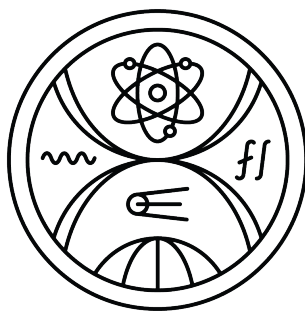


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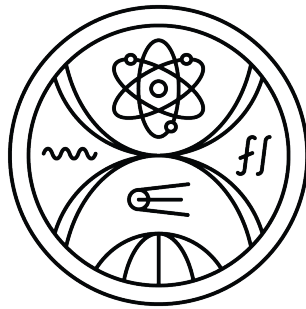


PHENOMENOLOGICAL EXPLORATION OF THE  
SENSE OF SELF AND ITS RELATION TO  
ANXIETY

Master thesis



COMENIUS UNIVERSITY IN BRATISLAVA  
FACULTY OF MATHEMATICS PHYSICS AND INFORMATICS



PHENOMENOLOGICAL EXPLORATION OF THE  
SENSE OF SELF AND ITS RELATION TO  
ANXIETY

Master thesis

Study program: Cognitive Science  
Branch of study: Computer Science  
Department: Department of Applied Informatics  
Supervisor: doc. dr. Toma Strle  
Consultant: prof. Ing. Igor Farkaš, Dr.





Comenius University Bratislava  
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**Field of Study:** Computer Science  
**Type of Thesis:** Diploma Thesis  
**Language of Thesis:** English  
**Secondary language:** Slovak

**Title:** Phenomenological exploration of the sense of self and its relation to anxiety

**Annotation:** Exploring lived first-person experience via the phenomenological approach has been gaining traction in the past decades. The enactivist approach in cognitive science sheds new light on the mind-body problem, stressing the importance of the environments in which living beings exist. A recent addition to this framework is the consideration of the existential dimension, i.e., the capacity of humans to take a reflexive stance on themselves, the world, and others. This capacity is arguably necessary for sense of self to emerge, as well as for humans to be able to experience states such as anxiety.

**Aim:**

1. Explore existing literature on the ontological frameworks within which to ground the existence of organisms in the world, with an emphasis on the novel abilities of human beings, focusing especially on the sense of self and anxiety.
2. Based on the frameworks explored in (1), examine the relationship between experience of anxiety and the sense of self with a pilot, inductive-deductive qualitative study.

**Literature:**

Fuchs, T. (2018). *Ecology of the brain: The phenomenology and biology of the embodied mind*. Oxford University Press.  
Gallagher, S., & Zahavi, D. (2021). *The phenomenological mind*. Abingdon, Oxon: Routledge.  
Haan, S. de. (2020). *Enactive psychiatry*. Cambridge University Press.

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## ZADANIE ZÁVEREČNEJ PRÁCE

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**Typ záverečnej práce:** diplomová  
**Jazyk záverečnej práce:** anglický  
**Sekundárny jazyk:** slovenský

**Názov:** *Fenomenologické skúmanie pocitu seba samého a jeho vzťahu k ľudskej úzkosti*

**Anotácia:** Skúmanie žitých skúseností z prvej osoby prostredníctvom fenomenologického prístupu získava v posledných desaťročiach na význame. Enaktívne prístupy v kognitívnych vedách prinášajú nový pohľad na problematiku tela a mysle, zdôrazňujúc dôležitosť prostredia v ktorom živé bytosti existujú. Nedávny prídavok do tohto rámca je zohľadnenie takzvanej existenčnej dimenzie, t.j. schopnosti ľudí zaujať reflektívny postoj k sebe samému, okolitému svetu, a iným ľuďom. Táto kapacita je pravdepodobne potrebná na to, aby sa objavil pocit samého seba, ako aj na to, aby ľudia mali kapacitu prežívať stavy, ako je úzkosť

**Cieľ:**

1. Preskúmať existujúcu literatúru o ontologických rámcoch, v ktorých sa dá zasadiť existencia organizmov vo svete, s dôrazom na unikátne schopnosti ľudí, so zameraním najmä na pocit samého seba, a úzkosti.
2. Na základe rámcov skúmaných v (1), preskúmať vzťah medzi zažívaním úzkosti a pocitu samého seba, pomocou pilotnej induktívne-deduktívnej kvalitatívnej štúdie.

**Literatúra:** Fuchs, T. (2018). *Ecology of the brain: The phenomenology and biology of the embodied mind*. Oxford University Press.  
Gallagher, S., & Zahavi, D. (2021). *The phenomenological mind*. Abingdon, Oxon: Routledge.  
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**Dátum schválenia:** 20.04.2022

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.....  
vedúci práce

I hereby declare that I have written this thesis by myself, only with help of referenced literature, under the careful supervision of my thesis advisor.

Bratislava, 2023

.....  
BSc. Matúš Brziak





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# Abstract

Sense of self and anxiety are some of the most characteristic phenomena of human life, speaking to the uniqueness of the human condition. The present work aims to investigate these phenomena through the framework of phenomenology, placing essential importance not only on what we can say about their inner workings from a theoretical perspective, but also how they are directly lived in first-person experience. Therefore, the aim is twofold. First, we seek to explore the existing literature in order to build a solid ontological foundation upon which to ground the understanding of not just the sense of self and anxiety, but life as such more broadly, from very basic organisms to human beings and their unique capacities for self-awareness. We explore embodied and enactive approaches in cognitive science and phenomenology, and investigate the fundamental forces that drive living being in the world. Turning to the question of the human condition, we explore what sets us apart from other forms of life. This investigation results in an understanding of the sense of self in increasing levels of complexity. Then, we ask how the phenomena of anxiety fits into the picture, and what we can say about it when investigated through a phenomenological lens.

The results of this background research lead us to the design of a qualitative inductive-deductive exploratory study, in which we use phenomenological interviews to obtain reports on the lived experience of anxiety. Through this study, we aim to explore if the claims about the phenomena in question can be found in lived experience. However, the design of the study aims to allow novel insights to be obtained in an inductive, bottom-up way. Therefore, the acquired results are presented not only in comparison to the results of the background research, but explored fully.

**Keywords:** sense of self, anxiety, phenomenology, qualitative study

# Abstrakt

Pocit seba samého a úzkosť sú niektoré z najcharakteristickejších javov ľudského života, ktoré hovoria o jedinečnosti ľudskej existencie. Táto práca sa zameriava na skúmanie týchto javov v rámci fenomenológie, pričom kladie zásadný dôraz nielen na to, čo môžeme povedať o ich vnútornom fungovaní z teoretického hľadiska, ale aj na to, ako sú priamo prežívané v osobnej skúsenosti. Cieľ je preto dvojaký. Začíname snahou preskúmať existujúcu literatúru, aby sme vybudovali solídny ontologický základ, na ktorom postavíme chápanie nielen pocitu seba a úzkosti, ale života ako takého v širšom zmysle, od základných organizmov po ľudskú bytosť a ich jedinečné schopnosti sebauvedomenia. Skúmame embodied a enactive prístupy v kognitívnej vede a fenomenológii ako aj základné sily, ktoré poháňajú živú bytosť vo svete. V rámci otázky ľudskej existencie, skúmame, čo nás odlišuje od iných foriem života. Toto skúmanie vedie k pochopeniu zmyslu seba samého na základe rastúcej úrovne komplexity. Následne sa pýtame, ako fenomén úzkosti zapadá do obrazu a čo o ňom môžeme povedať, keď ho skúmame cez fenomenologický pohľad.

Výsledky tohto skúmania literatúry nás vedú k návrhu kvalitatívnej induktívno-deduktívnej exploračnej štúdie, v ktorej využívame fenomenologické rozhovory na získanie správ o prežitej skúsenosti úzkosti. Prostredníctvom tejto štúdie sa snažíme preskúmať, či tvrdenia o javoch na ktoré sa zameriavame možno nájsť v žitej skúsenosti. Cieľom štúdie je však umožniť získanie nových poznatkov indukčným spôsobom zdola-nahor. Získané výsledky sú preto prezentované nielen v porovnaní s výsledkami podkladového výskumu, ale sú preskúmané plne.

**Kľúčové slová:** pocit seba samého, úzkosť, fenomenológia, kvalitatívna štúdia

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# 1

## Introduction

The aim of this thesis is to explore the relationship between the sense of self and the experience of anxiety. This exploration is set in a phenomenological framework, and as such places essential importance on the first-person lived experience of the phenomena being explored. There are two overarching sections to this work, a theoretical and a qualitative.

First, a theoretical exploration of the existing phenomenological literature on the sense of self and anxiety takes place, with the aim of grounding our understanding in a solid ontological framework. The aim is not merely to start at the phenomena of sense of self and anxiety, but to seek a framework within which to understand life as such more broadly, from very basic organisms to human beings and their unique capacities for self-awareness. We explore the implications of embodied and enactive approaches in phenomenology and cognitive science more broadly and attempt to place the living organism directly into the world not as a mental representation of itself, but as an embodied agent enacting its life. We will then turn to exploring the fundamental forces that drive living beings, by exploring the principles of self-organization and autonomy. This investigation will bring us to the concept sense-making, its role in cognition, and how it can help us understand the interactions between organisms and their environment. Then, we move to the question of the human condition, seeking to understand what makes us different from other forms of life. We will explore what is termed the existential dimension of experience, and how the capacities for reflective awareness that it grants us fundamentally change our existence, including our sense of self. To conclude the exploration of the sense of self, we will attempt to explain it in stages of increasing complexity, from what is termed the protoself, through the pre-reflective minimal self, up to the reflective narrative self.

Turning to the exploration of anxiety, we begin with an overview of the work of a number of prominent authors, and what current literature has to say about them. We will continue with the exploration of the role played by phantasy plays in the

experience of anxiety, and highlight several other features of the phenomena, including its self-enhancing spiral and negative teleology. Additionally, we will investigate the role of physical space in anxiety, and how it can transform our body from a locus of ownership and unity to an impersonal site of alienation and anxiety.

Then, in the first results section, we will summarize the results of the theoretical investigation, and make a number of claims about the relation between sense of self and anxiety. Additionally, several characteristics of anxiety are highlighted.

In the second main section of the present thesis, we aim to conduct a qualitative study in order to try to explore if the claims and characteristics given in the first result section about the sense of self and anxiety can be found in lived experience. This study is framed as an inductive-deductive multiple case-study examination of the sense of self and anxiety. To gather reports of lived experience, phenomenological interviews are employed, the design of which is strongly influenced by the background research in a deductive way. However, the study aims to allow novel insights to be obtained in an inductive, bottom-up way. Therefore, the acquired results will not be analysed and presented only in comparison to the first result section, but more broadly. The results of the qualitative study are presented in the second result section, followed by a discussion. Lastly, limitations of the present work are elaborated and the work as a whole concluded. The hope of the present work is that it can shed some light on the phenomena of the sense of self and anxiety, and perhaps on the human condition as such.



## 2

# Background theory

## 2.1 An introduction to phenomenology

Phenomenology is a philosophical approach that emphasizes the study of subjective experience, particularly in relation to perception, thought, and consciousness. This approach was first developed in the early 20th century by the German philosopher Edmund Husserl, and has since been expanded upon by numerous other philosophers, including Martin Heidegger, Maurice Merleau-Ponty, and Jean-Paul Sartre. Phenomenology seeks to understand how we experience ourselves and the world around us, as well as how we obtain meaning from subjective experience (Husserl, 1990).

Contemporary approaches, particularly the enactive branch of cognitive science, took up Husserl's call to understand subjectivity and consciousness and started developing appropriate methods of research (Petitmengin, 2006). This involves gathering detailed descriptions of people's experiences through interviews, observations, or other methods of data collection. The data are then analyzed using methods such as coding, clustering, and theme identification to uncover the underlying themes, patterns, and structures that characterize the experiences. An example of current methods included Microphenomenology (Petitmengin, 2006), Descriptive experience sampling (Hurlburt & Akhter, 2006), or SROE (Sampling reflectively observed experience) (Kordeš & Demšar, 2021). These qualitative methods and methodology in phenomenology more broadly are explored in depth later in the present work.

Research on subjective first-person experience is avoided in classical cognitive science due to its subjective nature, or lived experience is granted a secondary causal status, a view which is countered in the phenomenological approach (Varela, 1993).

## 2.2 The sense of self – a phenomenological exploration

*“There is no widespread philosophical consensus about the self.”*

– Gallagher and Zahavi, 2020

When talking about the sense of self in phenomenology, we usually begin by encountering terms such as minimal self, narrative self, ipseity, or the diachronic unity of the self (Gallagher & Zahavi, 2020). However, in a motivation to understand these concepts more thoroughly, the present work aims to go deeper at first, and seek a solid ontological framework to stand on. In this way, the aim is to attempt to ground the sense of self in the nature of existence as such, so that the legitimacy of the knowledge being pursued is ensured.

This section first makes a case for embodiment, the inseparability of subjective experience from the physical body, by a way of a critique against reductionism

### 2.2.1 A counter to representationalism and a case embodiment

In cognitive science and neurosciences there exists a wide-spread view which can be summarized as follows: There is an external reality which is only given to us through representations in our mind (Fuchs, 2018). Reality can be found “in the head”, which essentially turns perception into a useful physiological illusion. “What you see is not really there, it is what your brain believes there is” (Metzinger, 2010). This is the assumption of the cognitivist movement in cognitive sciences. Its hypothesis is that cognition (including human cognition), is the manipulation of symbols in the fashion of digital computers. The mind is thought to operate by manipulating symbols that represent features of the world as “mental representations”.

