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A Micro-Phenomenological Case Study

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Abstract

Qualitative studies using a method called descriptive experience sampling indicate that women with bulimia may experience an often strikingly large number of different phenomena at once. This unusual structure of experience has been termed ‘multiple inner experience’ and ‘fragmentation of attention’. In this case study, I explore the experience of a woman with bulimia through a different method, namely the micro-phenomenological interview. I was interested in whether my interviewee’s attention would be similarly divided between a large number of phenomena and how she experiences the process of eating and vomiting.

During moments when she was not eating and vomiting, her attention was indeed divided between an extraordinarily high number of co-occurring and rapidly evolving phenomena such as inner images, inner hearings, and bodily sensations, i.e., she experienced mind-wandering and multiple feelings within a few seconds. During eating and vomiting she did not experience mind-wandering but had increasingly more dissociative experiences. After vomiting she was clearly aware of herself, of her surroundings and of extremely positive feelings including *Geborgenheit* (a combination of security and comfort) and happiness. In contrast, her awareness before vomiting was characterized by various negative bodily sensations. It thus seemed that through eating and vomiting, my interviewee was not only able to dissolve negative bodily states and refocus her attention, but also to experience extremely positive feelings and a strong connection to her body and her surroundings.

The findings of this case study are consistent with previous qualitative studies on this topic. They also give context to and align with quantitative research on altered brain functioning in the attentional networks of individuals with bulimia, on associations between bulimia and attention deficit hyperactivity disorder, as well as on associations between bulimia and dissociative states. More research into the role of attention in bulimia is required to translate the findings into treatment approaches. In addition, the detailed analysis of feelings and their bodily components may allow to develop individualized treatments targeting factors such as body temperature, muscle tone, and the quality of breath.

Acknowledgments

On many different levels, I would like for this thesis to challenge the omnipresence of constructed categories and look at things for what they really are.

When we move away from matter, we move away from spirit.

In returning to our sensitivity, we return to that which gives us spirit.

I want to thank Clara for sharing her experience with me.

Without her, this thesis could not have come into existence.

And of course, I want to thank Thomas Slunecko for his kind support and responsiveness.

Nothing I have felt so far compares to the feeling of relief when I throw up.

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How I came to investigate Clara's experience

I already had an interesting (yet maybe not feasible) concept for my master thesis – one utterly unrelated to bulimia – when a colleague of mine made me aware of a number of studies about the experience of people with depression. The method which the researchers, all located at the University of Nevada, were using is called Descriptive Experience Sampling (DES). Hurlburt, who created the method, describes it in the following way:

“Descriptive Experience Sampling (DES) is a method for exploring inner experience. DES subjects carry a random beeper in natural environments; when the beep sounds, they capture their inner experience, jot down notes about it, and report it to an investigator in a subsequent expositional interview” (Hurlburt & Akhter, 2006, p. 271).

Importantly, “DES does not care about phenomena that occurred a second, a minute, an hour, or a day before or after the moment of the beep” (Hurlburt & Akhter, 2006, p. 277), individuals are instructed to exclusively describe the last undisturbed moment before the onset of the beep. The description should include all the dimensions of experience which are in conscious awareness including sight, smell, touch, taste, and hearing, as well as perceptions of the body, various forms of thought, feelings, and so on. During the analysis process the researchers label the sampled moments according to the presence of these and other phenomena of experience. The labels include, for instance, ‘inner speech’, ‘inner seeing’, ‘unsymbolized thinking’, ‘feeling’, and ‘sensory awareness’.

The method has been used primarily for the general and random inquiry of experience in its ‘pristine’ form, meaning experience of everyday life as minimally distorted by the act of remembering as possible. For the most part participants of DES studies are not marked by any common salient feature. However, it appears that many of them are students at the University of Nevada. Said colleague of mine made me aware of three DES studies which had been conducted with the specific intent of investigating the experience of people with depression or a tendency towards rumination (Scott, 2009; Lefforge, 2010; Gunter, 2011). The studies share a similar design – they compare two groups, one consisting of self-reported depressed or highly ruminative individuals and one of participants who scored low or average on the respective quantitative self-

report measures. The researchers set out to find a significant group difference regarding various characteristics of the gathered descriptions, including the number of moments of experience which contain negative feelings, depressive content (a term that was not further specified) or depressive symptoms.

The findings were consistent – for none of the studies the sampled moments mirrored the self-reported severity of depressive symptoms nor was there a significant group difference between depressed and non-depressed individuals for most of the inspected criteria. The fact that DES is a combination of an initially qualitative, introspective approach and a quintessentially quantitative analysis procedure (including sample t-tests and the like) may be one reason why the researchers were unable to confirm their expectations. Could there be reasons beyond the partly quantitative research logic for why the method is unable to capture neither what participants with depression report on quantitative measures nor what characterizes their experience in contrast to the one of other participants?

Irritatingly enough, the authors were implicitly suggesting that the participants may, in fact, not be as depressed as they report to be. Their attempts to explain the results of the studies included – amongst small sample sizes and the small number of sampling days – different forms of cognitive bias. For instance, that individuals who are self-reporting as depressed might appraise experiences in a more negative way in retrospect compared to their appraisal during or shortly after the experience (Lefforge, 2010, pp. 151, 167; Gunter, 2011, p. 88). Such attempts of making sense of the studies' findings are not only highly irritating (Slunecko, 2020) but certainly also highly illogical. To say that cognitive bias is to a large part to account for why individuals report to be depressed, is to say that those individuals are, in fact, not as depressed as they report to be. Instead, we should consider the option that the DES method is unable to capture at least some dimensions of experience which are defining of depression.

This assumption is consistent with methodological reflections of Hurlburt himself, who states that DES examines “the salient phenomena of experience; it does that as completely and thoroughly as possible, but it accepts that there may well be very faint or subtle aspects of experience that are not described” (Hurlburt & Akhter, 2006, p. 276). To say it even more clearly, DES is concerned with whatever ‘grabs an individual’s attention’ (Heavey et al., 2010, p. 358). As proposed by Matthew Ratcliffe, however, many different forms of psychopathology are characterized in terms of, what he calls, alterations in existential feelings (Ratcliffe, 2012). Feelings which – instead of

being directed towards specific objects of experience such as events or situations – constitute the way we relate to the world itself and the kinds of possibilities we feel are open to us. As background orientations which structure our more specific interactions with the world, existential feelings are in many cases not what is most salient to conscious awareness. Hence, DES is most likely not the adequate method to gain descriptions of them.

