deconstruction of the distorted relation to the world by increasing the proportion of undistorted micro/macro ties providing resilience on individual and community level. Of course, such approach is not meant to replace, but to complement intensive psychotherapeutic, psychiatric interventions, which are capable of resolving deadlocks, but struggle with treating relapse (as a consequence of the reemergence of distorted lifeworld). These issues reveal the directions of future investigations.

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6 Furthermore, while they represent three important social sources of anxiety, they are not the only one by far. The model can be complemented by including other critical theories such as Honneth's theory of recognition (1996) or Lash' theory of aesthetic reflexivity (1999).

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THE MANIA AND *STIMMUNG*: ON THE PHENOMENOLOGICAL DIFFERENCES OF THE PERCEPTION OF MANIA AND THEIR TRANSFORMATIONS

abstract

Epidemiological studies of the last decade have shown a low prevalence of hypomania and bipolar I disorder in Western societies while pointing to a prevalence of unipolar mania in non-Western societies. This work seeks to investigate the explanatory role of the Stimmung *concept to understand these differences, as much as the increase in the number of cases of mania in the West in the last two decades. It attempts to explore the relationship between the phenomenology of hypomania and its adaptation to the atmosphere of its environment. Our hypothesis is that the experience of hypomania would be in harmony with the narrative of Western societies and with* Stimmung *(in the sense of the term used by Spitzer and Heidegger) of these societies. Finally, we will present a clinical case and analyzes of business leadership manuals that will illustrate the phenomenological relationship of Stimmung and mania, as well as its transformation in the sphere of work.*

keywords

Stimmung*; mania; unipolar mania*

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This work aims to discuss the relevance of the *Stimmung* concept to the clinical and social perception of mania. It is argued that the concept of *Stimmung* may help us to understand the recent epidemiological data that point out a difference in the prevalence of cases of unipolar mania and type I bipolar disorder according to cultural and geographic variables. Thus, according to our hypothesis, the experience of hypomania would be in harmony, for example, with the central narratives of western societies. However, there is at least one point that represents a challenge for the theoretical use of *Stimmung*. This is because, in the case of Western countries, although their *Stimmung* seems to be part of the manic phenomenon, a considerable increase in these cases has been recorded since the beginning of this century. We hypothesized that this increase would be explained by the fact that there has been an internal *Stimmung* rip, which would lead to a transition from the hypomanic adapted functional state to the dysfunctional manic state, resulting in greater visibility of this condition.

The category of *Stimmung* used here comes from the philologist Leo Spitzer and the philosopher Martin Heidegger. Besides being a philosophical concept since the eighteenth century, *Stimmung* also designates a phenomenon that is difficult to circumscribe. It refers to the set of elements present in the environment that give an affective tone and confer a certain sensitive atmosphere that may impact both body and mind. The *Stimmung* means the external atmosphere in which we are immersed in and, at the same time, our inner state. In Spitzer's definition, it is "the unity of feelings experienced by man face to face with his environment (a landscape, nature, one's fellow-man), and would comprehend and weld together the objective (factual) and the subjective (psychological) into one harmonious unity". As a result, it can be said that a landscape has *Stimmung* and that someone has a certain *Stimmung*, as well as a historical era.

Heidegger also emphasizes the meaning of *Stimmung* as an atmosphere capable of determining what he calls being-with-one-another, something in which we are already immersed in and that always goes through us, which has a contagious quality, like "infections germs wander back and forth" (p. 67). Again, the concept does not refer to an epiphenomenon, a state of inner humor, but to the way that our *Dasein* is with another:

> [...] the attunement imposes itself on everything. It is not all inside in some interiority, only to appear in the flash of an eye; but for this reason it is not at all outside either. [...]. Attunement is not some being that appears in the soul as an experience, but the way of our being there with one another. (Heidegger, 2004, p. 67)

This characteristic of continuity between internal and external can be seen in the semantic complex of this German word. According to Spitzer, it has roots close to the Latin *temperamentum* (temperament) and *consonantia* (concord), but also humor, atmosphere. For Spitzer, *Stimmung's* semantic perspective as humor, mood, atmosphere is translatable into other European languages, but the aspect related to the idea of harmonic consonance would not find equivalent expression in those languages. Even so, there is a semantic similarity with the French word *ambiance*.