The origins of representationalism can be traced to the tradition of Idealism, which developed from the image-theory of perception. On this view, expanded by, among others, John Locke, David Hume and Immanuel Kant, our perceptions do not represent external reality, but are just impressions, ideas (*ideae*), or representations, from which we cannot draw concrete conclusions about reality (Fuchs, 2018). In Kantian epistemology, the world is taken into an ‘inner room’, recognizable not because we are actually in it, but because *it is in us* (Kant, 1781/1998). This view of what is real has, throughout the years, made its way into brain sciences and related neurophilosophy. The *conditio humana* is seen as a strange duplication of reality. All we receive from the “external world” are representations of things “out there”, without the ability to access them directly (Fuchs, 2018). This representationalism extended to the brain’s neural network rebranded the *ideae* into “neural representations” – specific excitation

patterns through which the brain mirrors the structure of the world (Fuchs, 2018). This movement is termed Neuro-reductionism, claiming that experiences can be ultimately explained by the underlying neural activity, and thus granting a primary causal status to brain processes. Extended, for example, to psychiatric disorders, proponents of neuro-reductionism claim that such disorders are ultimately diseases of the brain (de Haan, 2020).

This view of the world as pregiven and cognition based on representations is challenged by the enactive and embodied approaches in cognitive sciences (Varela, 1993), which have been gaining in support over the past decades. It aims to bypass the inner inner / outer world issue by studying cognition not as recovery or projection but as embodied action. On this view, reality is brought forth by a living being's body and its sensorimotor interaction with the environment. *Embodied* means that cognition depends on the kinds of experience that stem from having a body with various sensorimotor capacities, and that these capacities are themselves embedded in a more extensive biological, psychological and socio-cultural context. *Enaction* means that perception consists in perceptually guided action and cognitive structures emerge from the recurrent sensorimotor patterns that enable this action to be perceptually guided. We follow with a number of examples supporting these propositions.

Held and Hein (1963) conducted an experiment on freshly-born kittens, where they constructed a hollow cylindrical base with vertical stripes on the inside, through which outside objects could be observed. In the middle of the cylinder was a rotating axis with two harnesses for the kittens to be suspended in. Two baby kittens were placed inside the cylinder, where one could freely move around within the constraints of the cylinder, and the other was suspended on a gondola, and could only use its vision to observe the world. In this way, both kittens received same visual stimuli. After several weeks of exposure to this procedure, the two kittens were let out to move around freely. The kitten that was able to move without restriction had no problems orienting and moving around in the world, while the suspended kitten that remained passive was incapable of orientating in space and recognizing objects, and could not move around without constantly stumbling and bumping into objects (Held & Hein, 1963). What this experiment shows us, is that only a sensing *and* moving organism forms experienced space with the combination of visual, motor and vestibular patterns it receives.

Cataract surgery restoring vision to people suffering from blindness early in life shows similar results as the experiment above: Subjects report chaotic flickering of stimuli and inability of depth perception, with vision remaining severely impaired even after years of compensatory training (Hamlyn, 1962). These examples prove that something as basic as spatial perception is only possible for embodied and active beings.

But what about the synchrony between the lived and physical body? Is the bodily subject itself still not just a construct of the mind? One could make an argument that

the experiences of phantom limbs, in which body parts are perceived to be localizable outside of the limits of physical body, seem to prove this view.

This issue was already tackled by Husserl when he wrote about the correspondence, or syntopy, between the lived and physical body (Husserl, 1990). He gives the example of feeling the touching of an object that simultaneously moves over the skin – in this co-apprehension the body manifests itself as a unity. The coextension of the lived and physical body cannot be explained by a mere projection of bodily sensations into the space of the organic body, as the objective space of the organic body would have no existence in a virtual subjective world. There cannot be a projection “toward the outside” if this outside is just an interior world constructed by the brain.

If everything is just a mental construct or a simulation in our head, we would have no access to reality. It becomes even clearer that the subjective experience and the organic body are in no way two separate entities as soon as we enter an intersubjective situation. Let’s take as an example a visit to the doctor’s office, where a patient struggles with a pain in the knee. The patient is able to point to a specific area on his leg as the source of the pain, to an objective physical place which is able to be comprehended by the doctor. The patient does not point to a part of the brain when asked where the pain is located, instead he points to place that he does perceive subjectively, but which is made objective through the intersubjective interaction with another person.

We can therefore speak of not merely embodied, but also an extended or “ecological subjectivity” (Neisser, 1988), which becomes possible by the observation of a fact that subjective bodily space is embedded in objective space of a living organism in its environment. Whatever we are, we are actually in the world as bodily beings (Fuchs, 2018). Coming back to the experience of phantom limbs, this shows us that the experience of subjective body is indeed flexible, and can be, for example, extended via the use of a walking cane or a prosthetic limb. When we are skilled in riding a bicycle, we are, in a sense, extending our embodied form, and automatically adjust to bumps on the road, or obstacles in our way. The subjective body is therefore modified depending on the particular border at which the real interaction with the environment takes place. The objective space of a living body and the subjective space of bodily experience are intertwined and mutually modifying. As expressed by Merleau-Ponty: “The spatiality of the lived body is not a spatiality of positions, but a spatiality of situations” (Merleau-Ponty, 1962/2018, p. 115)

Thus, we have placed the living human being in the real world not as a mental representation of itself, but as an embodied agent enacting its life. “For the experienced body, the brain does not produce a “body image”, rather it is the body itself as felt” (Fuchs, 2018).

We are living beings, inhabiting our living body as the means of experiencing the

world. This state of affairs was described by Merleau-Ponty as bodily subjectivity, or “being-towards-the-world”, through the medium of the lived body (Merleau-Ponty, 1962/2018). Life and the lived body are the grounding sources of our enactment of life. Being embodied in the world in this way, we can say that the primary dimension of consciousness is the reciprocal, homeostatic, sensorimotor, and active-receptive relationship of the living organism and the environment (Fuchs, 2018).

We live on the basis of an unconscious bodily background which we can never fully grasp, and which imbues all more complex acts of cognition, such as perception and thinking, insofar as they require a medium by which they are accomplished – this medium being the subjective body. All feeling, perception, thought, imagination and action are completed on the basis of a bodily background. These phenomena always have a bodily subject (Fuchs, 2018).

“There is, therefore, another subject beneath me, for whom a world exists before I am here, and who marks my place in it. This captive or natural spirit is my body.” (Merleau-Ponty, 1962/2018, p. 296)

## **2.2.2 Embodied intersubjectivity**

On the intersubjective dimension, people are lived bodies also for others, who directly perceive them through their expressions and actions as a unified entity. Therefore, the lived body is never only subject or object, but better described as a subject-object. As lived bodies, we relate to each other by means of a primary “personalistic attitude”, which grounds the world and experience of life (Fuchs, 2018). Merleau-Ponty speaks of the “ambiguity that forms between the pure subject and the object a third genus of being”, and thus undermines the dualism of inside and outside. Therefore, we cannot speak just about consciousness of the body, nor objective physical body (Merleau-Ponty, 1962/2018).

Thus, embodiment is the basis of intersubjectivity. We experience the facial expressions, gestures and behaviour of others in the context of a given situation as the direct expression of their feelings, sensations and intentions (Fuchs, 2018). Subjectivity is essentially embodied: the lived body becomes the basis of the subject itself. We can never completely recognize ourselves from the first-person perspective, as personhood always includes being in relation to others.

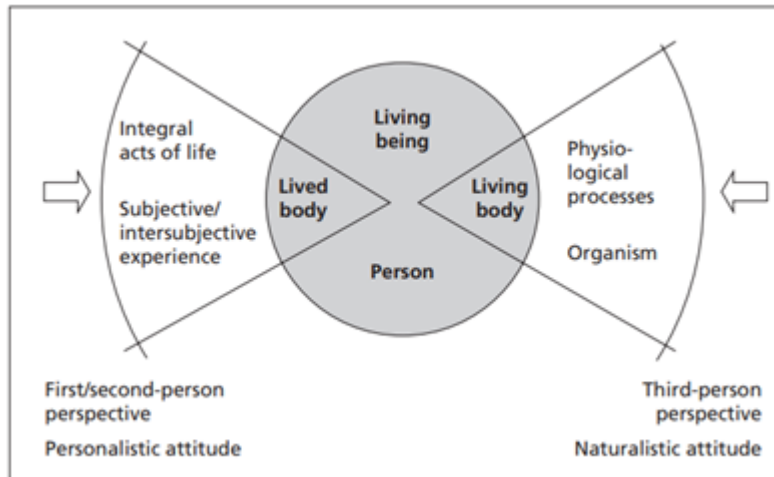


Figure 2.1: Dual aspect of the living being (Fuchs, 2018).

### 2.2.3 That which drives us forward – the principles of self-organization and autonomy

Having made a case for embodiment through the inseparability of the physical body and lived body, let us take a step back turn to the question of the fundamental forces that organize and drive living beings in the world. In this way, the aim is to build on the foundation of embodiment, by giving a sense of direction and self-organization to the understanding of life, starting at more basic living organisms, and building our way to human beings and their unique existential condition.

“The spontaneous and autonomous activity of life springs from an elementary drive, an impulse or motive for something. In experiencing a drive, such as hunger, thirst, or lust, we are presented with certain impulses of our lived body, which is autonomously motivated to pursue what it lacks, whether or not we follow these drives.” (Fuchs, 2018). Spinoza calls this source of our life’s “conatus” or “conation” (meaning endeavour/effort/urge/drive) (Spinoza, 1677/2000) a term dating back to Stoicism, and later used to denote the living being’s striving for self-preservation, closely connected with affective and volitional (in humans) life. We do not have such intentional acts fully in our control, but rather allow them to happen. Merleau-Ponty calls this the “passivity of our affectivity”: “It is not I who makes myself think any more than I who makes my heart beat” (Merleau-Ponty, 1962/2018, p. 496)

A self-organizing living system is essentially goal-directed towards its self-maintenance. An organism gains control over the substance which forms it only at the price of dependence on the environment. Life is necessarily connected to the environment and depends upon exchange with it, namely through its metabolism (Jonas & Jonas, 1966/2001). Metabolism as such stands at the base for the emergence of valences and preferences in living systems. An advanced autopoietic system is therefore pressured to

develop the capacity for adaptivity. This is an essential capacity of living systems to monitor and regulate themselves and improve their circumstances when needed. Adaptivity implies the capacity of “sense-making”, which, on the most fundamental level, means the ability to distinguish between adverse and favourable circumstances, resulting in self-preserving actions. In this way, sense-making turns the merely physical surroundings into an environment of significances and valences (Fuchs, 2018). In this way, a living cognitive being’s world is a relational domain created by that being’s agency and coupling with the environment (Varela, 1993).

#### 2.2.4 Sense-making as the essence of cognition

The concept of sense-making has important implications for cognitive Science, phenomenology, and our undressing of life in general. Some branches of enactivism argue that cognition itself should essentially be understood *as* sense-making: the evaluative interaction of an organism with its environment (de Haan, 2020).

Living beings rely on constant exchange with the environment to maintain themselves. Therefore, to survive, they need to make sense of their environment, and this capacity (sense-making) of the organism, is cognition. On this view, ‘mind’ is not separate or somehow hidden in the brain, it is a type of interaction with the environment. It is an activity, a temporally extended process, inherent to all living beings. In this sense, life and cognition are continuous, which is a central assumption of the Life-mind continuity thesis (Froese & Paolo, 2009): Matter is not opposed to cognition, but it can give rise to qualitative differences in specific organizations. What determines the character of matter is the mutual *relations* between the parts. This is the central idea of *emergence*: Properties of the whole depend not only on the properties of the parts, but also on their organizational structure. Following this view, cognition and matter are not two separate things, rather, matter in specific (self-organizing) patterns *is* minded (de Haan, 2020).

Sense-making is also affective, in the sense that our affects reflect the value or meaning of what is encountered. Affects refer to the experienced relevance of a situation: e.g. something is appealing, repulsive, or curiosity-inducing. This experience typically does not require any conscious analysing, as sense-making is primarily a direct bodily affective evaluation (de Haan, 2020).

What this also means is that on this enactive view, we can ascribe the capacity for cognition even to very primitive life, such as a one-cell organism. A cell survives by a combination of mechanisms to maintain homeostasis. This includes the regulation of ions, nutrients, and other molecules both inside and outside of the cell via membrane transporters and pumps (Alberts, 2002). Additionally, cells need to respond to external signals and stressors, including signalling pathways that allow cells to communicate

with each other and respond to changes in the environment (Alberts, 2002). A cell can respond to adverse and favorable states in the environment, implying a capacity for sense-making, even though a very basic one compared to more complex forms of life.

As such, sense-making entails basic values. Depending on the characteristics, abilities, and concerns of the organism, the elements in the environment have a specific value or meaning for it. They entail very basic values or valences. These are not projected by the organism onto a neutral world, but rather sense-making is a *relational* function between the organism and its environment. Importantly, the value of some aspects of the environment is to some extent dynamical (de Haan, 2020). For example, let's consider a lake in a forest. For a fish living in the lake, its value is that it provides shelter, food, and a place to find a mate. For a bear that comes to the lake, its value is that it provides food and a place to cool off during warm months, it does not seek shelter or look for mates there. Even in the previous example of simple organisms, we can say that certain aspects of the environment have a value or a meaning for the cell.