When I shared my concerns and irritation with the colleague who had introduced me to the studies in the first place, he made me aware that the method had also been used to investigate the experience of women with bulimia nervosa. In contrast to the studies with depressed participants, the three DES studies investigating the experience of women with bulimia yielded exceptionally interesting results (Doucette, 1992; Jones-Forrester, 2006, 2009).

The descriptions of women with bulimia were most saliently characterized by a “pronounced division of attention and a striking inability to maintain a clear and single focus of attention” (Jones-Forrester, 2009, p. iii). In the face of the overwhelming complexity of her experience one participant was oftentimes even unable to complete the sampling task (Jones-Forrester, 2009, p. 284). This is especially conspicuous, since the descriptions of individuals without bulimia – with the exception of individuals with borderline personality – usually contain only a few main elements of experience (Heavey et al., 2010). Importantly, the degree of divided attention – concerning both the number of sampled moments affected as well as the number of elements contained in one sampled moment – appeared to be directly related to the severity of bulimic symptomatology in (Doucette, 1992; Hurlburt, 1993). More precisely, high numbers of co-occurring elements in conscious awareness coincided with more frequent binge eating and purging behavior. This finding was not replicated (Jones-Forrester, 2009). However, Doucette did not use any standardized measure to rate severity of symptoms whereas Jones-Forrester used a quantitative self-report questionnaire rating binge eating, purging, history of eating disorder treatment, nonpurging compensatory behaviors, and suicidal ideation (Jones-Forrester, 2009, p. 133). One aim of my thesis is therefore to investigate whether the degree of divided attention changes during and after binge eating and purging. This could be one reason why randomly selected moments are not able to accurately reflect overall tendencies.

In connection with the division of attention, many women with bulimia in the aforementioned studies described phenomena where they had a tendency of being aware of the knowledge that an

experience was ongoing, rather than being aware of the experience itself. One participant described it in the following way:

“Thoughts and feelings were ‘fish’ in her awareness ‘aquarium’. Many fish could be swimming around simultaneously in the aquarium (...); each of these directly observed fish were one of Ashley's simultaneous Experienced awarenesses. However, some of the fish in the aquarium were ‘under the rocks with only their tails exposed’ (...). These were the Sensed thoughts or feelings: the ‘tail’ that was visible from under the rock was the knowledge present in awareness that the particular thought or feeling was ongoing. The fish itself was the thought or feeling that was known to be known in immediate awareness to be occurring outside of awareness (...)” (Hurlburt, 1993, p. 126). Importantly, this was not a dichotomous distinction – fish could be ‘partially under a rock’, ‘almost entirely under a rock’, or ‘just going under a rock’, and so forth.

This has led me to the assumption that the usual dichotomous distinction between the pre-reflexive and the reflexive cannot account for the many gradations that may exist in between, see for instance (Stern, 2009). Rather, these descriptions of experience suggest that we should think of the pre-reflexive and the reflexive as being located at two different ends of a spectrum.

A similar problem occurs with the distinction between thoughts and feelings. As the DES method entails labeling the sampled moments according to the phenomena of experience they contain, the researchers had to create new categories when women with bulimia were oftentimes unable to distinguish between thoughts and feelings. Certainly, the relationship between thoughts and feelings as well as the question what constitutes thought is yet to be determined (Schmidt, 2018; Ratcliffe, 2008). Even so, we can assume that thoughts are – for the most part – at least closely entangled with feelings. It is therefore interesting that DES studies report this failure to distinguish between the two only in women with bulimia and in individuals with anxiety disorders (Jones-Forrester, 2009).

Everything discussed so far left me fascinated, but also highly skeptical. If the results of the DES studies were valid, this was a completely new direction which mainstream eating disorder research has never explored. Moreover, I am not aware of any other qualitative study which is investigating the experience of individuals with bulimia in such a microscopic manner. It is a microscope, however, which is needed in order to capture the complexity of experience in a relatively small time interval. DES provides such a microscope but seems to have some

methodological shortcomings. Hence, I was extremely curious whether using a different methodological approach to access the experience of women with bulimia would yield descriptions which share a similar structure to the one observed in DES studies. The structure of descriptions would then not only be valid in virtue of internal consistency, but also in virtue of the coherence across different methodological approaches. Beyond that I was interested in specific aspects of the experience of women with bulimia. In particular, how they experience the process of eating and vomiting. Therefore, I needed a method which – besides offering the opportunity to look at very short moments – is also suited to describe how experience unfolds over time. In the following chapter I am going to discuss these and other methodological considerations in detail.

Method

As I laid out in the previous chapter, my motivation to investigate experiences of women with bulimia was prompted by previous DES studies. Their main finding concerned the synchronic structure¹ of the participants' descriptions. It was characterized by the co-occurrence of an unusually high number of elements of experience at the same time. The following example of one of the sampled moments illustrates this complexity of the synchronic structure:

“Vicky had just got off work and was walking through a casino looking for a taxi. At the moment of the beep she had a sensory awareness of the bright whiteness of the lettering of the word ‘monorail’ and the purpleness of the background on an overhead sign, and was also mentally aware of the meaning of the sign – that it pointed to the monorail. (...) she also had multiple inner seeings, four of these inner seeings were apprehended as simultaneously occurring in three-dimensional space on a rusty-orange background, and were coming rapidly toward her and then rotating out again to start over and come toward her again; two of these inner seeings were apprehended as separate, simultaneous pictures that were not in rotation.

In one of the four rotating innerly seen phenomena, she was thinking ‘find taxi’ to herself, which was apprehended as innerly seeing a still picture of a taxi stand that appeared identical to the taxi stand at the Hard Rock Hotel. In another two of the four simultaneous rotating inner seeings, she had two separate, simultaneous lemur pictures, with no background, just cut-out images of the two individual lemurs (...) In the fourth of these rotating visually imaged phenomena, she had a separate, simultaneous inner seeing of the *Australopithecus* picture she had seen in her anthropology class that was apprehended as being exactly like the picture she had seen in class of *Australopithecus* with a prehistoric-looking background. (...) These three inner seeings were apprehended as rapidly approaching her and then rotating out again to start over and come toward her again.