This second aspect of *Stimmung* played an important role in notions such as Syntony, defined by Minkowski as the ability to "vibrate in unison with ambiance", and in the concept of thymic space (*Der gestimmt Raum*) by Binswanger. And it can be said that was the second aspect of *Stimmung* that most interested these last authors in their writings about the called mood disorders or *Verstimmungen* for German psychiatry. For example, about the manic dysthymia, Binswanger wrote:

> *the term dysthymia refers not only to humor itself, but to the totality of the world of manic constitution*. (p. 125)

In Binswanger's conception, mania does not refer to a mood variation as a primary phenomenon followed by other changes. His conception is that, in these case, the change of the *thymos* involves a wider temporal and spatial shift that impact the way of being with the other. According to Binswanger, unlike the melancholy who would turns himself into his own world, the maniac, "turning away from himself, turns to others, to 'society'" (71). Kimura Bin also points out to the fact that the maniac patient would aspire to a fusional contact with the whole. These elements, Binswanger insist, would lead to an "inability to form a common world" with their fellows.

However, if much of the idea of *Stimmung* has been used to understand the psychopathological phenomenon, less attention has been paid to the potential role of *Stimmung* in diagnosis. In the specific literature, it is possible to find some articles that aims to attach institutional ambiance and treatment process, as Chaperot and Altobelli (2014) who discusses the role of psychiatry institution *ambiance* in the therapeutic or iatrogenic response. Another group of articles intent to relate the ambiance with a specific behavior response during the treatment. An example of this is the study of Yao and Algase (2006) that explored relations between environmental ambiance and locomotion behaviors of patients with dementia. But most of them applies the term *Ambiance* in a sense of atmosphere and environment and not in the sense that Spitzer and Heiddegger explores the term *Stimmung*. What we would like to evidence here is the relationship between the *Stimmung* and the diagnosis, this clinical event on the encounter between the therapist and the patient, the moment in which one seeks to understand the experience of the pathological alteration, and sometimes, to name it.

Following the methodological suggestion of Daudet, for whom it is possible to have three levels of approach of *Stimmung*, the individual, interpersonal and the collective level, we would like to focus this last one when combine with the diagnostic problem. Our choice is because the epidemiological studies of the last two decades present different and significant results in the geographical distribution of mania and depression (Aghanwa, 2001; Amamou, 2018; Dakhlaoui, 2007; Douki, 2012; Lee, 2009; Khanna, 1992; Makanjuola, 1982, 1985; Negash, 2005; Osher, 2000; Rangappa, 2016). According to them, there would be a low prevalence of hypomania and mania in Western societies, followed by an expressive number of cases of depression. At the same time, these surveys point to a significant number of cases of unipolar mania in non-Western societies. The results of the comparative study by Douki *et al.* (2010), between clinical cases in France and Tunisia, show that three-quarters of the first episodes in France were diagnosed as depressives

whereas in Tunisia three quarters were manic. In subsequent episodes, the percentage of presentation of mania was three times more extensive in the group of Tunisia. One of the conclusions of the researchers is that the expression of bipolar disorder would be different in the countries of the South, with a higher prevalence of unipolar mania in these countries. Two former articles by Makanjuola (1982, 1985) also show clinical data on the presentation of bipolar disorder in Nigeria that counter the worldwide data according to which depression would be the hegemonic expression of bipolar disorder. In his study, unipolar mania was the rule among patients. The research data of Negash *et al.* (2005) with patients in Ethiopia also present prevalence of manic episodes.

Also, another aspect of the issue is presented in surveys that show the weight of the cultural differences in the team of evaluators, responsible for making the diagnoses, even when using supposedly objective scales. This is demonstrated by the experiment of Mackin *et al.* (2006) to assess the effects of cultural biases on the identification of manic symptoms using the Young Mania Rating Scale, with North American, British, and Indian evaluators, showing that "Indian raters saw the manic behavior of the American patients as significantly iller and inappropriate than did American raters" (p. 380). In another study (Buchmuller and Meyer, 2009) reported by Ghaemi, demonstrated the difficulty of psychologists in diagnosing the manic episode from clinical vignettes. While 95% correctly diagnosed depression, only 38% were able to diagnose mania, based on the DSM-IV criteria (Ghaemi, p. 804). In their article, Kirov and Murray (1999) also discuss the relationship between the quantitative difference of manic presentation and the prejudice of the evaluating physicians.