An important caveat to mention in the context of existential sense-making, that will be explored later, is that when we are speaking about the *value* of the pond for the fish and a bear, it is inaccurate to say that they regard the pond *as* a place to seek shelter or find food. The pond *is* meaningful for these organisms, but it is not experienced *as* being meaningful. The fish does not need a concept of 'shelter' to seek out shelter in the lake, the bear a concept of 'food' to distinguish what he can eat, or the cell a concept of an 'environmental stressor'. The capacity to recognize something *as of a certain kind* is a more complex form of sense-making that required *reflexive awareness*, which we will turn to next.

### 2.2.5 What makes us unique?

In her recent book 'Enactive Psychiatry' (de Haan, 2020), de Haan works with existing enactive approaches to develop a robust four-dimensional model with the aim of achieving greater understanding and better treatment of psychiatric disorders. Although the model was built primarily with this aim in mind, it is quite flexible and applicable outside of just psychiatry. The four dimensions are different excerpts of one complex person-world system, with each shaped by the other three, and none being reducible to any of the others. The model offers a very useful way of conceptualizing human beings and the environments they inhabit. The four dimensions are as follows:

1. The experiential dimension, which includes the phenomena of subjective lived experience.
2. The physiological, involving bodily processes taking place mostly outside of awareness.



3. The sociocultural, which encompasses the intrapersonal as well as broader societal dimension of life.
4. The existential dimension, which is a capacity unique to humans, arising from our ability to reflexively observe our subjective experience, and in this way allows us to ‘take a stance’ on everyday situations and life more broadly.

Haan claims that the enactive Life-mind continuity thesis goes a long way in explaining living beings and their environments, but there is still something missing when it comes to human beings and their sociocultural worlds. The Life-mind continuity thesis fits very well with the first three dimensions of Haan’s model, the experiential, physiological, and sociocultural. However, there is something that it is like to be a human being, something that makes us different from all other life forms that we are aware of. This difference speaks to the fact of unique human consciousness, which Haan incorporates through the existential dimension.

### **2.2.6 The existential dimension**

This dimension has to do with the ability to take a stance on ourselves and our situation, and with how this ability shapes our existence in the world. It refers to a reflexive relation, in the sense that it refers to itself, making us not only aware but also self-aware (de Haan, 2020). This capacity was also expressed by Plesner by the term “excentric positionality”, in contrast to animal’s “centric” positionality, allowing perception of oneself “from the outside”, from the possible viewpoint of the other (Plesner, 1970). According to Plesner, and highly relevant for our investigation of the self, through eccentric positionality and the capacity of human beings to inhibit emotional impulses, we gain the capacity to employ imagination, anticipation, and fantasy (this will be important in our later examination of anxiety). The pause between perception and action allows us to enter into an “as-if” mode, with an option to reflect on the present situation, or by way of “trial action”, “simulate” a potential future outcome.

Our stance-taking capacity opens up a new space of meaning, fundamentally transforming our way of being in the world. This does not mean that the freedom that is opened up annuls the ways in which we are determined by our bodies and our environment, but it does give us a specific anchoring from which we can reflect (de Haan, 2020).

### **2.2.7 Basic and existential sense-making**

With this reflexive capacity comes a significant shift in our sense-making. We no longer just have the desire to survive, but novel existential values emerge, such as friendship,

respect, dignity, or broadly speaking, a desire to live a *good life* (de Haan, 2020). The existential dimension also transforms our basic biological life-maintaining values. What we eat, how we dress, or how we approach intimate relationships necessarily reflects who we are, even if what we display is that we simply “do not care”. Even if we do not reflect on our choices explicitly, our existential stance still permeates our sense-making at the unreflective (unconscious) level.

We reveal our stances through behaviour, but at the same time our stances are constituted by this behaviour. I.e., Our actions are enactments of our stance-taking (Merleau-Ponty, 1962/2018).

### 2.2.8 Socially constituted sense-making

Enactivism stresses that sense-making, even in its most basic form, remains necessarily embodied and embedded, the latter being very significant in the broader socio-cultural context. Our existential sense-making capacities are to a large extent learned in and through social interactions, which are embedded in socio-cultural communities (de Haan, 2020). This starts already in early childhood, where we are, typically, at first shaped by our parents and close family, later by the peers we meet, collectives and institutions that we enter, and the broader overarching social collectives, such as countries or states.

As an example of early existential sense-making, infants look for the reactions of their caregivers to determine the danger of a situation. As they get older, they are prompted to consider a situation from a perspective of another: “What would you do in her situation?” or “How would you feel if he did not want to lend you the toy?”. Through social practices, children develop more and more elaborate skills in perspective-taking, amounting at some point to full blown reflective capacities. Once these capacities are developed enough, we can consider things such as: “Why do I so often feel scared / angry / anxious?” “Is this really where I want to be in life? Or would I rather move someplace else or find a different job?” Thus, from early childhood, experiences of joint attention, pointing towards objects, shared references to situations, mutual understanding, and cooperative practice result in a broader intersubjective form of sense-making, termed *participatory sense-making* (Jaegher & Paolo, 2007).

An example of sense-making at higher levels of societal organization is the use of bank notes or coins to represent monetary value. If we simply examine a euro bill, we cannot determine its value. It only emerges within the context of a larger system of symbolic relations, established intersubjectively through societal agreement (Fuchs, 2018). Therefore, our perception is co-constituted by our stance-taking capacities as well as by the language we use, and other sociocultural practices we engage in.

## 2.3 The sense of self – setting the layers

From the investigation so far, we can see that whatever our sense of self is, it is inextricably linked to our lived body as the medium through which, and *as which*, we exist in the world. We also saw what sets the human being apart from other life, through our capacity to ‘take a stance’ and reflect on our situation. We will later return to further implications that the existential dimension has on the sense of self.

Continuing our investigation of the sense of self, the next step might be to ask just what it is that we are talking about here in terms of lived experience? The question that we could ask next is: How should we begin to understand our experience now that we have our basic ontological groundwork in place?

### 2.3.1 Basal subjectivity

What we are dealing with, first and foremost, is a primary body-affective self-feeling, that is at the core of all of our conscious processes, which is quite elusive to conceptualize. Before we arrive at higher-level phenomena such as perception and cognition, there is a form of immediate, pre-reflexive self-presence, an affective colouring that joins consciousness with itself (Fuchs, 2018). This “feeling of being alive” speaks to the core of our individual subjectivity. It is an undirected bodily self-awareness, constituting the background of all intentional feeling, perceiving, and acting (Fuchs, 2013). This feeling can be heightened, intensified, or diminished in different experiential states along a spectrum of basic polarity of ill- and well-being, and able to be captured by the word *vitality*. In feelings of vitality the body functions as a medium of experiencing the world, with its overall state pervading our experiential field as a whole, and thus may be regarded as a primary manifestation of embodiment of subjectivity, and thus of our sense of self.

Zahavi (2017) speaks in a similar way about a basic self-affection, which may be taken to ground the first-person givenness of every situation. Any perception or action directed toward an object implies a tacit self-awareness without requiring introspection. It is given immediately as mine:

“This first-personal experiential givenness is manifest in the very having of the experience. It is a givenness that obtains even when we are not explicitly aware of it. A conscious mental state is not merely conscious of something, its object; it is simultaneously self-disclosing or self-revealing.” (Zahavi, 2017)

In affective disorders, such as depression and mania, a general diminishment of vitality can be found (Schneider, 1959). In such states, the exchange between body and environment is impaired, drive and impulses exhausted, resulting in feelings of distance and alienation. Since a person’s basic self-awareness is influenced by a dimin-

ished feeling of being alive, he can experience affective depersonalization, potentially culminating in the nihilistic delusion of the Cotard’s syndrome (Enoch & Trethowan, 1991), leading to delusional depersonalization.

These basal feeling correspond to the ‘deep body’, or “body-as-subject”, which as a “natural subject” is at the roots of all higher reflective acts of consciousness. This most basic bodily self-affection or feeling of being alive is termed the “protoself” (Fuchs, 2018), inspired by Damasio’s notion of the “elementary self” (Damasio, 2010).

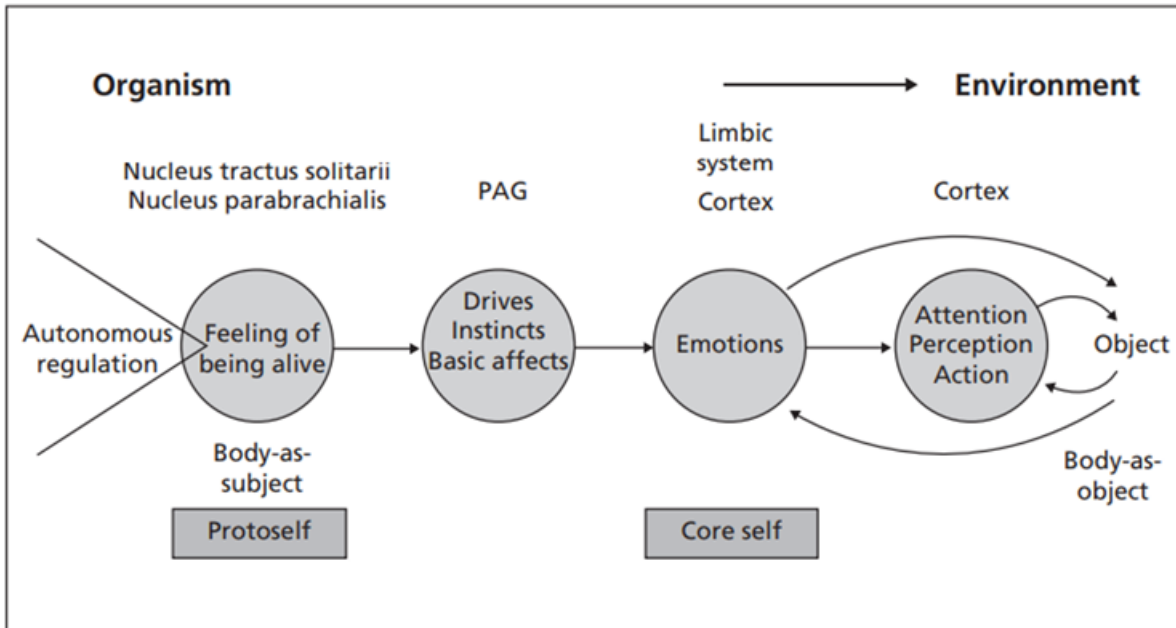


Figure 2.2: Basal and higher levels of consciousness (Fuchs, 2018).

### 2.3.2 The protoself as the foundation of the minimal self

The protoself is subsequently enriched by basic affects, drives, and valences, stemming from the dependence of the organism on its environment. (Fuchs, 2018) In this way, even the most basic organisms need to be able to distinguish between ‘self’ and ‘not-self’ and maintain these boundaries through interaction with the environment. Higher level integrative processes then direct these basic affective energies toward the environment and objects within it, “. . . thus enabling the emergence of the core self as a pre-reflective being-(and acting)-toward-the-world”. (Fuchs, 2018). With the concept of the core self, we are getting into a somewhat more familiar territory as far as terminology around the sense of self goes. On Damasio’s view, the core self is about action, or more specifically, about a relationship between organism and an object. (Damasio, 2010). The concept of the “core self” can be found through terminology in other authors, most notably as “Ipseity” by Sartre and Richmond (1943/2022), “ecological self” by Neisser (1988) and “Minimal self”, commonly used by Gallagher and Zahavi (2020). In the present work we will employ the terminology of the minimal self.

### 2.3.3 The Minimal self

The Minimal self is a form of embodied awareness stemming from one’s physical presence in the world, which is momentary, non-linguistic, and pre-reflective (Lindström et al., 2022). It is an intrinsic feature of primary experience, which is non-observational and non-objectifying. This means that the awareness in question is not based on reflectively or introspectively observing our attention to our own experience, and thus does not turn the experience into an observed object. This awareness is rather built into our experience as an essential part of it.

The Minimal self contains several sub-components, with each contributing to a perceived separateness of ourselves from the rest of the world (Lindström et al., 2022). There is no widespread agreement on exactly what should be classified as a sub-component of the minimal self. For example, Gallagher in his earlier writings proposed the sense of agency and sense of ownership (of experience) (Gallagher, 2000), Milliere included spatial self-location and bodily awareness (Millière et al., 2018), or Lindhal embodiment and a sense of boundaries (Lindahl & Britton, 2019).

Lindström et al. (2022) provide a good overview of the emerging agreement on the aspects of the minimal self, as well as the narrative self, which will be explored a little later. The aspects of the minimal self are: Agency, body ownership, bodily awareness, spatial self-location, and perspectival ownership of experience. Additionally, there is also the sense of separateness (self and non-self), which is common to all aspects of the self, including the reflective narrative self.

We will now give a summary of each of the five main aspects of the minimal self:

#### **Sense of agency**

The sense of agency is a sense of being in control, of causing or initiating an action (Gallagher & Zahavi, 2020). It gives the impression of the self as an actor in the world, thus, in a pre-reflective way, being someone. It distinguishes between actions caused by oneself and not, and in this way defines the self (Lindström et al., 2022). Agency enters intentional action in two ways: First through experiential sense of agency at the pre-reflective level, i.e., “I have the sense that I am moving, even if I am not aware of the precise details”. Second, through reflective attribution of agency, that I can make if asked about my action, i.e., “Yes, it was me that was waving at you from the bus”. This retrospective reflective capacity is only possible via the existential dimension and is attributed to the narrative self. We will return to agency later.