In addition to these four rotating inner seeings, Vicky also had two separate, simultaneous inner seeings which were not part of this rotation process. In one of these, she was separately and

¹ The synchronic structure refers to the architecture or topography of the experiential space or ‘landscape’ of a subject at a given moment in time (Petitmengin et al., 2019). I discuss the distinction between the synchronic and the diachronic later in this chapter.

simultaneously seeing the character sequence '4.5 mya' (with mya referring to million years ago). The 'mya' was seen to be in white lower case letters and the '4.5' was in white block numerals. This 4.5 mya inner seeing was in the center of her visual field and was not rotating with the other inner seeings. In the other of these non-rotating inner seeings, she was innerly seeing a still picture of a taxi stand that appeared identical to the taxi stand at the Hard Rock Hotel. This inner seeing was a duplicate copy of the rotating taxi stand image, and was without any words or inner speech. (...) Thus there was one taxi stand picture that was in rotation with the rest of the multiple inner seeings, but was also apprehended separately and simultaneously, like a still, identical copy, that was apprehended as not in rotation and was innerly seen in the back of her head.

She also had a separate, simultaneous worded thought process of needing to walk fast to find a taxi. She was aware of the words 'walk fast, find taxi', but was unable to say if these words were symbolized. However, she knew that the words were not in images, not in inner speech, and they appeared to be just a worded thought that didn't appear to be spoken or said, she just knew the words to be there.

She had been talking with her boyfriend on the phone, and he was talking at the moment of the beep, but she had withdrawn from the conversation entirely. Instead she was entirely occupied with her multiple inner experience." (Jones-Forrester, 2009, pp. 179-181)

Indeed, Vicky's experience is of striking complexity. Her 'inner' experience appears to take over her attention to the point that she is no longer aware of the conversation with her boyfriend. My intention was to examine the synchronic dimension² of experiences of women with bulimia with a different method. Amongst other aspects, to see whether descriptions generated by means of another method would also be characterized by a high number of co-occurring elements. Moreover, I was interested in the experience of the time period of eating and vomiting, not least because I expected the structure of experience to be drastically altered. Therefore, I needed a method which – unlike DES – is able to capture how experience unfolds over time. The methodological approach I chose has both – the ability to function as a microscope for investigating the synchronic dimension as well as the ability to capture the diachronic dimension

² The synchronic dimension refers to the configuration of the experiential space or 'landscape' of a subject at a given moment in time (Petitmengin et al., 2019).

of experience. While it is predominantly characterized by what Petitmengin has developed and described as the micro-phenomenological interview (Petitmengin, 2006), I am going to delineate how exactly I appropriated and applied the method for the purposes of this project.

At the end of the chapter, I use Hurlburt and Akhter's (2006) criticism of the micro-phenomenological method as a point of departure for further methodological considerations. In doing so, I attempt to carve out methodical characteristics and implicit methodological presuppositions that might otherwise have gone unnoticed. It will also become clear how, by my specific application, I could avoid a few potential weak points of the micro-phenomenological method.

The micro-phenomenological interview

The method of the micro-phenomenological interview is rooted in the idea that experience is composed of various dimensions, such as the visual, auditive, tactile, kinesthetic, olfactory, or gustatory. The person experiencing has different degrees of awareness for those various dimensions. At times, she may be quite unaware of one or more of them, for instance, because she is more involved with her objectives than with the process of achieving them. During the interview, the interviewer tries to help the interviewee stabilize her attention on the different dimensions of her subjective experience in order to enhance her awareness of them while also gaining a description. One important aspect of the process of enhancing her awareness of the different dimensions of her experience is exploring their descriptive categories³ or 'generic characteristics'. In case of the auditive dimension, for instance, interviewer and interviewee can talk about volume, tone, distance, direction, persistence, and other qualities of sound. The more descriptive categories interviewer and interviewee discuss, the greater the degree of precision of the description of the related dimension becomes. Moreover, if she was quite unaware of a

³ According to Petitmengin, descriptive categories are derived from 'descriptemes', that is, minimal units of meaning in transcripts, by classification (Petitmengin et al., 2019). However, it is not clear whether the construction of descriptive categories is indeed exclusively rooted in concrete instances found in transcripts. This would imply that the definition of descriptive categories can only take place a posteriori during the analysis procedure. Since descriptive categories are also used to guide the interviewee in the exploration of her experience during the interview process, there appears to be a hen-and-egg problem. Moreover, the claim completely neglects the role of common-sense and intuition throughout the interview as well as the classification process, see for instance (Tewes, 2019).

dimension prior to the interview, she will gain a more differentiated awareness through and throughout the interview process.

I discuss methodological presuppositions, particularly the implications of presupposing certain descriptive categories, in more detail later. First, I focus on the interview techniques and other factors which play a role in the process of becoming aware.

The interview process

Stabilizing attention

Petitmengin suggests initiating the interview and hence the process of stabilizing the interviewee's attention onto a particular experience in the past by providing a safe and quiet setting as well as a clear delineation of how long the interview will last and what will be discussed in the course of it. It is the interviewer and the setting that help the interviewee to "remain within the boundaries of the experience being explored" (Petitmengin, 2006, p. 239).

Due to the COVID-19 pandemic, Clara and I conducted our interviews via Skype. For each interview we made sure that both of us were in a quiet room where we would not be disturbed by other people. Apart from her dog, there were few sources of disruption across our interviews. Conducting the interviews via Skype had the advantage of being able to video record our sessions without any additional effort. Moreover, we could conduct interviews extremely spontaneous, for instance, immediately after she had vomited. Contrary to Petitmengin's suggestion, I did not set a fixed timeframe for interviewing Clara. Our interviews usually lasted between two and three hours. We took as much time as we needed to discuss a fixed period of time in the past to the degree of precision I felt was sufficient. I suggested to take a break whenever it seemed that either she or I could not focus well anymore. Discussing the whole experience in one session was important as it helped minimize the interval between the experience and its description.