Without ignoring the many factors involved in epidemiological and in cross-cultural studies, such as hereditary factor, family history, diagnostic instrument differences, seasonality, we would like to emphasize the role that the concept of *Stimmung* and cultural atmosphere may play. In part, a little of this hypothesis, although in other terms, has already been indicated in those studies cited above. For example, Dakhlaoui *et al.* (2007) suppose that in Tunisia "[...] mild to moderate depressive episodes are probably underestimated due to the high tolerance of these symptoms in families". *Stimmung* could help to understand this state of affairs, since it would be the tolerance and imperceptibility factor for manic symptoms, especially in its hypomanic form, in Western countries. Conversely, its low tolerance in other contexts.

It is relevant, in this context, Ghaemi's observation that hypomania would be one of the few diagnoses of Axis I of the DSM that does not have as a criterion for its diagnosis a significant dysfunction: "Hypomania involves little to no subjective distress, no functional impairment, and no apparent loss of freedom. In fact, usually, one's functioning is enhanced. In this sense, hypomania in isolation does not meet DSM definitions of a mental disorder" (p. 810). It is also appropriate to add Caillard's consideration concerning the less rigid boundaries between the hypomanic and the manic state: "The border between the two states remains blurred, even subjective, depending to a large extent on the level of adaptation and tolerance of the environment" (Caillard, p. 25, 1982).

However, along with this solid data on differences in manic perception, there is also a state of affairs that seems to point in the opposite direction. For, according to Yutzy *et al.* (2012), if from the 1970s to the 1990s the rate of prevalence of mania in the western countries remained unchanged between 0.4% and 1.6%, from the 2000s it passed to incredible 5% and 7%. Therefore, an increase of more than 1,000%. Still, this change can also be understood precisely by the way mania is absorbed in what we have called the cultural atmosphere of *Stimmung* of these countries. For not only is there a tolerance for manic cases in Western countries, but there are also discursive and narrative mechanisms that stimulate mania as a factor of productivity in this context. That is what we have seen in many business leadership manuals, for example.

This relationship appears not only in business magazines but also in scientific articles since the 1990s, in which the relationships between bipolarity and creativity have been investigated, claiming that music geniuses, political leaders, painters, writers would have been bipolar patients. In the following decade, another thesis arose that bipolar disorder would help a business career. The manic phase comes to be known as the *CEO's disease*, and a look at the management manuals and leadership is enough to understand why: the clinical signs that characterize manic behavior appear in those books as the ideal characteristics for market participation and productivity in times of high levels of competitiveness. Thus, these manuals recommend, however paradoxical it may sound, a leader should prefer the crisis to stability, have self-confidence, have a holistic understanding of the context, have energy and energize employees, be euphoric, feel well-being, communicate and promote changes. The leader must look for opportunities and take risks, ignoring any danger. He must be the one who revolutionizes, experiments and creates (Hickmann, 1990). Although more emphasized in leadership management literature, these characteristics are sometimes appreciated for every individual who wants to intensify their performance and self-manage. So no wonder a hypomanic patient, an businessman hospitalized by his family in the psychiatric emergency room, said: "I am not going to take too much mood stabilizer because my clients do not like it when I am out of the manic phase". What can be more self-confident than someone who says, "When in mania, I became more powerful than God"; or "I felt the whole sea, not just a drop in the ocean", or "I am the chosen one. I am universal"?

Strengthening this state of affairs, the manuals for extracting the best performance from the leader diagnosed with bipolar disorder have appeared as well. For example, one of the titles is "Managing a Hypomanic", which states that it is possible to control the disease avoiding its negative aspects - such as irritation, intolerance, depression, risks of aggression and suicide - and thus avoiding "business catastrophe".

However, this management capacity seems to have reached its point of exhaustion, revealing it counterproductive aspect. Recent studies have begun to question this link between entrepreneurship and mania. The article "Career effects of mental health" (2015) brings the results of research carried out by three universities with significant sampling. The main results: 1) individuals at higher risk of bipolar disorder are more likely to be self-employed or executives (25%) in new and small companies because these enterprises would be more risk tolerant; 2) these individuals are significantly less likely to assume administrative places (13%), including chief executive officer, chief operating officer or chief financial officer; 3) as for wages, they earn 43% less on average.