#### **Bodily awareness**

Bodily sensation refers to soma sensation – such as proprioception and touch. These senses set our body apart from other matter in the universe, from which

we do not experience such input (Lindström et al., 2022). There are reports of bodily awareness being lost completely in cases of deep meditation, sensory deprivation, or certain drug states (Dor-Ziderman et al., 2013). However, even while loose awareness of the body, other aspects, such as agency or spatial position can remain intact(Lindström et al., 2022).

### **Body ownership**

Body ownership refers to the pre-reflective sense that the body we inhabit is indeed ‘ours’ (Lindström et al., 2022). This aspect of the minimal self is contested by, for example, Bermudez, who denies that ownership has a distinct qualitative feel, arguing that only the conceptual judgment of ownership exists, which, being a reflective capacity, is not part of the minimal self (Bermúdez, 2011).

### **Spatial self-location**

The sense that one’s being has a spatial self-location somewhere in space, generally one’s own body, which is set apart from all other locations, adding to the sense of separateness from the world. There also exist reports of experiences void of such spatiality (Dor-Ziderman et al., 2013). Interviews with expert meditators suggest that a person is able to sense his body in a ‘spread out’ way outside the bounds of one’s skin. However, bodily awareness can remain intact, indicating that these two aspects of the minima self can come apart

### **Ownership of experience**

Ownership of experience refers to the sense that my experiences are in-fact mine (Lindström et al., 2022). Albahari additionally distinguishes between personal and perspectival ownership of experience (Albahari, 2011). Perspectival refers to the sense that experiences appear to *someone*, in a subjective sense. The *someone* does not have to have any other properties, other than being the recipient of the experience. For example, in the condition of thought-insertion, the ownership of thoughts is not experienced as ‘mine’, but these experiences are still present ‘to me’ in a perspectival sense of ownership. Personal ownership of experience refers to identifying with thought and emotions we experience, and therefore arguably belongs with the narrative self.

## **2.3.4 The narrative self – the reflective self**

In contrast to the pre-reflective nature of the minimal self, narrative self is related to the reflective capacities that humans possess. By weaving together episodic memory, future planning and self-evaluation into a coherent narrative and a sense of identity, the narrative self is formed (Dor-Ziderman et al., 2013). The narrative self is an

evolving phenomenon, which emphasizes the temporal dimension of selfhood, starting its development in early childhood and continuing for the rest of our lives (Gallagher & Zahavi, 2020). The social dimension of selfhood also becomes apparent in the narrative self through the narratives we encounter as we live in the world. Selfhood becomes, to a certain extent, part of the public domain, being guided and shaped by familial and cultural models of what a person should and shouldn't be. The life story of an individual becomes interwoven with stories of others and embedded in a larger historical and communal 'meaning structure' (Gallagher & Zahavi, 2020).

According to Dennet, due to the fact that we are hardwired to become language users, and once we are caught up in the web of stories and socio-cultural narratives, we cannot help but "inventing" ourselves. He views the self as a center of "narrative gravity" (Lycan & Dennett, 1993).

Lindström et al. (2022), same as for the minimal self, again offer explanation for aspects of the narrative self, highlights three: Personal identity, continuity through time, and metacognition. An explanation of these aspects is as follows: (Lindström et al., 2022)

### **Personal identity**

Personal identity includes autobiographical memory of one's own personal history, as well as awareness of social roles within one's sociocultural community (Lindström et al., 2022).

### **Continuity through time**

Due to the fact that personal identify, although changing, generally remains continuous through time, one identifies with previous or future versions of oneself (Lindström et al., 2022).

### **Metacognition**

Metacognition is defined as thinking about thinking, or cognition about cognition, and consists of two components: metacognitive knowledge and metacognitive experiences (Flavell, 1979). Metacognitive knowledge is combination of believes about oneself and one's cognitive processes, tasks and strategies. Metacognitive experiences are conscious experiences providing internal feedback about, for example, current progress in a task, future expectations, or degree of understanding. Metacognitive experiences activate cognitive and metacognitive strategies, including monitoring of progress, planning of effort, predicting relevant factors, and evaluating of current performance or future changes. In the context of phenomenology, metacognition is highly relevant, as it is through the ability to reflect on our current experience that we can influence our cognition and subsequently experience itself (Lindström et al., 2022).

### 2.3.5 Sense of separateness

Sense of separateness of ourselves and the world is, according to Lindström et al. (2022), central to all the above mentioned aspects of the self. This sense of being discernable from the rest of the world stems both from the minimal and narrative aspects of the self.

## 2.4 Anxiety – A phenomenological exploration

This section first gives a brief introduction to anxiety as the phenomenon is commonly understood in popular literature. Next, phenomenology of anxiety will be explored in depth, based on recent work done in the field.

Anxiety is an emotion characterized by feelings of tension, worried thoughts, unease, and physical changes such as increased blood pressure as in “Anxiety”, 2022. Occasional experiences of anxiety are a normal part of everyday life. It is perfectly normal to worry about things such as one’s health, financial situation, or the well-being of those close to us (“Anxiety Disorders”, 2023).

However, when the symptoms of anxiety become more persistent or intense and start interfering with daily activities during prolonged periods of time, anxiety can turn into a mental condition. It can manifest in various forms, such as generalized anxiety disorder, panic disorder, social anxiety disorder, specific phobias, or post-traumatic stress disorder (“Anxiety Disorders”, 2023).

The exact causes of anxiety disorders are not entirely understood, but research suggests a combination of genetic, environmental, and neurological factors as contributing to their development. Genetic studies have shown that individuals with a family history of anxiety disorders are more likely to develop the condition themselves. Environmental factors, such as traumatic experiences, chronic stress, or a history of abuse, can also contribute to the onset of anxiety disorders (Bandelow et al., 2017). Additionally, certain brain structures and chemical imbalances in neurotransmitters, such as serotonin and gamma-aminobutyric acid, have been implicated in anxiety disorders (Craske et al., 2017).

Treatment options for anxiety disorders typically include a combination of psychotherapy and medication. Cognitive-behavioural therapy (CBT) is a commonly used psychotherapeutic approach that focuses on identifying and modifying negative thought patterns and behaviours associated with anxiety (“What is Cognitive Behavioral Therapy?”, 2017). Medications such as selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), and benzodiazepines can also be prescribed to alleviate symptoms of anxiety (Bandelow et al., 2017).



### 2.4.1 Phenomenology of anxiety

The present investigation of anxiety builds primarily on the works of Stefano Micali and Dylan Trigg, and their books “Phenomenology of Anxiety” (Micali, 2022), and “Topophobia -a phenomenology of anxiety” (Trigg, 2016), respectively.

Anxiety as an affective state is extremely difficult to conceptualize, with numerous philosophers and clinicians conducting work on the subject in past and in the present (Micali, 2022). Additionally, there is significant overlap between a number of affective states proximal to anxiety, such as fear or terror. This section will investigate a number of prominent authors’ position on anxiety, looking for defining characteristics from a phenomenological perspective.

For Heidegger, anxiety is the fundamental mood that opens the possible dimension of authenticity available to human beings and is linked to the experience of *nothing* and *being toward death* (Heidegger, 1962). He claimed that the experience of nothing is essentially related to anxiety, which generates a radical transformation of our lived experience of the world. Anxiety does not appear as an object nor as being, rather in it the nothing is encountered at one with beings as a whole. In the light of the nothing of anxiety the original openness of beings as such arises: that they are in fact beings, and not nothing. Heidegger saw anxiety as fulfilling the most positive function in a metaphysical sense: It brings Dasein (the experience of being that is peculiar to human beings) before beings as such for the first time (Krell, 1998).

However, according to Micali (2022), it is not clear why the essence of the experience of nothingness in anxiety should be reduced only to this function. He claims that Heidegger’s description of anxiety is questionable from a phenomenological perspective in the way in which anxiety is experienced, as he is mostly interested in its relevance for his metaphysical investigation. Micali submits that such a positive teleology as Heidegger proposes is not present in anxiety.

Sartre claimed that anxiety reveals our ungrounded and absolute freedom, and primarily concerns our relation to ourselves in a threatening situation. Choosing one’s actions primarily shows itself as a negation: “I am not who I was before”. In this negation, freedom shines through as anxiety. Anxiety presupposes imagination of future situations and has a self-reflective nature. Whereas fear regards the relation to threats coming from the world, anxiety is the reflective apprehension of the self. In this sense, we are afraid of a specific danger, and we are anxious about not knowing how we will relate to what we are afraid of. In fear, one does not find the principle of action in oneself, whereas in anxiety the self-relation becomes prominent and one’s absolute freedom is at stake. Anxiety is precisely one’s consciousness of being one’s own future, in the mode of not-being (Sartre & Richmond, 1943/2022).

According to Micali (2022), Sartre is ambiguous about the connection between

the future condition and the present one, by determining this connection in terms of sovereignty, as if the main issue in anxiety was to preserve one's own absolute freedom, meaning not being determined by anyone else, not even by one's own future self. Micali claims that this misunderstands the phenomena, as the crucial role of obscure phantasies in anxiety makes it impossible to establish a solid relation between the two "scenarios" in which two egos operate. In anxiety, there is no such experience of a future self that threatens the present self's decisions. The distressing future situation *is* a fundamental feature of anxiety, but it appears differently, in terms quasi-intentionality, as will see later (Micali, 2022).

For Goldstein and Blumenberg, anxiety is a mismatch between organism and environment. It is a shock stemming from the impossibility of reacting to external challenges in a coherent way. Anxiety arises when adequate response to environment becomes impossible. It is an organism's reaction of catastrophic behavior versus ordered behavior (Goldstein et al., 2014). Blumenberg's research showed that only human beings are capable of transforming anxiety into fear by means of the combination of complex social interactions and symbolic activities, such as language. Prior to this, anxiety is the intentionality of consciousness without object. The ability to name things plays a major role in avoiding the effects of anxiety, as it allows us to "shape" and define it. In this way all fears arise from anxiety – they are "urbanizations" of anxiety (Blumenberg, 1988). However, according to Micali (2022), there is a presupposition in Blumenberg's research that is problematic, specifically that anxiety primarily signifies a suspension of symbolic activities. He claims rather that anxiety signifies a re-orientation of our thinking, of our symbolic activities, and of our imagination, with full suspension of symbolic activities occurring only during cases of extreme pathology (Micali, 2022).

Freud's investigation of anxiety was set in his work on trauma, where he introduced it along with fear, and fright (a term very similar to terror). He claimed that fear requires a definite object of which to be afraid, and fright is the result of a person running into danger in a surprised way without being prepared for it. On the other hand, anxiety describes a particular state of expecting danger or preparing for it, even if one does not know what exactly the danger will be. After a traumatic situation, where one experienced helplessness, one may encounter a danger-situation, which contains an element of expectation for the repetition of the traumatic situation. It is in this danger-situation that the signal of anxiety is given. Anxiety is therefore on one hand an expectation of trauma, and on the other hand a repetition of it in a moderated way. In this way, anxiety to some extent protects its subject. Trauma generates anxiety, and the ego "uses" a part of this anxiety in the form of phantasy as a signal to defend itself from re-experiencing the traumatic situation (Freud et al., 1966).

Micali (2022) claims that although phantasy plays an important role in Freud's

theory, he does not elaborate on this function enough. The “imaginative anticipation” of danger in anxiety needs to be explored further. Additionally, he claims it is inaccurate to say that anxiety has no object, as there is a certain intentionality present in anxiety (Freud et al., 1966).

### **2.4.2 About the actuality of past trauma**

In anxiety, a temporal and spatial interval remains between the subject and the destabilizing event, and this interval is filled with imagination. Unlike during the experience of terror, in anxiety one always has time to prepare oneself for a threatening situation, typically by imagination that joins the gap between oneself and the future event. In terror, one cannot relate to what is happening to oneself, as it is an immediate response to a situation that exceeds one’s capacity for receptivity and endurance. The temporal structure of anxiety always starts from the assumption about the order of relevance: the future situation is considered to be more significant and pressing than the present one (Micali, 2022).

## **2.5 Traits of anxiety from a phenomenological perspective**

Micali claims there are five essential traits of anxiety from a phenomenological perspective, which need to be investigated: (Micali, 2022)

- Quasi-intentional imaginative anticipation
- Negative inspiration
- Recurrence of bodily manifestation
- “Interchange of speech” with an alien power
- Negative teleology

But first, there is a need to investigate the workings of imagination more broadly in a phenomenological context, due to their principal role in the experience of anxiety.

### **2.5.1 Phenomenology of phantasy**

Initially in Husserl’s investigation of imagination, the relation between phantasy and image-consciousness was at the center. Image-consciousness is rooted in the perception of a present object, that refers to another object. It is a mode of consciousness

through which we are able to experience and represent objects that are not currently present in our immediate perceptual field. On the other hand, pure phantasy is not based on such a perception, and Husserl compared it to remembering, which he considered analogous to the act of imagining (Micali, 2022). Whereas remembering is an intuitive consciousness of a past perception, imagination is consciousness of a fictional perception. Objects intended in acts such as perception and memory as experienced as real events occurring during different times of life. On the other hand, in phantasy we relate to perception that is fictional. Therefore, in his later work, Husserl treated acts of phantasy as a quasi-perception. These acts are experienced as “a simulation of a possible perception” (Jansen, 2016). Micali agrees with Husserl’s proposition, adding that phantasies should be characterized as a reproductive modification of perceptual consciousness, a modification of a *possible* perception in the as-if mode. Therefore, imagination is an act that constitutes a distinctive awareness of objects without referring to the perceptual horizon (Micali, 2022).