For the interviewee to be able to connect to her past experience and to feel comfortable with sharing it, there needs to be a relationship of trust between her and the interviewer. The atmosphere must allow for slowness, silence, and not having an immediate or fully developed answer. Moreover, she has to feel relaxed enough to shift her attention away from the current moment and her other preoccupations onto the past experience. Once the interviewee has started to shift her attention onto it, there are specific techniques the interviewer applies to help her to

uphold and possibly deepen the connection. One of them is that the interviewer “unceasingly reformulates all the descriptive elements concerning the experience itself, which effectively refocuses the subject’s attention on the experience” (Petitmengin, 2006, p. 239). Besides refocusing the interviewee’s attention on the past experience, the reformulation also serves to verify whether the interviewer has understood the interviewee correctly. Reformulation for the purpose of verification is evident in the following excerpt where Clara describes the transition from visually perceiving reality to visually perceiving an inner image of her face. First, she looks in the mirror. When she lowers her gaze, her visual field is divided into two parts; an upper part in which she still perceives reality, and a lower part in which her face appears in color on a black background.

Clara: I first saw my forehead, because I looked down, basically (moves left hand from top to bottom) forehead downwards. And until the entire face was (indicates quotation marks with left hand) in focus, well, it wasn’t one hundred percent sharp, not even later, but it was sharper. At the beginning just the forehead, then the eyes-nose-area, the mouth-chin-area everything was somehow a little bit (moves head back and forth and pinches eye-area) blurred still.

Constanze: That means, the face was already there in the black frame, (Clara nods) (Clara: Exactly) It didn’t just appear (Clara: Exactly, exactly) when you moved your face down, it was already there before you looked at it? (Clara: Exactly, exactly) And then you just gradually (Clara nods) became aware of it? (Clara: Exactly, exactly) And it didn’t, sorry, I didn’t quite understand that, it didn’t change in sharpness, did it?

Clara: It didn’t change in sharpness, just because I perceived the forehead first, the forehead was initially sharper than the rest. And then I just additionally saw the nose, eyes, mouth and so on as well.

Some aspects of the inner image, such as the ‘black frame’ and the image’s sharpness, we discussed in more detail before and after, respectively. What the excerpt shows very well, however, is how I make sure that I understood her correctly and ask her whether the image’s sharpness changed over time.

In our case, reformulation for the purpose of refocusing in contrast to verification was usually only necessary in particular situations such as after taking a break. More commonly than

reformulation, it was moments of silence that gave Clara the space to immerse herself in the past and were helpful to uphold or deepen her connection to the experience we explored. After the first couple of interviews, Clara had gotten very good at staying connected to her past experience. She was extremely calm and kept her eyes closed for nearly the entire duration of each interview. Hence, techniques for refocusing her attention were only seldom required. Petitmengin is certainly right that the reformulation of descriptive elements helps the interviewee to deepen the connection in case it is not very strong. The interviewee may, however, also be distracted by trying to parse what the interviewer is saying and, more generally speaking, by the presence of the, at least auditive, stimulus. In case she has not lost contact yet and is still immersed in the past, reformulations may therefore have adverse effects. An excerpt of my first interview with Clara illustrates this case very well. Except for a brief moment, her eyes were closed while she tried to put into words a feeling which she had experienced during a moment of highly divided attention that day.

Clara: ...when I am just like in this cube, you also have to contort yourself, basically the body feels like it shouldn't be like this, I'll put it that way now. (about 16 seconds pause) (opens her eyes for a short moment looking up to the right before she begins to speak again) You simply notice that something is different, it is not supposed to be like this, like how can I express it physically, like if I were to do a posture now, (bends slightly forward while sitting) I'd say like this, bent over, crouched, or somehow like this, so strange. Like a fetal position. But somehow more angular...

Instead of interrupting her with a reformulation such as 'You feel as if you are in a cube, as if you have to put your body parts into places where they normally would not be. Your body feels a way that it is not supposed to be', I gave her the space to stay connected to her experience and to find new ways of describing it. As a result, she went on to describe it with a combination of words and an according bodily gesture.

Reformulation is, furthermore, only possible when the interviewee is not, for instance, commenting on, assessing, or judging her experience. Whenever she is not describing the experience itself, the interviewer redirects her attention back to such description. The main technique for doing so is asking her a specific question about its synchronic or diachronic

dimension.⁴ The following example is taken from our first interview about the process of eating and vomiting.

Constanze: What does this ‘being at home’ feel like?

Clara: (closes eyes) Mmm good. Well, how does it feel? Like, like being in good hands. That’s where I belong, it belongs to me. I know what’s coming, it’s all-, there’s nothing surprising about it. It’s totally, all expectable, pleasant. Mmmmh not, not, not surprising, I would say. Um yes. Actually, unfortunately, good. Yes. (opens eyes) Really, really secure [geborgen], yes it sounds stupid, but yes that’s how it is. Sometimes I don’t dare to say what I, I mean, I’m telling you now, but sometimes I don’t dare to say how it really feels, because someone else must think (claps hand to forehead)

Constanze: Yes, but let’s stop now, (Clara: Yes) that won’t do us any good, if you explain it like this. We’ll just stay with the feeling. The feeling is security [Geborgenheit], right. (Clara: Yes) Um, how do you feel this security? (Clara closes her eyes)

Clara: Um in the whole, (gestures with hands at neck, chest and head level) like in the whole chest area simply fluffy, yes. I say it (opens eyes) really as it is. Yes I- (slightly questioning) (laughs briefly)

Constanze: Yes, you (encouraging)

Clara: (closes eyes) Um, yes, soft, pleasant, like (Constanze smiles) when someone strokes you, like when you take a baby by the arm. Like yeeeah. (strokes her right shoulder and upper right arm with her right hand) Right now I’m thinking to myself I’m stupid, but that’s just the way it is. (laughs)

Constanze: (smiles while talking) Now stop evaluating all the time, (Clara opens eyes) because then we can’t look at it. (laughs) (Clara: Yes) Well. (with friendly emphasis) (Clara closes eyes) So it’s uh fluffy, like when you take a baby by the hand. What do you mean? That you take a baby by the hand or that a baby-

Clara: No, just like when someone takes me into their arms.