In order to illustrate this relationship between mania and its instrumental administration for higher productivity in the work environment, we will present a clinical report, which was treated in a psychiatric emergency department in a large metropolis in Brazil. This case allows us to raise a hypothesis about the contemporary condition of *Stimmung* and the intensification of the perception of mania even in Western countries.

The case refers a patient, 28 years old, brought by relatives to the psychiatric emergency, where he was hospitalized. On the day of first attendance, he walks around the infirmary, talks to all patients, attaches meaning to all the colors and objects around him. He said he worked in a company of development and commercialization of hardware and software. For the last three months, he worked 18 hours a day. He was a trainee and, in the company hierarchy, he "was below the line of misery". He claimed he worked harder than his boss's boss, but earned more than twenty times less. According to him, in this company, the employees "do not have to punch the time card, have to hit its targets". So he came to sleep three hours a day with small moments of naps during the day. After a few days, so he continued his speech, "I did not need to sleep anymore. I wanted to do something great. That activated areas of my brain and

connected it with the universe and the cosmos. I started to have many ideas to improve the company. I started thinking about thinking, and I went up, up, up to other spheres. It's bad because I lost contact with me, I did not know where I was anymore. It's like an astronaut who does not have oxygen to return to Earth". A few days later, he stated: "The day I came to this clinic, I had presented my hiring document to go up a post in the hierarchy. The document was with the boss to be signed. On that day, the (president of Brazil) Dilma fell. I thought I had conquered everything I wanted. I began to think I was seeing the glory of God. I was so tired. It was only with this nervous breakdown that I managed to relax, to feel good".

This case is a concrete example of what we might call the internal rip of *Stimmung*, which is taken to its extreme and finds no narrative able to contain the experience anymore.

Thus, from a situation in which it absorbed the mania and rendered it someway tolerable, maybe imperceptible, even scientific and clinical contexts, and it passed into a condition of acceleration and stimulation of its internal logic in such a way that it is impossible to signify anymore.

In conclusion, we may say that *Stimmung*, as a concept that reveals the aspect of the interaction between subject and object crossed by an affective tonality of experience, may allow the access to a fundamental and less explored dimension of the human suffering experience. Mainly in the process of diagnosis, the inclusion of the *Stimmung* dimension could help to refine it and not to reduce it to a simple act of categorize. Certainly, the subliminal and evanescent character of the *Stimmung* phenomenon may be factors that hinder its apply and its formal conceptualization. But we still maintain that it may enrich our clinic sensibility and help us to understand the complex process of human *pathos*.

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EXISTENTIAL LOSS IN THE FACE OF MENTAL ILLNESS: FURTHER DEVELOPING PERSPECTIVES ON PERSONAL RECOVERY IN MENTAL HEALTH CARE

abstract

Personal recovery entails the idea of learning to live a good life in the face of mental illness. It takes place in a continuous dynamic between change and acceptance and involves the existential dimension in the broadest sense. With cognitive self-regulation and empowerment as central elements, however, current models of recovery mostly have an individual focus instead of a relational one. Furthermore, there seems to be an emphasis on the component of change. Little attention is payed to the role and integration of dealing with loss in personal recovery. In this paper, the role of loss in mental illness will be elaborated from an existential perspective. This will be done by relating existential changes to possibly disruptive experiences of loss in wider experience. With the help of several perspectives on dealing with loss it will be argued this can be integrated in processes of recovery. Then, it will be elaborated how reexperiencing a state of being surrounded, or being included, being held is a necessary part of recovery. The result consists of a refinement of the view on personal recovery. The aim of this paper is therefore twofold: (1) to arrive at a better understanding of what existential loss and loss in wider experience in the context of psychopathology entails, and (2) to further develop perspectives on recovery in mental health care.

keywords

mental illness, personal recovery, existential dimension, loss, meaningfulness

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To the question about the meaning of life
everybody answers with the story of his own life.
(Konrád, A Feast in the Garden, 1992)