Husserl’s investigation of phantasy leads to further differentiation. He made a distinction between pure and perceptive phantasy, and between clear and unclear phantasy. Perceptive phantasies are related to fictional experience which is, however, attached in actual perception. This happens, for example, in theatrical performances, which have a character of “transition” from actual perception to phantasy (Husserl, 2006). The distinction between clear and unclear phantasy has important implications for the investigation of anxiety, and warrants a closer examination

### 2.5.2 Clear and unclear phantasies

In clear phantasy, vivid fantasized objects appear in the flow of intentional consciousness, whereas in the cases of unclear phantasy, objects appear as empty phantoms, without details and being barely filled out (Husserl, 2006). According to Husserl, most phantasies are unclear phantasies, and they do not rely on image consciousness or presuppose perception in any way. In them, we experience something between seeing and not seeing, without a clear intuition of what we are experiencing. It is as if we constantly fail to “center” on the object of phantasy, constantly missing it. For this reason, Micali suggest using the word “appearances” rather than “objects” (Micali, 2022).

Regarding the temporalization of appearances in unclear phantasy, Husserl highlights three characteristics: (Husserl, 2006)

1. Their protean character: they constantly change without ever constituting a coherent unity. The appearing “object” (“appearance” in Micali’s terminology) fluctuates in a protean fashion.
2. Their abrupt appearing and disappearing: In this respect they are fundamentally

different from appearances stemming from perception, not subject to any stable pattern

3. Their intermittence: The appearances of unclear phantasy tend to return

Importantly, Micali opposes Husserl in his presupposition that phantasy is submitted to our will. He claims that Husserl treats phantasy as if they were under our control and we could reproduce them at will. It becomes clear that phantasy is indeed not submitted to our will when considering, for example, a guilty person contemplating an irreversibility of his actions, or a child imagining monsters in the dark (Micali, 2022).

According to Micali, the appearances of unclear phantasy are the dimension where our desires, anxieties and fears manifest themselves, but also always escape our grasp.

“The appearances of phantasy incarnate our most intimate dimension, one that escapes both our gras and our control. In phantasy something deeper appears and at the same time vanishes; something essential to our identity, something that we are, but which we cannot grasp” (Micali, 2022, p. 149)

The relationship between phantasy and desire is complex, yet has three key characteristics: (Micali, 2022)

1. Phantasies do not simply contain imaginary objects understood as the targets of our drives and desires. Instead, they are complex “scripts” of organized scenes
2. The subject is always present in these scenes, usually taking on different appearances and roles
3. If we assume that desire is always woven into phantasies, then they also become the place for defence mechanism (e.g. projection, negation)

### 2.5.3 Experiential modalities of phantasy

From the term “phantasies”, one might assume that the experiences involved always necessarily contain a visual element. However, this assumption is incorrect, as was stated by both Husserl and Merleau-Ponty. Merleau-Ponty (1962/2018) emphasized that imagination involves more than just visual imagery, and may contain a broader range of modalities, including bodily sensations and non-visual sensory impressions, such as inner dialogue or self-talk. According to Husserl (2006), as was stated above, unclear phantasies do not rely on image consciousness or presuppose perception in any way, and imagination as such involves more than just visual images.

## 2.6 Traits of anxiety

### 2.6.1 Imaginative anticipation: The quasi-intentionality of anxiety

Micali concludes on Husserl by stating that his analysis of unclear phantasies can contribute to the present investigation when we consider unclear phantasies as tentative expressions of our challenging affective life. In anxiety, there is a tension between two aspects of the phenomena: (Micali, 2022)

1. Everything appears to be confused and indeterminate, where the limit between the anticipated perceptual experience of the impending future and the phantasies projected onto it becomes blurred. Anxiety entails a “coherent deformation” of symbolic activities, as well as affective responses.
2. The anticipation of the unspecified negative event is experienced with undisputed certainty. We are already preoccupied *now* with what is going to happen

In anxiety, one attempts to anticipate the future situation in order to escape the possible dangers, however this anticipation is guided by the expectation that anything and everything negative may happen. What we are dealing with is a hybrid form of visualization that entails an interplay between anticipation, clear phantasy, and unclear phantasy. Anxiety manifesting primarily in the appearance of unclear phantasies, and for this reason Micali claims, that it is correct to use the term “quasi-intentionality” for the appearances arising from anxiety (Micali, 2022).

### 2.6.2 The negative inspiration of anxiety

In anxiety, we are relating ourselves to what is “beyond us”, to what we cannot fully embrace or understand. In a deep stare of anxiety, we do not fully understand what is happening to us, but at the same time we are able to relate in an almost inspired way to what is beyond comprehension (Micali, 2022). Freud stated that a patient in a state of anxiety does not remember anything of what he has forgotten or repressed, but he *acts* it out, without fully knowing what he is repeating (Freud et al., 1966). A similar notion is expressed by Derrida, who claimed that the repressed does not concern only what remains radically alien from one’s own past, but also the phantoms of the worse yet to come (Micali, 2022).

### **2.6.3 The recurrence of anxiety's bodily manifestations**

Most characteristic bodily expressions of anxiety include a feeling of paralysis, cold sweat, difficulty breathing, a general sense of constriction, tightness in the chest, tremors, and heart palpitations. What is important is that if these manifestations reach a certain intensity, they themselves contribute to the generation of additional anxiety (Micali, 2022).

### **2.6.4 Our “exchange of speech” with anxiety as an alien power**

Micali proposes to use a paradoxical category of “responsive initiative” in order to understand our relation to anxiety. Anxiety's pathos (an affect as the beginning of our experience) manifest itself in an originary way in the effect that it produces in a bodily self. Micali calls this effect a response, which is not to be ascribed to a fully self-sufficient subject, but to a respondent (who is more or less capable to say ‘I’ in response and to act as an I, but who initially appears in the weak form of a pre-I). In this way, anxiety's affect is transformed into something addressed by our directed response. (Micali, 2022) This notion is expressed nicely by Kierkegaard in his analysis of guilt:

“... he who becomes guilty through anxiety is indeed innocent, for it was anxiety as an alien power that grabbed hold of him. And yet he is guilty, for he sank in anxiety, which he nevertheless loved as he feared it. There is nothing in the world more ambiguous” (“The Concept of Anxiety”, 1981)

We become guilty of anxiety by listening to it. Our responsibility manifests as a weakness through consenting to anxiety's “power of seduction”: we say yes to it by not replying adequately. Guilt, therefore, means the passivity of being caught up and hypnotized by anxiety (Micali, 2022).

### **2.6.5 Negative teleology of anxiety**

The issue of the teleology of anxiety is where Micali differs from numerous previous authors. Sartre, Freud, and Heidegger, each in their own way, claim that anxiety hides a positive teleology, a proposition with which Micali disagrees. Anxiety as such does not paralyze us, but also urges us to perform actions that go in a direction diametrically opposite to our will, preparing our future paralysis in the process (Micali, 2022). Derrida expresses a similar view by what he calls the “autoimmune logic” of anxiety: Driven by the will to avoid the worst, we conduct actions that we believe are capable of safeguarding from the future outbreak of the negative, while in the process undermining our current defences so much, as to support future helplessness (Habermas et al., 2003). Anxiety is supported by our accomplice complacency; it

signifies a preoccupation with a change that is out of our control, and therefore leads to the possibility of undergoing a radical transformation through which we will not be able to recognize ourselves in this future (Micali, 2022).

## 2.7 Space-based anxiety

In his recent book “Topophobia – A phenomenology of anxiety”, Trigg (2016) explores the relation between space and the experience of anxiety. Topophobia refers to a broad set of spatial phobias, such as agoraphobia (fear of open or crowded places), claustrophobia, or gephyrophobia (fear of bridges). In Trigg’s work, topophobia refers to the way in which the boundary line demarcating one place from another loses its porousness and becomes fixed, and as such has to do with disordering of spatiality (and thus embodiment). The experience he outlines can be characterized as attached to a specific form of bodily existence, characterized by the felt transformation of the body from a locus of meaning, ownership and unity to an impersonal site of alienation and anonymity. Trigg claims that this transformation is both expressive of anxiety, and the object of anxiety. He defines spatial phobias by a general principle of a boundary disorder, framed by the transformation of one’s bodily experience of the world, including both subjective and intersubjective dimensions, such that the perception of the world becomes almost anonymous and formless. This anonymous and formless presence is claimed to be anxiety. Anxiety does not introduce a new facet to the body, but instead unveils that a dimension that is operational, even if remaining dormant, in both anxious and non-anxious existence. What is transformed is the relation we have with our bodies, such that the concealed dimension of the body in its anonymity becomes visible. Trigg take this experience of a transformation not only as an expression of anxiety, but also as its source. In the moment of anxiety, a human subject remains present, gazing upon his own body, and it is thanks to this ability to regard the body simultaneously as both one’s own and not one’s own that anxiety emerges in the interstitial space between personalized experience and impersonal materiality. The temporal structure of the discontinuous body serves to accent the futural orientation of anxiety. Anxiety appears for the subject as a possible threat on the impending horizon, and as such is framed as an anticipatory mode of being always directed toward an unwritten future (Trigg, 2016).



### 3

## Results (1) – exploration of literature on sense of self and anxiety

This section summarizes the main findings of the background theoretical exploration of the sense of self and anxiety, and aims to propose a couple of novel findings. Then, several aspects of these phenomena are highlighted to be explored in the follow-up qualitative study.

Claim: The existential dimension of experience exclusive to humans can be argued as the reason for the emergence of the narrative side of the self, as well as the experience of anxiety as such.

The life-mind continuity thesis provides (Froese & Paolo, 2009) a thorough explanation for living organisms existing and interacting with their environment in order to survive. However, there was a need to account for the unique conditions of human beings, and how they fit into the picture. The factor that sets human apart, phenomenologically speaking, is the fact that we can take our experience as an object of awareness through our reflective abilities. This ability allows us to take a stance (existentially speaking) on situations that we find ourselves in, and in doing so to become self-aware (de Haan, 2020). As we have seen, the narrative self requires reflective awareness to for self-evaluation and future planning, in order to weave together a narrative around our sense of identity (Dor-Ziderman et al., 2013). Given that the existential dimension of experience enables a capacity for stance-taking, and thus gives human reflective abilities, we can claim that it is necessary for the emergence of the narrative self.

In this way, we gain an ability to inhabit our emotional impulses (Plessner, 1970), and fill the ‘gap’ that is created between perception and action in novel ways. New alternatives of action or potential future situations can be simulated through imagination in an “as-if” mode. This distancing also allows to escape the merely subjective life-world of the animal into an intersubjective socio-cultural world of human beings

(de Haan, 2020). This imagination of potential future situation is, according to the background research, one of the primary characteristics of anxiety, along with its manifestation through bodily symptoms (Micali, 2022). In anxiety we anticipate a future threatening situation through imagination, which, if we follow the reasoning of the existential dimension and the narrative self, would not be possible without the reflective abilities of humans.

Through our investigation of anxiety, we can see that for Heidegger and Sartre, despite some of their claims being refuted, anxiety also plays a unique role in humans. For Heidegger, anxiety brings Dasein, the experience of being before beings as such for the first time, an experience peculiar to humans (Heidegger, 1962). For Sartre, anxiety reveals our ungrounded and absolute freedom, and is one's consciousness of being one's own future, in the mode of not-being (Sartre & Richmond, 1943/2022).

Claim: The primary dimensions of the sense of self is our lived body.

We saw how our physical existence is inseparable from our lived experience, through the view of body as a subject-object. This 'deep-body' or 'body-as-subject', termed the 'protoself' is always at the root of experience (Fuchs, 2018). The protoself is subsequently enriched by basic drives and affects, which is in line with the embodied and enactive approaches in cognitive science, which claim that reality is brought forth by a living being's body and its sensorimotor interaction with the environment (Varela, 1993). Given that a living organism survives fundamentally on the basis of exchange with its environment, it needs on hand to be able to distinguish through sense-making favorable circumstances, as well as to distinguish between the boundaries of 'self' and 'not-self' (Fuchs, 2018). All feeling, perception, imagination, thought, and action are completed on the basis of a *bodily background* or in other words: these activities always have a bodily subject (Fuchs, 2013). Therefore, alternations of our bodily experience can be claimed to be alterations of our sense of self, both on the pre-reflective and reflective levels of awareness.

The claims made above are a combination of theoretical and phenomenological (as pertaining to lived experience) characteristics of the sense of self and anxiety. Therefore, there is a line that needs to be threaded when investigating the occurrence of the phenomena in question. Consequently, the qualitative study as a part of the present work aims to investigate the occurrence within experience the following characteristics of the sense of self and anxiety:

1. Aspects of the narrative self in the experience of anxiety
2. Bodily experience in experience of anxiety

The background research additionally highlighted four characteristics of anxiety that are deemed worth exploring. The occurrence of unclear phantasies (Micali, 2022),

and the experience of space as related to anxiety (Trigg, 2016) are both relevant to the sense of self. The “spiral” of anxiety and the lack of positive teleology (Micali, 2022) do not seem as directly related to the sense of self, but the qualitative study will nonetheless investigate if they are present within experience, as an additional research interest. These four additional characteristics are expanded upon as follows:

### **The unclear phantasies in anxiety**

The claim arising from background research regards anxiety as manifesting in a major way through quasi-intentional unclear phantasies, which are to be considered as expressions of our challenging affective life. The phantasies are means for the anticipation of unspecified negative events, which are experienced as to indisputably happen. They are unclear, because their content is confused and indeterminate, as if we constantly tried to focus on their object, and yet constantly fail (Micali, 2022). Importantly, phantasies can be experienced through as range of modalities, not exclusive to visual experiences (Merleau-Ponty, 1962/2018).