⁴ The diachronic dimension refers to the evolution of the experiential space or ‘landscape’ of a subject in time (Petitmengin et al., 2019).

This is an example where Clara – instead of describing her experience – started to judge it because she felt that it was ‘crazy’ or that it would appear ‘crazy’ to others. By firmly reassuring her that I was not interested in judgements and subsequently asking her about the details of the bodily feeling that she had started to describe, I was able to redirect her attention to the feeling’s location. After indicating its location with gestures and words, she briefly hesitated again, and I promptly interrupted and reassured her. She then went on to describe the quality of the feeling but interrupted herself yet another time with the comment ‘Now even I think, I’m crazy, but that’s the way it is’. I insisted on her to stop judging her experience, telling her that it prevented us from ‘looking at it’. I then went on to reformulate the last descriptive element she had mentioned and asked her to talk about it in more detail. It was not necessary for me to explicitly tell her that I was not interested in judgements or that she should stop judging her experience. I could have simply redirected her attention back to re-enacting or to non-judgmentally describing the re-enactment. However, since it was our first interview about an experience of eating and vomiting, I wanted to make it clear to her that judgement was *in general* unfavorable during our interviews. In the following interviews about experiences of eating and vomiting, she was indeed not hesitant and did not make any judgmental remarks when she described similar and other feelings as having ‘positive’ qualities.

Lastly, Petitmengin suggests encouraging the interviewee to use generic terms such as “‘this feeling’, ‘that’, or ‘this strange thing’” (Petitmengin, 2006, p. 240) to refer to aspects of experience which emerge into awareness but have not been adequately verbalized yet. This role of a pointer can also be assumed by non-verbal, visual, or kinesthetic symbols. Having the possibility of explicit reference is supposed to help the interviewee to stabilize her attention on vague or not yet describable awareness. In contrast to generic terms, Clara and I used neologisms and gestures to refer to aspects of her experience which she had not had clear awareness or a clear verbal description of yet. The following excerpt is taken from an interview focusing on a moment about one hour before eating and vomiting.

Clara: ...with the red folder that was, um, how should I put it? Somehow, I would say, a rather positive stress, well, stress but also positive stress, because I also, well, I’m actually doing it, I liked doing it. Like it was clear to me that I like to go there, but nevertheless also this, oh God, I won’t sleep again, or sleep so little, like it was, also a bit of a conflicting, (...) how can I describe the feeling? (thinks) Hm. How can you describe positive stress? I don’t know, I’m just

wondering if I can think of a comparison or something, or some feeling that I can associate with it. Positive stress. Hm. (thinks) (mumbles) Well, the positive stress is maybe more like, how should I put it, like a bit, well, I'd describe it as being in love, in the stomach somehow, when you're in love, you're also kind of excited, but it's also positive, that's how it was with the positive stress.

At this point in the interview Clara had no clear description or awareness of the different elements of experience which constituted what she called 'positive stress'. Towards the end of the excerpt, she begins to describe it by indicating its bodily location, namely the stomach area.

From 'what' to 'how'

In addition to redirecting the interviewee's attention from the present to the past, the interviewer directs it from the objects of awareness towards the modes of their appearance, from the perceived towards the act of perceiving. Petitmengin refers to it as directing the interviewee's attention from the 'what' to the 'how'. "For example, if it is a matter of describing an inner image, instead of asking questions concerning its content (the objects seen), she asks questions such as 'When you see this, how do you see it?', in order to draw the subjects' [sic] attention towards the size, distance, direction and persistence of the image... or any other generic or structural feature that gradually emerges from the analysis work" (Petitmengin et al., 2019, p. 695).

Although she distinguishes between the content of experience and its structural features, between the 'what' and the 'how', a strict separation between the two is not possible. Petitmengin herself says that "a statement such as 'I see a blue elephant', while describing the content of the image (what is seen), also includes a descriptive element of the image itself (how it is seen): 'blue'" (Petitmengin et al., 2019, p. 703). In my view, the perception of content, in this case the perception of an inner image of an elephant, is, amongst others, enabled by perceiving a wide range of descriptive or structural elements as a whole, as a single entity. Usually, we perceive this entity as an instance of something, at least we perceive it through the lens of our previous experience (Clark, 2013). Content, therefore, does not exist independently of the one who perceives but is inherently tied to the process of perceiving. Avoiding perceiving content is a very difficult task, partly because we are not used to it. It is most likely impossible not to refer to the content of experience during a micro-phenomenological interview. Whenever the interviewee

refers to the content of experience, however, it is the interviewer's task to help her determine the mode of its appearance. The more structural characteristics they discuss the finer the granularity of the description becomes. An 'inner image of an elephant', for instance, is a rather generic description and can refer to many different instances. By specifying its structural features, the description loses its generality. Thus, shifting the focus from the content to the mode of its appearance goes hand in hand with successively generating a more fine-grained description.

Questioning the interviewee about why she was experiencing something, on the other hand, can be avoided easily. 'Why' questions lead her to describe her objectives or make other abstract considerations instead of attending to the processes which the explored experience in fact consisted of.

The singular experience

In a similar manner it is important to ensure that the interviewee does not make a generalized statement, but is referring to a *singular* experience "which is precisely situated in time and space" (Petitmengin, 2006, p. 242).

In the following excerpt Clara talks about a voice she heard during the last few seconds before vomiting that same evening. As apparent from the excerpt we discussed some of its characteristics already earlier during the interview. Because she seems to hear 'the same' voice during other experiences of eating and vomiting, there are a few parts in the transcript, marked in italics, where she makes generalized statements. It is also apparent how I try to direct her back to the characteristics of the voice she heard *that day*.

Constanze: Okay. Alright. That was when, when you swallowed and you already felt sick. And what happened next?

Clara: Yes, then I knew I couldn't do it anymore, (grimaces regretfully) I mean

Constanze: How did you know?

Clara: The thought just came into my head, like, 'I can't do it anymore'.

Constanze: But that was the thought we discussed already, or was this the next thought?

Clara: No, that was still the one.

Constanze: Okay.