1. Introduction

Recovery denotes a personal process of living with mental illness. Thirty years ago, the concept of recovery was introduced in mental health care by Patricia Deegan. She understood recovery as an attitude, a stance, and a way of approaching the day's challenges. Moreover, she emphasized the unpredictability of the process: "It is not a perfectly linear journey. There are times of rapid gains and disappointing relapses. There are times of just living, just staying quiet, resting and regrouping. Each person's journey of recovery is unique" (Deegan, 1988, pp. 96-97). Since its introduction, the concept has become increasingly important in mental health care worldwide. The implementation of recovery-oriented care and the development of the concept has continued to provoke discussions. Various definitions of recovery have been suggested, some of which echo the idea of a personal journey put forward by Deegan. Such definitions are formulated by Anthony (1993), Slade (2012), and Davidson (2012). A recent study by Van Weeghel *et al.* has put forward that personal recovery is an evolving and dynamic concept. Most elements have remained constant over time: the idea is that the concept of recovery represents processes rather than outcomes, including elements of connectedness, hope and optimism, identity, meaning in life, empowerment, responsible risk taking, and coping with challenges (Van Weeghel *et al.*, 2019; see also Andresen, Oades, and Caputi, 2003). Furthermore, the notion of personal recovery can be distinguished from that of clinical recovery. The words *journey*, *process*, and *nonlinearity* are often mentioned in the context of personal-subjective definitions, and words such as *functions*, *abilities*, and *symptoms* are usually employed with regard to clinical-functional definitions of recovery (Van Weeghel *et al.*, 2019).

However, an overarching theoretical framework of recovery to support empirical research on the topic is still lacking. This may have to do with the fact that personal recovery is subjective by definition. Agreement on its meaning therefore remains challenging. Moreover, although recovery takes place in a continuous dynamic between *change* and *acceptance*, there seems to be an emphasis on the component of change. In light of the dynamic of recovery this is a one-sided view. However, in the literature, a shift in attention can be noticed from "What is recovery?" to "How does recovery come about?" (Van Weeghel *et al.*, 2019). In this respect, according to Leonhardt *et al.* (2017), an important element is the recognition of the need for

patients to make decisions about the *meaning* of the challenges they face in their recovery. In other words, a better understanding of the challenges that patients face is necessary in order to understand how coping with these challenges plays a role in recovery.
The goal of this paper is to offer a more nuanced understanding of the dynamic of recovery as a starting point to further develop its conceptual framework. To accomplish this, I return to the first definition of recovery by Patricia Deegan and focus on the losses and challenges that often accompany mental illness. First, the broader context of the existential dimension in psychopathology and in recovery will be elaborated. Then, I consider how experiences of existential loss and challenges can be understood in the context of mental illness and from an existential point of view. Various perspectives will be offered on how dealing with challenging experiences can be integrated in a process of recovery. It will be argued that recovery can be regarded as a process of restoring right relationships. This idea will be presented as a way to further develop perspectives on personal recovery in mental health care.

2. The existential dimension in psychopathology and recovery

In human perception, sensorimotor interaction with the environment (or embodiment) and social interaction (or intersubjectivity) are inseparably linked (Fuchs and Schlimme, 2009). The lived body corresponds to the bedrock of unquestioned certainties, which attunes us to the world and to others. Our body, which incarnates us in the world, literally provides us with *sens* through moving around. The French word *sens* cannot only be understood as meaning, but also as directedness and orientation (Edgar, 2016). We do not only experience our being-in-the-world itself, but we can also take stance on these experiences, on ourselves, and on our situation. This reflexive situation has been a central theme in phenomenology and philosophical anthropology. Heidegger, for instance, characterized our condition as "the being who is concerned about its being" and "who relates to its being" (Heidegger, 1927/1962). Kierkegaard defined the self as relating to itself (Kierkegaard, 1849/2008). The evaluative relation with ourselves and with the environment is what constitutes the existential dimension (De Haan, 2017). It functions on a daily, basic, and practical level, but also on the complex level of values, life goals, and worldview (Mooren, 2011/2012).
It has been stated that the existential stance forms the very precondition for the emergence of mental disorders (Fuchs 2011). The idea here is that because we do not align with ourselves and with our present situation, we can suffer from alienation (De Haan, 2017). According to De Haan, the existential stance may be involved in mental disorders in several ways. First, it may play a *constitutive* role in the disorder. This is, for example, the case in anxiety disorders where the fear of getting a panic attack is an inherent element of the disorder itself. Second, mental disorders can *include* patients' stance-taking. Depression for instance also affects one's reflective stance on things: it is part of being depressed to have no hope for future change and to have a distorted perception of the past. Third, the existential relation of patients to their experiences and situation can have important *modulatory* effects on the course of the disorder and on patients' well-being (De Haan, 2017, pp. 529-530).
The existential dimension, understood from our bodily engagement with the world, thus has a central role in how a disorder comes to expression, as well as in how patients relate to their experiences and situation. The ways in which these aspects intervene with each other determines how exactly the existential dimension is involved in the course of a person's disorder and in processes of recovery. In general, usually questions are involved concerning one's own existence, the relationship to one's own body, to other people, and to the world (Boertien and Kusters, 2018). Dealing with these questions in a successful way often results in new meanings (see e.g. Boertien and Kusters, 2018; Dröes and Witsenburg, 2012). In the next section, the emergence of these types of questions will be considered from the perspective of changes in the sense of reality and belonging to the world.