Additionally, the case was made for the experience of anxiety itself arising from the narrative side of the self. The phantasies experienced by the participants in the present study will therefore be closely explored.

### **Spatial anxiety as invading our sense of separateness from the world**

Trigg’s work on spatial phobias explored the relation between lived space and the experience of anxiety (Trigg, 2016). His central claim was that in anxiety related to spatiality, one experiences as felt transformation of the body from a locus of ownership and unity to an impersonal site of alienation and anxiety, and as such threatening the boundary between ourselves and the outside world. This transformation is seen as both expressive of anxiety and the object of anxiety. The sense of separateness from the world was highlighted as an important, if not the most important aspect of the sense of self (Lindström et al., 2022). Therefore, if we encounter such an experience of anxiety in the present study, these claims will be investigated.

### **The negative teleology**

Micali claims that there is no positive teleology to be found in anxiety (Micali, 2022). In our study we will therefore try to examine, if anxiety could be claimed to play a positive role with any participants.

### **The “spiral of anxiety”**

The claim here is, essentially, that if anxiety is not managed appropriately, it can subsequently enhance itself through its symptoms. This includes both bodily

manifestations and the patterns of unclear phantasy (Micali, 2022). This claim will also be investigated in the study.

### 3.1 Returning to the original question

To summarize briefly the theoretical findings related to our main research question:

How does the sense of self change in the experience of anxiety?

The capacity for the experience of anxiety is only possible with the emergence of the reflective sense of self – the narrative self. Anxiety manifests in bodily symptoms, as well as through unclear phantasies anticipating future threats in an indeterminate way, a future which nonetheless seems unavoidable. Our personal and social identity is formed through the narratives we tell ourselves through the narrative side of the self. This identity is threatened by the appearances of unclear phantasies in anxiety, therefore our sense of self is affected. The sense of self is closely tied to our bodily existence, and therefore is affected in anxiety. Additionally, anxiety related to experience of space can in certain cases threaten our experience of separateness from the world, this separateness being a vital aspect of the sense of self.

# 4

## Methodology in Phenomenology

### 4.1 Phenomenological interviews

The primary method of collecting qualitative data in phenomenology is through the phenomenological interview, which aims to capture as closely as possible the lived experience of a participant. Naturally, this approach faces significant difficulties due to the first-person character of the phenomena we are after. There is a communication barrier between subjective experience and accurate expression of such experience for outside comprehension. Therefore, the approach in the phenomenological tradition has, since its conception, stood based on the practice of so called “bracketing” (commonly known also as the phenomenological reduction, or epoché) (Husserl, 1990). This approach aims to suspend our everyday preconceptions, judgments, and theories about the world, to approach the “raw” experience. Arguably the most well know method employing this tradition is micro-phenomenology, developed by Vermerch, and altered by Petitmengin (2006), which is designed to explore each experience in a fine-grained detail.

Another well know method is descriptive experience sampling (DES), developed by Hurlburt, which employs a beeping device carried by participants during their everyday activities. The beeper gives a sound que at random intervals, prompting the participants to write down their current experience in as much detail as possible (Hurlburt & Akhter, 2006). Alternatively, researchers at the University of Ljubljana have been developing an approach that uses sitting meditation sessions to approach epoché via an already-established tradition (Kordeš & Demšar, 2021), arguing that in meditation we naturally tend to bracket our experience. I, as the author, got the chance to participated on such research during my Erasmus stay in Ljubljana, meditating and sampling experience in their Laboratory for Empirical Phenomenology.

There have been authors that argue against the hard-line orthodoxy of Husserl’s original approach (Stilwell & Harman, 2021), making the case for enactivism-informed

interviews. These have more in common with interpretive phenomenology that emphasizes the importance of context and the stance that we cannot simply study a phenomenon that is removed from background information (Conroy, 2003).

Stilwell and Harman suggest that a combination of observation and semi-structured interviews provides mutually enlightening data, advocating for observation of real-time interactions between participant(s) and their environment, including others (researchers or other participants), who may scaffold the experience (Stilwell & Harman, 2021). On their enactive view of data collection, the unfolding of experience in a qualitative interview is not a reifying recapture of “objective,” pre-reflective, past experience. Meanings are not always apparent to participants and novel insight can unfold through interview questions, participant reflection, and the elicitation of narratives. The claim that experience is not to be objectified, but understood, as it is dynamic and can change with reflection and exploration is a stance held by multiple authors (Kordeš & Demšar, 2021; Stilwell & Harman, 2021)

This departure from the hard-line phenomenological tradition allows researchers to get inspired by existing approaches and combined them to design a method that best suits the collection of the type of data they are after, without the need to train the participants in the practice of phenomenological reduction.

The interviews employed in the present study are designed in a semi-structured way to explore participant’s experiences of anxiety. Sampling of experience as it is unfolding is not used, therefore out of the interview methods mentioned above, their design is closest to microphenomenology. The interview design is strongly inspired by (Stilwell & Harman, 2021), using a combination knowledge in a deductive way from the background research, and an existing phenomenological questionnaire called EAWE - Examining Anomalous World Experiences (Micali, 2022).

We continue with an introduction to the present qualitative study, followed by the employed methods, including elaboration on the design of the interview.

# 5

## Sense of self and anxiety – a qualitative study

The second part of the present thesis was to design and conduct a qualitative phenomenological exploration of the sense of self and anxiety. This study is framed as an inductive-deductive multiple case-study examination of the phenomena being explored. We started by exploring the background theory and frameworks, which resulted in a number of claims and propositions detailed in the first result section. This first set of result was then used in a deductive way to aid in the design of a semi-structured phenomenological interview (described in the next section), targeting aspects of the sense of self and experience of anxiety, in order to compare the results to the claims made about the phenomena. However, the intention was to keep the qualitative exploration fairly open-ended and explore the sense of self and experience of anxiety more broadly, not sticking strictly to a top-down approach. In this way, we left an open space for bottom-up inductive approach to potentially go beyond the scope of what was claimed in the first result section, or to explore unexpected experiences that might arise more in depth. The differentiation between results related to the results of the theoretical research, and additional results that were worthy of exploring, is made clear in the qualitative result section.

### 5.1 Methods for the present study

#### 5.1.1 Participant selection

Participants were asked about potential willingness to join the study through direct messages from the author. They were told that the commitment from their side would be participating on an interview with a semi-structured format, where they would be asked about their experience of anxiety. The interview was said to last approximately up to an hour and a half, with a potential follow-up second interview if required, and

if they agreed.

In total, twelve potential participants were reached out to, and ten accepted to participate on the interview. Out of the ten interviews that followed, two had to be discarded before the data processing stage. In the first case the participant had a really tough time understanding what was being asked of him in terms of describing the lived experience, and would very frequently move into talking about his own opinions and judgements on his own experience and anxiety as such. Later during the interview, it was obvious that he became disinterested in talking further, and we decided to stop. In the case of the second interview that was discarded, talking about experience of anxiety became early on very emotionally straining for the participant. It was obvious that the interview was causing her pain, and we agreed to stop soon after.

What remained was eight interviews that were completed successfully and provided data that could be processed. Out of these eight participants, in three cases a second interview was conducted after a mutual agreement, in order to get a comprehensive account of lived experience.

### **5.1.2 Design of the interview**

The interview consists in an initial introductory part, which remains the same for each interview. This introduction lasts until the initial question about experience of anxiety is asked, at which point the interview structure changes into a semi-structured format. In the following, these parts are explained respectively.

#### **The introductory part of the interview**

The introductory part of the interview, includes general information for the participant about what to expect, and aims to give some initial assurances in order to build rapport with the participant:

“We will be conducting a semi-structured interview, where I will be asking about your experience of anxiety. If you are at any point uncomfortable with talking about anything that comes up, that is perfectly ok, we can take a break or stop at any time. If you feel tired, or don’t feel like you want to continue for any reason, we can stop”

Once the participant acknowledges this, the introduction continues with asking for permission to make an audio recording of the interview:

“Do I have your permission to make an audio recording of this interview? This recording will not be made public, and your name will not be mentioned at any point in the study. The recording serves only as an additional resource for me to return to while processing the gathered data”

The recordings of the interviews are saved only in the password-protected computer of the author. They are not shared or made public in any way. Once the participant



agrees, the recording starts, and the introductory query is given, which always remains the same:

“Try to remember a situation which happened recently, or one that you feel you remember fairly well, in which you experienced anxiety. Don’t tell me about it yet but try to return to that situation in your mind.”

Once the participant gives a sign that they are ready, they are asked to provide a little more context in terms of where they were and what they were doing, in order to help them situate in the experience better:

“Could you first give me a little bit of context for this experience, in terms of where you were, or what you were doing”

Once the participant provides some context, the first question about anxiety is given:

“How did you experience anxiety in this situation?”

From this point onward, the interview becomes semi-structured, and it is the task of the interviewer to guide the participant toward areas of interest in the present qualitative study.

### **The semi-structured part of the interview**

Since our primary aim is to explore how anxiety affects the sense of self, the intention is to try to guide the participants into talking about certain phenomena of interest, without explicitly asking about their sense of self. The presupposition (and the hope) is that they can be, to some extent, deduced from report of lived experience given by the participant. There are six of what we can call categories of phenomena of interest that are inquired about, which are inspired by the background research in a deductive way. These are of course mutually intertwined, but nonetheless provide a certain structure to scaffold the interview:

- Bodily experience
- Thoughts and phantasies
- Experience of space
- Experience of other people
- Atmosphere

When conducting the interview, the categories of phenomena are used to check what phenomena already came up during the interview. If the participant does not venture into a particular area on their own, these categories are deemed appropriate to ask about more directly, but with an attempt to not be too suggestive. Apart from the background research, the last four categories listed above

are inspired by and integrated from the existing phenomenological questionnaire called EAWE – Examining Anomalous World Experiences (Sass et al., 2017) (experience of space is also influenced by Trigg’s (2016) work). This questionnaire was originally developed to study lived experience in schizophrenia, however it includes categories that can be implemented in different phenomenological qualitative studies (a claim which the authors themselves state). Appendix 1 contains a list of these categories taken from EAWE, including subcategories of specific manifestations of the phenomena, which were used during analysis to categorize the data that was gathered, when appropriate. The six categories and reasoning behind them is explained as follows (categories taken from EAWE are marked with an asterisk):

### **Bodily experience**

As was argued in the first result section, the experience of our lived body at the most fundamental level is what gives rise to the protoself. After its enriched by basic drives and affects, the body serves as a basis for our affective experience, perception, imagination and thought (Micali, 2022). As such bodily experiences are a vital part of the sense of self and are therefore explored. Additionally, anxiety very typically manifests through bodily symptoms (Micali, 2022).

### **Thoughts and phantasies**

The claim that was made about anxiety is that it manifests strongly in unclear phantasies, which arise through the narrative side of the self. According to Micali (2022), these phantasies are unclear in the sense that their content being confused and indeterminate, failing to focus on stable objects. Importantly, phantasies can be experienced through as range of modalities, not exclusive to visual experiences (Merleau-Ponty, 1962/2018). Therefore, the interviews aim to explore the experience of phantasies reported by participants.

### **Experience of space\***

We saw that Trigg’s claim about spatial phobias explained anxiety related to lived space manifesting as a felt transformation of the body into an impersonal site of alienation (Trigg, 2016). In this sense, anxiety threatens our sense of separateness from the world, which, as claimed by Lindström et al. (2022) is central to all other aspects of the self. The hope is that if we encounter anxiety as related to lived space in the experience of any participants, this claim can be verified.

### **Experience of other people\***

The intersubjective dimension of experience was highlighted in the section on embodied intersubjectivity. The perception of other people is unique, as they are not just object, but rather subject-objects, with implicit subjectivity of their own. We experience the feelings and intentions of others through their facial expressions, gestures, and behavior (Micali, 2022). It is known that anxiety commonly manifests as social anxiety with, e.g. feelings of inferiority, or a fear of failing (“Anxiety”, 2022). Given the uniqueness of the intersubjective dimension of life, we will explore the experience of anxiety that may arise with it.

### **Atmosphere\***

The term atmosphere refers to the external world and its overall quality, feel, or organization. Experience of atmosphere can be subtle, pervasive, or uncanny, with its features being depicted by EAWE as being “everywhere and nowhere” (Sass et al., 2017, p. 37) and difficult to isolate and describe (Sass et al., 2017).

### **Spiral of anxiety and negative teleology\***

Additionally, we will look for signs of anxiety enhancing itself through its symptoms, what was called the “spiral of anxiety” in the first result section, as well as for signs of teleology of anxiety, which is according to Micali always negative (Micali, 2022).