Clara: It's such a hammering thought, *it always comes back to me, it always comes back, it's always this thought, I hate it.* (laughs regretfully) (opens eyes)

Constanze: It also comes often, (Clara: Yes) meaning when you are in this situation you hear this voice in your brain more often? (Clara: Yes) So the sentence really repeats itself, you hear it repeatedly?

Clara: (nods) (closes eyes) And also this, this, this voice and yes eww (disgusted noise) I don't want it at all, I hate it, but yeah it keeps coming back. *And I can't fight it anymore. I've been through it many times with my therapist, but that's just the way it is* (gestures with hand and face), yeah. (laughs)

Constanze: But this voice, um, it was relatively neutral before, (Clara nods) like very like, like det-, decided, but not unpleasantly loud, or unpleasantly in tone or anything. (Clara shakes head) Does it change, or does it stay the same and simply repeat itself?

Clara: It repeats itself. It doesn't change, *I just can't hear it anymore, because I hear it almost every day.* (laughs) Like it's not bad, but to me it's just that I already know what's coming next.

Constanze: Yes. (Clara opens eyes) And it doesn't change in terms of location, does it stay in the same place in your head?

Clara: Yes, *I don't know how it is on other occasions, I can't say*, but today it didn't (Constanze: You hear it repeatedly now too, right?) (nods) Exactly.

Constanze: I mean you hear it more than once. That's what I'm talking about. (Clara closes eyes) I'm just talking about whether it changes during these repetitions today.

Clara: (eyes closed) (thinking) Over and over again. (moves head up and down)

Constanze: How often would you say it occurs approximately?

Clara: Oh, until I have vomited, (opens eyes) I don't know, I can't tell. Until, until I was at the toilet. Feels like fifty times.

Constanze: What was the approximate time frame?

Clara: (closes eyes) Ten, twenty seconds (opens eyes) until I was at the bathroom, no idea.

Selecting a singular experience to be explored is the most essential step at the beginning of each interview. For the selection of a singular experience Petitmengin distinguishes between three cases: ‘cognitive processes’ easily reproducible during the interview setting, experiences which cannot be reproduced at will and last only a short period of time, and experiences which cannot be reproduced at will but last for several hours or several days. The experiences which Clara and I explored fall somewhere in between the last two categories. Although it is possible to conceptualize the experiences of eating and vomiting and the preceding experiences of highly divided attention as disjunctive, it is more likely that they are interrelated (the results of our interviews make this hypothesis quite plausible). I conceptualize the experiences of eating and vomiting, which lasted a few minutes, and the preceding experiences, which lasted a few seconds, as several specific moments which must be understood in relation to each other. In other words: I assume that the process of eating and vomiting must be viewed as embedded within Clara’s experience outside of eating and vomiting. For long-lasting experiences such as these, Petitmengin suggests that the interviewer help the interviewee to select one or several specific moments. She gives as an example preictal feelings which can last up to a few days (Petitmengin, 2006).

Selecting experiences of eating and vomiting was relatively easy. During the period of our interviews Clara was eating and vomiting nearly every day, often multiple times per day. We usually chose a singular experience of eating and vomiting which occurred on the same day or the day before the interview. In many cases we conducted the interview immediately after she had vomited. The first step always consisted in identifying a starting point for the period of time which we would discuss in detail. The starting point was usually a moment shortly before she began to serve the food.

Selecting moments of highly divided attention preceding the process of eating and vomiting was a little more intricate. Due to the previous DES studies, I assumed that states of divided attention most likely occurred frequently throughout the day. Therefore, we tried to identify moments in which her experience consisted of a large number of different elements. While it was by no means a selection criterion, they sometimes also explicitly encompassed feelings, inner images,

and inner hearings related to eating and vomiting. Some of these experiences occurred already hours before eating and vomiting.

An excerpt from our very first interview illustrates the underlying idea very well. Our initial contact, that is a phone call, and our first interview took place on the same day. We talked on the phone around 2 pm and started interviewing around 9 pm. She had vomited only half an hour prior to the interview and also a little earlier that afternoon. In the following excerpt she talks about the moment in the afternoon shortly before she started to eat. Importantly, these excerpts serve to illustrate the selection of specific moments and are not complying with micro-phenomenological principles.

Clara: ...then I got up from the sofa and saw something to eat. In this case, it was actually leftovers from lunch. And that was when I actually noticed, well, I saw it and then it was like a, like a, I don't know how to describe it, like a blackout in my brain

That day, she experienced 'a blackout', a moment of losing control shortly before eating. In the same interview, she also said that she has a blackout every time she eats and vomits. I was interested, however, and asked her whether there was an earlier point in time when she felt drawn to the relief of eating and vomiting.

Constanze: ...is this, this 'I'm drawn to the food' or to this, to this relief, what you call it. Did that really only happen when you saw the food from the sofa, or is it possible that this had somehow already begun earlier, for example with canceling on your boyfriend, that somehow a process had begun earlier?

Clara: I'm just saying that when I saw the food, it was clear. But I think it has, well, yes, I feel that it already started before that. I can even imagine, um, I've never talked about it with, oh yes I have, with one friend I've already talked about it. Well, I can even imagine that it already started, wait a minute, so about when we talked on the phone. Not because of the phone call, not at all, it's just that I was insanely tired, in my head I was already calculating, I don't know, I'll be in the office at this and that time, I still have to do this and that, then I can lie down. And then I'll go to my boyfriend, or not, as it turned out later. And it was somehow a dreadful feeling, I'll call it that. Yes, whether everything works out the way I want it to work out, well, yes works out, works out the way I want it to work out. Because I'm in pain and so on. And for me

[eating and vomiting] is always, I think, in my head it's always the solution for everything, sort of, yeah. So it is possible that it already started at that point

Apparently, Clara had been having many stressful thoughts and feelings just before I called her at lunch, a few hours prior to the 'blackout'. In fact, we explored approximately five seconds of the period of time shortly before the phone call in a micro-phenomenological manner later during this first interview. Similarly, there was a moment at least one hour before eating and vomiting when she felt an inner struggle because she felt she would not manage to not vomit.