3. Existential loss in the context of psychopathology

There are many threats to making sense of experiences that accompany mental illness (Van Weeghel *et al.*, 2019). One of the reasons for this is that abnormalities of atmospheric qualities of subjective life are central to phenomenological accounts of mental illness (Sass and Ratcliffe, 2017). This involves what Jaspers calls a "transformation in our total awareness of reality," a "transformation of basic experience which we have such great difficulty in grasping" (Jaspers, 1963, p. 95). The most common psychiatric term used to describe such experiential alterations is *derealization*. Derealization can be defined as "loss of sensation of the reality of one's surroundings" or as altered "feelings and sensations of ... reality as perceived by the individual", and is often paired with *depersonalization*, which usually refers to altered reality of oneself (Sass and Ratcliffe, 2017, p. 91).

The phenomenon of a changed sense of reality and belonging to the world has been described by Ratcliffe in terms of existential feeling.[1] The concept concerns an existential orientation or an 'opening' onto the world (Merleau-Ponty, 1964, pp. 163-164), and denotes how the overall experience of being-in-the-world is inseparable from how one's body feels in its surroundings. That is to say, an existential feeling "*is* the way in which one finds oneself in the world" (Ratcliffe, 2008, p. 129), while a shift in the feeling is felt accordingly as "a changed relationship to the world as a whole" (2008, p. 124). At times, the world may feel close or distant, threatening or overwhelming, and our relationship with the world may involve a general sense of belonging or estrangement. It is precisely when they are subject to change that existential feelings become particularly salient. For instance, in the context of religious experience one can experience there being a higher order to which one harmoniously belongs, a higher power from which one is inextricable (James, 1902). In the context of psychopathology, however, existential feelings often seem to be related to impoverished experience, thought, or activity (Ratcliffe, 2008). This impoverishment can go as far as existential feelings becoming pathological.

Ratcliffe understands the criteria for existential pathology on the basis of the view that in existential feeling the world is disclosed pre-intentionally as a *possibility space*. Existential feelings have a dynamic versus a static nature, which concerns the ability to change perspectives, and they have to do with relation versus isolation, which concerns the ability to relate to other people (Ratcliffe, 2017). Existential changes that involve a particular kind of loss – that is, a loss of contact with oneself, with other people, and with the world – are thought to be pathological when they condemn a person to a diminished existential realm. Existential pathology is thus an inability to change perspectives, which results in an isolation from others or, in other words, a retreat from a shared world (Brett, 2002). Although this loss of relatedness may vary depending on the kind of disorder, in general diagnostic categories encompass a wide range of "existential changes", i.e., changes in the ontological dimension that can be distinguished from each other in terms of a person's access to the possible (Sass and Ratcliffe, 2017, p. 93). These experiences on the level of a sense of reality and belonging are common in the schizophrenia spectrum, but they can also be found in other conditions, such as dissociative, anxiety, and mood disorders.