As was stated before, our primary aim in this qualitative study is to clarify the claims made about the sense of self and anxiety in the first result section. However, all reports of experience related to sense of self and anxiety will be included, in order to see if relevant experiences come up that fall outside of the range of the claims made from background research.

# 6

## Data analysis

The reports of experience were analysed with a combination of notes taken during the interview process, as well as by relistening to the recordings of the interviews. The principle of inductive bottom-up gathering of results was adhered to, resulting in bottom-up construction of categories based on the experiences that were reported. The terminology of descriptive experience sampling was used for certain types of thoughts, namely inner speech and visual experiences (Heavey & Hurlburt, 2008).

# 7

## Results (2)

The results are organized as follows: First, a report on experience relevant for our study is given sequentially. Then, a summary for each of the categories of phenomena of interest are provided

### 7.1 Reports of experience – a summary

#### **Participant No. 1 (male)**

The experience of anxiety was strongly linked with introspection, usually when he was going to sleep, and as he said, “when there aren’t many distractions around, so you start thinking”. He would have flashbacks to situations in the past, all of which (that he described), were linked to feeling guilty about the past. The guilty thoughts manifested through inner speech from a third person, speaking to himself: “There is nothing visual . . . I hear a voice, it is implied that it is “me to me” speaking” (p1). He would accuse himself about wasting opportunities, situations where he “messed up”, or decisions that he regrets. He described these thoughts as “a self-loop which feeds itself . . . when I start thinking about myself”

When probing into nature of the flashbacks, asking if there was a visual component to them, the term “phantasies” seemed to interest him. After some thinking he did say that sometimes there can be a form of phantasy during the flashback, but still in the sense of inner speech of “what if I did something else”, but nonetheless oriented only into the past. He reported no visual experiences during anxiety. When asked about the experience of anxiety as related to other people, he returned only the above-mentioned introspective guilt feelings, e.g. feeling guilty about accidentally hurting his sister when they were young.

Regarding bodily experience during anxiety, he had trouble giving an accurate

account. He described the experience as a form of pain, but not exactly physical pain, to which he could not give a bodily location.

When probed, he did not resonate with any space-related experience.

It was fairly difficult to get him to talk about how exactly these experiences unfolded, he would often shift into analyzing and trying to explain them away.

### **Participant No. 2 (male)**

The experience of anxiety was related to judgements about a present situation he would find himself in. Similar to participant No. 1, he reported instances of inner speech from himself to himself: “I’m doing everything wrong in life” / “I shouldn’t be doing this job” / “Why am I feeling so bad” (p2). He stated that he tries to “escape” the thoughts by distractions, but if he fails, they tend to self-intensify.

Regarding bodily experience during anxiety, he reported several, including tightness in the throat with varying intensity, shallowness of breath, and a kind of mental fog experienced as a pressure on his head and a narrowing in the field of vision

When asked about visual aspect of experience in anxiety, he reported none, same for experience of space, and anxiety related to other people.

He seemed quite uncomfortable later during the interview, and we decided to stop.

### **Participant No. 3 (female)**

The experience of anxiety for this participant was strongly related to a certain type of physical space. As she described it: “I suddenly find myself in a certain “time and space” (“časopriestor“– Slovak term), and the anxiety comes”. The characteristics of these spaces can be summarized as: She finds herself there suddenly and unexpectedly, without being able to prevent the situation and is not capable of escaping. It did not seem to matter if the places were open or constricted.

She gave example of climbing a winding staircase to the top of a cathedral in Paris. Climbing to the top was challenging but manageable, and even when she was at the very top in an open space, she felt normal. However, as soon as she went to return down the narrow staircase, the anxiety came. “My vision fogs up and narrows, it’s as if I’m looking through a funnel”. “I suddenly feel completely overwhelmed by the space, and without control of myself”. Probing

about thoughts that she may have had, she said: “It’s not that my thinking stops, but it’s as if my brain is going on reserve”. In the situation of the staircase, she could remember only one un-worded thought as she was being led down by her friend: “Must follow my friend”. Her thoughts in anxious situations seem very restricted and fuzzy, which she attributed to the oppressiveness of the space. Probing about potential visual experiences, she said: “If there is something, I am not aware of it to the extent that I can describe”.

She gave two more example where anxiety manifested for her in the same way: being stuck in a tram that temporarily broke down inside a tunnel and having to climb around a large rock during a hike.

Regarding bodily experience during anxiety, she reported shallow breath, internal tremor, and a narrowing of field of view: “It’s as if I am looking through a funnel”.

When asking about anxiety in social situations, she reported experiencing occasional stress, but no anxiety.

#### **Participant No. 4 (female)**

The experience of anxiety was related to thinking about the worst-case scenario in a particular situation, manifesting through inner speech to herself. For example, she described a situation where she was suspecting her boyfriend of cheating, experiencing the inner speech as “Oh, he might have gone on a date”, or “why did he put the new photo up?”. She reported often being stuck in the thoughts, where attempts at rationing away her worries as unfounded proving ineffective.

She did not report any visual experiences during anxiety.

Regarding bodily experience during anxiety, she reported an initial jolt between chest and stomach when an anxiety trigger arrives, then turning into a sensation in the stomach: “Like if someone hits you, then it turns into butterflies in the stomach”. She also reported that this sensation in the stomach tends to influence her breathing and make it shallower if she focuses on it. Additionally, an overall “nervous” feeling accompanies her experiences of anxiety, which she was unable to localize or describe closely.

#### **Participant No. 5 (male)**

The experience of anxiety revolved around the sense of losing control in a particular situation, usually when other people were involved that weren’t performing up to his standard. In these cases, he experienced inner speech (he called it his “inner critic”) as a means of anticipating what might happen next: e.g. “The co-authors will start asking stupid questions when they see it”, “I am not sure how

things will unfold”, or “This will not be correct”. He described a kind of closed cycle to these thoughts: “The anxiety demands more effort to think, I want to regain control of the situation but it’s not possible . . . this contradiction then cycles on itself”. He was not able to elaborate on how exactly he experiences the loss of control, other than he “feels it implicitly”, and it’s related to the thoughts. He did not report any visual experiences related to anxiety

Regarding bodily experience during anxiety, the most prominent for him was a tightness in the stomach, usually paired with a shallowness of breath.

When asked about experience of anxiety related to space, he said he doesn’t experience anything like this.

It was quite difficult to lead this participant into describing what he was experiencing, similar to p1. He kept returning to analyzing and explaining away why his thoughts occur the way they do, as opposed to describing how they manifest.

### **Participant No. 6 (female)**

The experience of anxiety can be separated into two types: situational and long-lasting. The situational instances of anxiety contained instances of both visual and auditory thoughts. For example, she described a situation which happens fairly often, where she starts being anxious about her health, and as she said: “This starts the machine of overthinking”. In these situations, she imagines how people close to her might react if she gets injured: “I see my mother crying”. Another example is an anxiety related to work, where through a partially visual and partially auditory experience she imagines how other people might judge her and her team: “I imagine what will be said, that they will be saying that we didn’t make”, “I also partially see them when this is happening”. She reports feeling judged in these situations.

The long-lasting anxiety she reports as manifesting differently and regarding mostly certain long-term situations in her family. This anxiety is connected to “currently ongoing situations”, but she does not have to be physically present in them directly. She describes the anxiety as: “An unconscious state . . . the anxiety doesn’t keep building up, but stays in at a certain level”, “You are not thinking about anything specific, but something still weighs down on you . . . It’s a more subtle but longer lasting negative feeling”. She reports not being able to focus and trouble sleeping when this type of anxiety manifests, as well as no thoughts that she could give an example of.

Regarding bodily experience during anxiety, she reports hyperventilation which becomes more prominent if she focuses on it, and a negative feeling around stom-



ach and chest, which she couldn't describe more precisely.

Additionally, she reports sometimes experiencing pressure around her body "Everything becomes denser, the air and myself".

### **Participant No. 7 (male)**

The experience of anxiety was related to thoughts about being overwhelmed with responsibilities, which had either a self-victimizing or a self-critical character. Participant reported partially worded speech, in which he was pitying himself or being critical to himself: e.g. "Why... this... to... me... now?", „Why are you doing this to yourself", „You will be fine, you don't have to create your own things, just cancel this and work for others, chill", "I could have been much better prepared...", "Why are you always in a rush to get things started" (p7). He also reported sometimes experiencing an image of people who were doing similar things profession-wise as him, but who were older and more successful, at the same time as the partially worded inner speech was unfolding.

Regarding bodily experience during anxiety, he reports a floating sensation in the belly, that he couldn't quite put a hold on: "It's kind of floating, something that is not in control". Another characteristic experience was tension in the jaw and in the cheeks.

Additionally, he reported that during anxiety he sometimes experiences the air around him as denser, pressing on his body from all sides. He didn't report any other experience of space during anxiety.

### **Participant No. 8 (female)**

The experience of anxiety was very prominent in the social domain, especially related to performance at university. She reported strong anxiety about expecting failure, of saying something wrong, or being judged or embarrassed. This anxiety manifested in very clear and vivid visual experiences. She described seeing herself and others "from above" in various scenes, which were connected to one or more anxious expectations listed above. The more she invests herself in these scenes, the stronger the anxiety becomes. These experiences are paired with bodily manifestations of anxiety, most notably sickness in the stomach (sometimes to the point of throwing up), faster heartbeat, and cold hands. She describes that both the visual and bodily experiences of anxiety become much stronger when they have to do with a novel situation, in which she does not know what to expect.

Additionally, she reported a re-occurring experiences of partial-derealization in

situations when the anxiety too intense. She was asked if she would be willing to draw it, and she enthusiastically agreed. Figure 8.1 shows the drawing she provided. In a follow-up interview, the experience of derealization was explored.



Figure 7.1: A drawing by participant 8. On the left — Experience of anxiety before derealization. On the right — experience of derealization resulting from heightened anxiety.

She described the reason behind the state of partial derealization as a way to lessen the symptoms of strong anxiety. The experience doesn't occur rapidly, but builds up over a time span of 10 to 15 minutes. "I don't think I create it ... it just sort of starts to happen and then I'm there", "It comes from all sides, as a kind of huge surge". She describes the experience as her existing in a kind of protective bubble:

"It is my world (inside the bubble) ... that protects me, and where I feel comfortable", "I don't really perceive the boundaries of the bubble, I just know there is a difference between what is inside and what's outside", "It has a certain form and a certain border". The experience of herself inside the bubble remains stable:

"I don't perceive what's around me, it kind of all meshes into one, none of it has form. Apart from me inside the bubble. I perceive myself ... like imagine an ocean and a lighthouse, around you it's all ... \*whoosh-y sound effects\*... but you feel yourself concretely, you are aware of yourself."

The inside of the bubble includes an experience of color green that surrounds her

(as seen on the picture), which she doesn't see directly, but perceives it intuitively: "I realize that it's there (the color green), but it's not that I see it"

When asking about how she perceives people and space outside of the bubble, she describes:

"It doesn't really have a form, people don't have faces, they are not part of reality, but a part of the new reality", "I do not perceive them as people that you can grab like this... (grabs my arm)", "I'm not aware of the form of the real world, as I get into this state". "Even the ground itself is "elsewhere"". (The ground is symbolized in a tri-color straight line on the drawings)

When asking about her thoughts while inside the bubble, she had trouble describing them. "There is not time to think really ... I am not really aware of them"

### **7.1.1 Summary of findings**

This section gives a summary and an interpretation of the findings of the qualitative study, without relying on the findings of the background research. This is in line with the exploratory inductive aim of the present study, as mentioned previously. Comparison to the claims made about anxiety and the sense of self stemming from the background research is expanded in the latter discussion section.

#### **Bodily experience**

Anxiety manifested in bodily experience for all participants. The most common experiences included sensations in the stomach and altered breathing. Other bodily manifestations included tightness in the throat, internal tremor, cold hands, tension in facial muscles, pressure in the head, and negative feelings in the chest.

Two participants experienced pressure on the body from all sides, as if their body became denser, as well as the air around them. This experience seems to be combination of bodily sensation, and experience of space affecting the body.

Two participants reported alterations to their vision, specifically narrowing of the field of view. One described it as a kind of "mental fog", suggesting that this experience might not be experienced exclusively as bodily.

#### **Negative thoughts**

Thoughts – guilty, judgement of the present, anticipating negative future, sense of losing control, imagining negative reactions of others x2, being overwhelmed by responsibilities

An experience that was very prominent among the participants could be termed “negative thoughts”, in most cases being of a self-referential character. This included guilty thoughts about past choices, negative judgement of present actions, anticipation of a negative future including reactions and judgements by others, losing control, and being overwhelmed by responsibilities. These thoughts manifested through both visual, auditory, and partially auditory modalities. The most common was as inner-speech from oneself to oneself, being partially worded in two instances. Visual experiences included anticipation of reaction or judgments from others, and comparison of a present situation to a more desirable one.

The temporal aspect of these thoughts, meaning if they were oriented to past, present, or future, also varied among the participants. For participant num. 1, this orientation was exclusive to past, connected to guilty introspection about past choices and events. For participants num. 2 and 7., these thoughts revolved around anxiety oriented to the present moment, in num. 2’s case negatively judging his present conduct and choices, and in 7’s connected to feeling overwhelmed by responsibilities and pitying himself or being critical to himself. The thoughts of participants num. 4, 5, 6, and 8 had a future orientation.