Clara: ...it was a mixture of a bit desperate, angry. But somehow I also, I think, I didn't really want to, um, how should, um, admit to myself that I know I won't make it, even though I planned to, it was like a, it was so strange innerly, like again, again like a, I can't trust myself, like divided or torn or something, this wanting and trying, and still not making it and knowing that you won't make it. And above all, what does it mean to know that you won't make it, that's already stupid, I can't know what will happen in the future, that, that's now, that was just innerly, I actually, I thought to myself at that moment, actually I still have the possibility to make it, but somehow I knew it, and it just annoyed me that I knew I wouldn't make it, although theoretically I still could have. A kind of being angry about it.

Constanze: Um the feelings um how was that, the being angry or this being torn, how did that feel?

Clara: Well, um. So it was, it was a bit, I would say, a kind of pulling in the body somehow, not a tearing, because I said torn, but it was more like a pulling in the body as if something would just pull inside of me, strange like, well, when I connect with it now, it's more in the chest area.

Simultaneously with this feeling, she experienced the innerly spoken words 'Shit, I won't manage again' in the form of a silent scream. According to her, that was when she started focusing more on her thoughts than on her boyfriend whom she lay next to. This shift from the perception of her surroundings towards the perception of inner hearings, inner images, and bodily feelings turned out to be very characteristic of her experience of moments which did not involve eating and vomiting. Starting points were moments in which she experienced many such simultaneously occurring 'inner' phenomena.

The diachronic dimension

After settling on a starting point, we would begin to discuss the diachronic dimension of her experience until I had a rough idea of its different phases. We then discussed these phases and their subphases in greater detail. This was by no means a linear process but a highly iterative one. More often than not, we ‘jumped back and forth in time’. Sometimes to look at a not yet or not sufficiently described dimension, sometimes to clarify the exact temporal arrangement of already addressed elements. As Petitmengin puts it, “micro-phenomenological interviews have an iterative structure which helps subjects repeatedly evoke the experience to be described while guiding their attention towards a progressively finer synchronic and diachronic mesh” (Petitmengin et al., 2019, p. 695).

The following are two excerpts from the description of a moment shortly before Clara had a blackout and vomited. The excerpts show how we try to elucidate the temporal arrangement of different but interwoven bodily feelings, a change in visual perception, inner hearing and body position.

Constanze: (Clara’s eyes are closed) And at this point, you said before, actually a depressed feeling emerged after, after looking in the mirror. Was that after looking in the mirror, or was that

Clara: That was after, well, because of looking in the, well, shortly after, yes.

Constanze: Okay. And this condensing, was that the depressed feeling, or (Clara: No) (Clara shakes her head) what was the depressed feeling?

Clara: The depressed feeling was more like, well not more, the depressed feeling was (short pause) anyway not much, (puts right palm on right side of face) also in the face, well especially at the eyes (thinks briefly), that I somehow in the eyes, that I felt, that a few tears are coming, I mean I didn’t start crying, like the feeling also in my jaw, that it’s cramping up a bit, um, and like a little lump in my throat, like when I have a lump stuck in my throat, and (thinks) I’m thinking, was there something else. Eyes, jaw, lump in the throat. And ah, yes such a, also a, in the heart area, I don’t know exactly where my heart is, I just call it my heart area. A bit left of the sternum (pause) a pulling (asking) no, wait a minute, pulling is not the right expression, rather a twinge. A twinge, yes. (pause) (mumbles something) (pause) Well that was this feeling, that these, these feelings, I’ll say eyes, jaw, throat, heart, I’ll just call it that, um, they came at the

same time, so they didn't, they didn't come one after the other (gestures with right hand and makes accompanying noises), but it really occurred synchronously.

Constanze: Mhm. (pause) And, um, that, so to speak, that was already, at that point you no longer noticed your face in the mirror, that only appeared afterwards, didn't it?

Clara: That's during, actually, quite during, yes.

Constanze: And the condensing of the heat in the body, or of the heaviness in the body, was that, was that also during, or was that-

Clara: That was also during, but that wasn't the depressed feeling, that was, I don't know what kind of feeling, a heavy feeling.

Constanze: Okay. But did the condensing start before the depressed feeling, or was it exactly at the same time as the depressed feeling?

Clara: (thinks) (mumbles something) The condensing indeed started a bit before, a fraction of a second presumably.

Constanze: Okay. And you also said that you briefly felt even hotter than before (Clara: Mhm) Was that at that moment, or when was that?

Clara: The getting hotter was at the same moment as the condensing.

Constanze: Okay, so really (Clara: Simultaneous.) also- That was exactly simultaneously (Clara: Exactly) (Clara nods) with the condensing, but it was just very shortly before the depressed feeling?

Clara: Exactly.

Constanze: And at this moment you then, did you then at some point avert your gaze from the mirror, or was it in the mirror the entire time? Or can you describe it to me in the further course of time (Clara: Mhm, mhm.), how the feeling persisted, or not, or the look in the mirror

Clara: Mhm, well this, the look in the mirror, at that point this uh condensing feeling appeared, I'll just call it that. Um shortly after that, the depressed feeling and immediately afterwards I lowered my gaze, so I no longer looked in the mirror.

In the first excerpt we talk about the arrangement of various bodily feelings (see Figure 1). Successively it becomes clear that at first, Clara experienced simultaneous feelings of compression, warmth, and heaviness.⁵ She experienced all of this while she was looking at her reflection in the mirror. A fraction of a second afterwards a ‘depressed feeling’ came into her awareness. She describes it as consisting in bodily feelings in four different locations, namely the eyes, the jaw, the throat, and the heart area. The sensations in those four locations emerged into her awareness absolutely synchronous, she experienced them as *one* feeling of being depressed. Contrary to my initial understanding, it became clear that the ‘depressed feeling’ had emerged while she was still looking at her reflection in the mirror.

In the second excerpt Clara describes how she, while lowering the gaze from her reflection in the mirror and successively perceiving an inner image of her face, heard multiple innerly spoken sentences (see Figure 1).

Constanze: So (determined), you said, this thought ‘I look like shit’ (Clara: Mhm) actually came up while you were averting your gaze from the mirror, so to speak, so actually already when you were still looking in the mirror, I think, right?

Clara: Yes, well, it started when I looked in the mirror, and it continued until I (lowers head forwards and raises it again), which is actually a fraction of a second (lowers head briefly), well, until I looked down.