4. Perspectives on dealing with loss in wider experience

Existential changes do not only operate on the deepest existential level, but they also influence wider experience. How exactly this is the case is for the most part still left unexplored. However, several issues have been noted that may be involved when a person experiences existential changes. Besides a diminished sense of reality, this concerns issues

1 In his attempt to relate existential feeling to wider experience and thought, Ratcliffe calls the sense of reality and belonging the "global anticipatory structure of experience". See: Ratcliffe, M. (2017). *Real Hallucinations. Psychiatric Illness, Intentionality, and the Interpersonal World.* Cambridge, Massachusetts / London, England: The MIT Press.

such as altered meaning, altered familiarity, and diminished vitality and relevance (Sass and Ratcliffe, 2017). In other words, existential loss can also result in loss in wider experience. This has also been stressed by Muthert, who identifies six types of loss that can be distinguished in the clinical care of people with a psychotic vulnerability: loss with regard to health; activities or practical matters; dreams, desires, and expectations; relationships; stigmatization, and experiences of fellow patients (Muthert, 2012). The range of domains in life which can be affected by psychopathology shows the potentially disruptive nature of it. Moreover, it is important to notice that it is bidirectional. On the one hand, existential changes may influence a crisis or a disruption in wider experience. On the other hand, loss in wider experience does not only imply *what* is lost; the loss also has an effect on *how* someone experiences the world as a whole (Ratcliffe, 2017). The extent to which this is the case depends on whether the specific experience is regarded as a disruption. A bigger disruption threatens the existing sense continuity to a greater extent. In other words, challenges that people with mental illness face can affect the emotional, social, and existential bonds with the surrounding world. Whereas sense-making has to be understood in the life of the moving body, existential loss can literally result in a standstill.

In a figurative and sometimes also in a literal sense, recovery then often concerns starting to move again, thereby searching for directedness, and orientation. This is often accompanied by the emergence of new meanings (see e.g. Boertien and Kusters, 2018; Dröes and Witsenburg, 2012). Dealing with difficulties is part of this process, and when successful, can contribute to processes of recovery. In terms of existential changes, the ability to change perspectives and to (re-)establish relationships is of crucial importance here. Being able to change perspectives influences decisions that patients make about the meaning of the challenges they face in their recovery. Moreover, relating to other people is an openness to alternative possibilities and to the realisation that what is given to one now is not all there is. At the same time, acceptance of what happened also plays a crucial role. Several perspectives on dealing with loss in wider experience can be distinguished from a theoretical point of view. These theories have in common that health is never a perfect state of being. Rather, it is precisely the ability to adapt and the ability of self-control in light of the physical, emotional, and social challenges of life (Huber, 2014).

Hermeneutical theories give attention to dealing with loss and existential challenges in terms of a reorientation of existence. A common view is that of Attig. He emphasises that the entire person is at stake during processes of actively dealing with loss: emotional, psychological, behavioral, physical, social, intellectual as well as spiritual aspects. Various environments of the person also play a significant role: the physical world, the social world, the world of the self, and the world of the lost (Attig 2011). Three subprocesses can be distinguished. A first process is to realise to a greater or lesser extent that the loss is there. This concerns the *recognition* of the loss. A second process involves looking for respect for the *uniqueness* of the experience(s). A third process concerns searching for an *'understanding'* of what has happened (Attig 2011). The development of new meanings is particularly important in the third process. Various factors may play a role in this regard. First, the movement of positive psychology emphasizes the role of embodying a positive attitude, which consists of elements such as hope, optimism, resilience, and trust. The concept of flourishing denotes "a state where people experience positive emotions, positive psychological functioning and positive social functioning, most of the time," living "within an optimal range of human functioning" (Frederickson and Losada, 2005; on trust, see e.g. Mújdricza, 2019). Second, religion can also function as an existential resource. The relationship between religion and health has been studied particularly in the context of the 'religious coping paradigm'. Religious coping will often occur where non-religious coping