### **Being oppressed by space**

The experience of participant number 3 was quite unique among the gathered reports. In this case anxiety was related to being suddenly and unexpectedly overwhelmed by certain spaces, which gave her a strong sense of not being able to escape the situation. It did not seem to matter if the space was open or constricted. Thoughts appeared to be almost entirely suppressed in this experience. Additionally, as mentioned in the section on bodily experience, two other participants experienced the air around their body as being denser and pressing in on them.

### **A negative atmosphere**

Participant num. 6 reported a reoccurring experience of anxiety that could not really be localized, and which was described as a more subtle longer-lasting negative feeling which was weighing down on her on a consistent level.

Two additional participants described an overall feel to their experience that could not be localized in the body, one as a type of pain which wasn’t physical,

and the other as an overall nervous feeling. These two experiences arguably still best fit under the category of negative atmosphere.

### **Being trapped in anxiety**

Six out of eight participants reported on either being trapped in their experience of anxiety, or the symptoms of anxiety increasing the intensity of the overall experience. Participants num. 1, 2, and 8 described what can be called a self-intensifying loop if they fail to escape the thoughts or invest themselves in it. Participants num. 4 and 5 describe efforts to either rationalize the thoughts away, or attempting to gain control over them, which, if they fail to do so, results in being “stuck” in them. Participant num. 6 describes her experience of hyperventilation becoming more prominent if she focuses her attention on it.

### **Anxiety resulting in partial derealization**

Participant num. 8 described an experience of partial derealization which sometimes occurs when the experience of anxiety becomes too intense. She reports experiencing this state as her existing inside of a protective bubble, which separates her from the outside world, which is described as being part of a new reality. The inside of this bubble contains an affective experience of the color green, which is surrounding her.

Her thoughts inside while inside of the bubble seem mostly suppressed, however it did not seem that her experience of herself was alter in a significant way, especially when compared to the world outside of the bubble.

# 8

## Discussion

Returning to the claims made in the first result section, we are now in a position to compare them to the findings of the qualitative study. We go through the characteristics of sense of self and anxiety as listed in the first results section in order, and and examine them in light of the results gathered from our qualitative study.

### **Aspects of the narrative self in the experience of anxiety**

As we have seen from the background research, the narrative self can be argued to arise through our reflective abilities that humans possess, which allow us to take our experience as an object of awareness, and therefore to take a stance on ourselves and our situation, or to imagining potential future situations. In this way we gain the capacity to weave together narratives around our sense of identity. Through the background research we have seen that in anxiety we anticipate a future threatening situation through imagination, which is one of the primary characteristics of the phenomena, and would not be possible without the reflective abilities mentioned above.

We have seen from the qualitative study that such experiences related to the narrative self were indeed quite prominent. The experiences of all but one of the participants contained thoughts that could be argued to be of a self-referential narrative character, whether that be thoughts related to guilt about past actions, to the sense of losing control over the present situations, or to imagining negative reactions from others.

Interestingly, in the case of participant num. 3, there was no report of such thoughts occurring. We could argue that the implication of this finding is that perhaps narrative self-related experience is not necessary for the experience of anxiety, or for the onset of it. On the other hand, it can be conceded that perhaps

the interview simply did not reveal such experiences, or that the participant was not able to report them.

### **Bodily experience in experience of anxiety**

As we have seen, all participants experienced sensations in the body that were related to anxiety. Some occurred more frequently than others, but our study gives support to the claim that the experience of anxiety always also manifests in a bodily experience.

### **The unclear phantasies in anxiety**

The claim arising from background research regards anxiety as manifesting in a major way through quasi-intentional unclear phantasies, as means for the anticipation of unspecified negative events, which are experienced as to indisputably happen. They are unclear, because their content is confused and indeterminate, as if we constantly tried to focus on their object, and yet constantly fail.

Importantly, we have seen in our qualitative study examples of anxiety that did not contain an anticipation of the future, and that anxiety can be also experienced when reflectively introspecting on past situations, or regarding what seemed to be exclusively the present situation. This finding casts a certain doubt on the claim that phantasies in anxiety are related only to anticipation of the future. However, it might be the case that these experiences did contain an element of orientation into the future, which was not discovered.

The claim about the unclear nature of these phantasies is more difficult to assess, to a large extent stemming from my inability as the interviewer to be able to lead the participants into sufficiently detailed reports about their experience. However, we have seen examples where the phantasies are claimed to be experienced vividly in the visual sense, in the case of participant num. 8 exceptionally vividly. Four participants reported no visual experience and seven reported instances of inner speech, with varying degrees of vividness. We can compare these results to a study done by Heavey and Hurlburt (2008), in which they assessed the prominence of different types of inner experiences among 30 participants. In the study they showed that instances of inner speech and visualization are among the most common experiences in general, not particular to just anxiety (Heavey & Hurlburt, 2008). They found the overall frequency of inner speech to be 26% and inner seeing (visual experiences) 34%. Although our qualitative study contained a much smaller sample, we can see that inner speech occurred more frequently (seven times) than inner seeing (four times). It might be the case that experi-

ences of anxiety in general contain more worded than visual thinking, but this is not a claim we can verify.

In conclusion, the claim about the unclear nature of phantasies present in anxiety was unable to be assessed properly, however, we have seen at least one case where the visual experience involved in anxiety was reported as being exceptionally clear visually, which goes against the claim that phantasies in anxiety are always experienced as unclear.

### **Spatial anxiety as invading our sense of separateness from the world**

As we have seen, Trigg (2016) His central claim was that in anxiety related to spatiality, one experiences as felt transformation of the body from a locus of ownership and unity to an impersonal site of alienation and anxiety, and as such threatening the boundary between ourselves and the outside world.

The experience of participant num. 3 was the most prominent when it comes to the relation between anxiety and spatiality. She reported being suddenly overwhelmed by the space around her, losing control of herself in the process. This experience severely repressed her capacity for thought as well as narrowing her field of vision. It is difficult to say to what extent this experience can be described as threatening the boundary between herself and the world. However, knowing that the sense of self is closely intertwined with the experience of the lived body, we can see the effect that the overwhelming space had on her, as she also described bodily manifestations of anxiety in this situation.

Although less severe, two other participants reported an experience of the air around their body becoming denser and pressing in on them, which could be argued to be a similar threatening of the sense of separation.

### **The “spiral of anxiety”**

One of the claims arising from the background research described symptoms of anxiety enhancing themselves if not managed appropriately. In our study, six out of eight participants described an experience that resonates with this claim. Three described a kind of self-intensifying loop of thoughts related to anxiety, two reported that they experienced being “stuck” in anxiety, and one participant described her bodily experience of anxiety intensifying if she focused her attention on it.

These reports seem to show that the “spiral of anxiety” is indeed a very common experience in anxiety



### **The negative teleology**

We have seen that Micali (2022) claimed that there is no positive teleology to be found in anxiety. The results of the qualitative study seem support this claim, as none of the reports of the experience of anxiety in our study seem to show a positive purpose.

## 9

# Limitations

Arguably the most prominent limitation to the present qualitative study was the experience of the author in conducting the phenomenological interviews. From re-listening to the recordings of the interviews during data analysis, it was obvious that certain questions could have been asked better, and certain experiences explored more in depth. As the study did not include many participants, it seems obvious that there are variations of experiences of anxiety which were not obtained. A potentially better way to capture the desired phenomena would be to instruct the participants to write down their experience of anxiety as it is ongoing, or alternatively return back to the experience at least on the same day as it occurred, and write it down in this way. Additionally, conducting multiple interviews with each participant over a longer timespan would undeniably result in more rich and in-depth reports of experiences. A future study might also consider differentiating between normative and clinical (meaning diagnosed with an anxiety disorder) populations and compare experiences of anxiety between these two groups.

# 10

## Conclusion

The aim of the present work was to conduct a phenomenological investigation of the sense of self and its relation to anxiety, and to attempt to answer the question of: How does the sense of self change in the experience of anxiety? This effort was divided into two parts, a theoretical and qualitative. In the theoretical part, we sought to investigate the sense of self and anxiety in a thorough way, attempting to ground our understanding in a solid ontological foundation, which would encompass all living organisms, not just human beings. We started by making a case for embodiment, and for the inseparability of the lived and physical body. Once we placed the living organism directly into the world not as a mental representation of itself, but as an embodied agent enacting its life, we moved to exploring the fundamental forces that driving living beings by the principles of self-organization and autonomy. This exploration made us reconsider our understanding of sense-making and its central role in cognition, claiming that it is in fact the primary mechanism of cognition. Then, we moved to the question of the human condition, seeking to understand what makes us different from other forms of life. We described a unique capacity of humans to reflectively observe experience, and thus to be able to take a stance on ourselves and on situations in our life, a capacity which is enabled by what is termed the existential dimension of experience. Additionally, we highlighted the implications that this reflective capacity has on our sense-making, which becomes ingrained in our socio-cultural worlds in a deeply intersubjective way, giving rise to participatory sensemaking. Then, we sought to build the layers of the sense of self, starting at the protoself, which arises from our embodied and enacted existence in the world. The proto-self subsequently serves a foundation for the pre-reflective minimal self, a term which is more commonly known in phenomenology. After describing characteristics of the minimal self, we turned to the narrative self, which was argued to arise through the existential dimensions of experience, and which requires reflec-

tive awareness to weave together a narrative sense of identity unique to humans. After describing its characteristics, we turned to the investigation of anxiety.

Our investigation of anxiety began with an overview of what several prominent authors had to say about the phenomena, as seen through a phenomenological lens. We continued with the exploration of the crucial role of imagination (phantasy) in anxiety, resulting in several defining characteristics, including their quasi-intentionality and unclear nature in which they anticipate a negative future. Several other characteristics of anxiety were highlighted, including the self-enhancing spiral of its symptoms, and its negative teleology. Additionally, we investigated the role of physical space in anxiety, and the felt transformation of the body from a locus of ownership and unity to an impersonal site of alienation and anxiety, threatening the boundary line separating ourselves from the outside world.

The results of the theoretical investigation were summarized in the first result section. Two significant claims were made here, which were intended to be investigated in follow-up qualitative study. The first claim was that the existential dimension of experience exclusive to humans can be argued as the reason for the emergence of the narrative side of the self, as well as the experience of anxiety as such. The second claim states that the primary dimension of the self is our lived body, highlighting its importance anxiety. Additionally, we sought to investigate a number of other characteristics of anxiety stemming from the background research, namely the quasi-intentional unclear phantasies, spatial anxiety, the “spiral of anxiety”, and the claimed negative teleology of anxiety.

The qualitative part of the present work began with an overview of available methodology in phenomenological research, including examples of several current prominent methods. The present qualitative study was framed as an inductive-deductive multiple case-study examination of the sense of self and anxiety. The data were collected through semi-structured phenomenological interviews, the design of which was inspired in a deductive way by the previous background research, as well as by certain existing methods. The results of the study were first given sequentially participant by participant, describing their respective experiences of anxiety. Then, a summary of findings was given, which were grouped into categories that emerged after analysis. This included: bodily experience, negative thoughts, being oppressed by space, a negative atmosphere, and being trapped in anxiety. An additional section on partial derealization resulting from anxiety was included, as this was a unique experience reported by one participant. Lastly, in the discussion section, the results of the qualitative study were compared to the claims made in the first result section. Here, we saw that the narrative

self was indeed heavily present in the experience of anxiety of our participants. Only one participant did not report a narrative experience. Most prominent were instances of inner-speech, but visual experiences were also represented to a significant degree. Regarding bodily experience of anxiety, we saw that all participants indeed experienced anxiety as manifesting in bodily experience. The results on the nature of unclear phantasies in anxiety remained inconclusive, as most of the gathered reports were not sufficiently detailed to be able to make claims about the nature of this phenomena. Nonetheless, at least one participant reported visual phantasies that were especially visual and clear, casting at least some doubt on the claim that phantasies manifest in an unclear way in anxiety. Regarding spatial experience of anxiety, three participants reported experiences that could be considered spatial. For one participant especially, the experience of space played a central role in the experience of anxiety. It is difficult to say to what extent this experience can be described as threatening the boundary between the participant and the world, but if we take the experience of the lived body as central to the experience of anxiety, this claim could indeed be valid. The “spiral of anxiety” was undeniably shown to be a very prominent feature of anxiety, with six of our participants reporting experiences that could be placed in this category. Lastly, in line with the background research, there was no positive teleology to be found in any of the reports of experience that we gathered.

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# Appendix 1: EAWE - Categories of phenomena"

## 1 Space and objects

- Distorted experiences of space
- Affective E of space

## 2 Other persons

- Sense of remoteness from others
- Sense of inferiority, criticism, or mistrust in relation to Others
  - \* Feelings of self-C, Self-criticism
  - \* Feeling of social paranoia or social anxiety
  - \* Pervasive mistrust of others
- Disturbance of Self-Other demarcation
  - \* Universal merging with others
- Difficulties with gaze
- Heightened intensity, aliveness, or reality of others
- Changes in quality or tone of others appearance
  - \* People seem threatening in a strange way
- People seem as communicating something special or unusual
  - \* Paranoid significance
- Anomalous Behavioral / attitudinal response to others

- \* Active withdrawal
- \* Opposition / rebellious behavior
- \* Social disinhibition
- \* Compulsive clownery / entertainment of others

### **3 Atmosphere**

- Decreased intensity or substantiality
  - \* Deanimation
  - \* Nonspecific / other derealization
- Inanimate things seem alive or intentional
- Heightened intensity / hyperrealization
- Emptiness, numbness, indifference