fails, especially in situations involving loss of life, health, and relational embeddedness (Van Uden and Zondag, 2016).
Furthermore, narrative theory can also play an important role in a process of recovery. Sharing the experiences helps to structure thoughts and feelings. This in turn creates "free spaces" for new experiences and restores the ability to regulate behavior and feeling (Bohlmeijer, 2007; see also Lewis, 2012). This allows 'answers' to be adjusted over time and to take up the experiences of loss and challenges in the larger context of one's life story. This enables to establish a meaningful connection between what is lost and what is (still) possible (Muthert 2012). Relating loss with all aspects of existence therefore seems to be an indispensable step in a successful process of personal recovery. However, importantly, regaining control and understanding sometimes does not soothe the pain. What is needed might then not be a search for understanding, but an attempt to face the loss and accept it as a reality.
In any of the perspectives described above, a phenomenological approach seems to relate best to approaching processes of recovery. Phenomenology puts emphasis on the person being a *Dasein* – "Being-in-the-world" – and considers the constructed, interpretive aspects of experience (Corrie and Milton, 2000, p. 9). It predominantly seeks to explore, describe, and clarify with an open attitude. In this context, particularly existential phenomenology may be valuable. Existential phenomenology is potentially concerned with most of the aspects of personal recovery in its psychological dimensions, as it considers issues such as death anxiety, isolation, responsibility, and meaning (Huguelet, 2006).

5. Recovery as restoring right relationships

In the previous sections, recovery has been addressed as a process which is characterised by the dynamic of change and acceptance. Dealing with loss has been put forward as a necessary part of this dynamic. It has been argued that the existential dimension has a crucial role in these processes. However, despite of the fact that the existential dimension is at the core of recovery, it is questionable to what extent it is actually being addressed as a crucial element in mental health care. The most holistic model available for psychiatry is the well-known biopsychosocial (BPS) model, which was brought to medicine by George L. Engel (1977, 1978). This model, however, does not explicitly acknowledge the existential dimension. Currently, many researchers think that biopsychosocial is not enough, and that the model should be expanded to include the existential or spiritual dimension as well (see e.g. Katerndahl, 2008; Sulmasy, 2002). In her forthcoming book on enactive psychiatry, De Haan argues for a biopsychosocial-existential model from an enactive perspective (De Haan, 2020).
The perspective on recovery that has been developed in this paper further supports this view. In the previous sections, loss in the context of psychopathology has been understood from the perspective of existential changes, i.e., changes in the sense of reality and belonging to the world have been taken into account. The idea has been put forward that existential loss in the context of psychopathology may involve a loss of relatedness with a shared world, resulting in impoverished experience. This loss may influence the relationship with oneself, with other people, and with the world as a whole. Experiences of crises may have a profound impact on this, as it disturbs the existing sense continuity. Sense continuity is based on a complex set of relationships that involves coherence, commitment, and connection in time and space (Antonovsky, 1987).
Based on the philosophical-anthropological notion that a human person is a being in relationship (Sulmasy, 2002, p. 25), it can therefore be argued that existential changes and experiences of loss that a person with mental illness may face has to do with a disruption of "right" relationships. It is this idea that I wish to put forward with regard to our understanding of recovery. Understanding the human person as a being in relationship involves viewing

the human person as intrinsically spiritual (Sulmasy, 2002; Lonergan, 1958). From the above follows that a successful process of recovery can be understood as a process of restoring "right" relationships. This involves developing new relationships to what is lost or being challenged in order to be able to focus on what is still possible. In a broader sense, this can be understood as restoring intrapersonal physical relationships, interpersonal relationships, and extrapersonal relationships, involving those with the interpersonal environment, and with the transcendent. In other words, recovery is aimed at coherence, commitment, and connection in time and space (Antonovsky, 1987). The restoration of right relationships thus implies a restoration of our engagement with the world, with other people, and with ourselves, in other words: it concerns the existential dimension of *sens.*

At the same time, as Deegan (1988) stated, "essential aspects of the recovery process are a matter of grace and, therefore, cannot be willed. However, we can create environments in which the recovery process can be nurtured like a tender and precious seedling" (p. 18). A restoration of relationships implies that a necessary part of recovery should also include reexperiencing a state of being surrounded, being included, being held: a sense of trust. One way to enable this, if not the most important way, is with interpersonal encounters and with the help of "free spaces" (Van Weeghel *et al.*, 2019). This direction would provide the conceptual framework of recovery with a foundation in philosophical anthropology, which has direct implications for recovery-oriented practice. It adds an existential or spiritual dimension in the broadest sense to what is otherwise often thought of as just "providing enough social support" for patients.

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