Constanze: Okay, so when the thought started, did you really still see the actual mirror, your actual reflection? (Clara: Mhm) And until when exactly did the thought last?

Clara: Until my head was lowered, so until uh, until I perceived my (hesitates) image, which was not my reflection, this mental image of me, completely, meaning not only forehead, nose, thing (points with left hand to the areas), but the whole image, so to speak.

Constanze: And then you thought to yourself (Clara mumbles something) ‘Just how I feel’. What?

Clara: Yes, exactly, ‘Just how I feel’, yes. (nods) (opens eyes)

Constanze: And that was (Clara closes eyes) directly afterwards?

⁵ Earlier in our interview she had already given detailed descriptions of those feelings.

Clara: That was directly afterwards, yes. When I already perceived it [the inner image] completely, mentally.

Constanze: Okay. But the whole time while you were thinking to yourself ‘Just how I feel’, did you perceive this inner image the whole time?

Clara: Mhm. (nods)

Constanze: Okay. And then this ‘Why do I feel like this’ came. When did this come?

Clara: That came right afterwards, but then this inner image went away again, um. Yes, wait a moment. (pause) Then I straightened up a bit, well, straightened up is stupid, just a bit, and (puts face in both hands) I sort of did this then. ‘Why do I feel so bad today?’ (strokes her face with her fingers and palms in a circular motion; slightly outward, downward and inward again) And then ‘Oh right, I remember’.

Constanze: Did you have, at the time of the ‘Oh right, I remember’, did you have the, the head still in the hands?

Clara: Yes, another good question, (props her head in her left hand) I’ll have to think. Um. I quickly go through it again from, from, from, yes, so if I say nothing for some time, I just think briefly, I mean I try to feel my way back in. (about 21 sec. pause) Yes, so I still had my head in my hands, at the time of the sentence uh ‘Why do I feel like this today?’, ‘Oh right, I remember, I mean I’ve just been through a break up’.

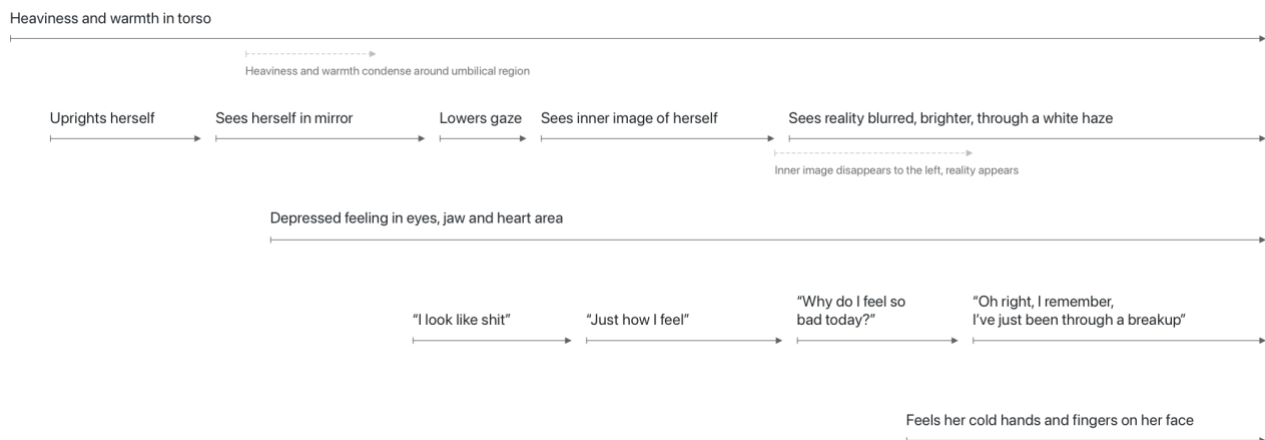


Figure 1 illustrates the temporal unfolding of the experience Clara describes in the above two excerpts.

In essence, we can see that Clara’s experience *appears* to unfold in different phases. Importantly, the temporal arrangement of elements and the division of experience into different phases are

analytical steps which the researcher inevitably starts to perform during the interview process. The division into phases is undertaken by the researcher and not, *per se*, inherent in experience. If we then want to distinguish between the diachronic dimension (as illustrated in Figure 1) and the synchronic dimension of experience this has to be done with caution. The transition from diachronic to synchronic corresponds to a transition from the macroscopic to the microscopic. The researcher tries to carve out, first coarse-grained phases, then more fine-grained ones until she reaches a very microscopic level for which she can discuss the elements of experience in great detail.⁶ The distinction between synchronic and diachronic is, thus, tied to the investigation of experience – not to experience itself. It is tied to the process of ‘dividing’ experience into extremely fine subphases. Sparby (2019) rightfully notes that “synchronic and diachronic aspects are co-constituted, although we can also identify structures that emphasize one over the other. Still, both in practice and on a fundamental level, the analysis of diachronic and synchronic aspects run in parallel; when trying to find what belongs to which aspect, and trying to build an analysis of which processes are inherent in the material, one goes back and forth between diachronic and synchronic aspects” (Sparby, 2019, pp. 152-153). This seeming paradox arises from the above-mentioned fact that the distinction between synchronic and diachronic is not reflected in experience itself; that – as we will see in the next section – even ‘synchronic elements’ such as feelings and innerly heard sentences are time phenomena; and that the diachronic dimension of experience is constituted by the successive unfolding of synchronic elements.

The synchronic dimension

In the above two excerpts we primarily discussed the temporal unfolding, that is, the diachronic dimension of Clara’s experience. As the excerpts show, the elements of her experience align in a way that gives the researcher a plethora of options for dividing them into phases and subphases. Petitmengin suggests that the ‘how’ of evoked experience unfolds in two distinct dimensions: the diachronic and the synchronic. She writes: “The synchronic dimension corresponds to the configuration of the experiential space or ‘landscape’ of the subject at a given moment in time. The diachronic dimension of the experience corresponds to the evolution of this landscape in

⁶ However, as mentioned earlier and discussed below, in practice this is not a unidirectional process.

time” (Petitmengin et al., 2019, p. 695). I already laid out, however, that, in fact, there is no ‘given moment in time’, that is a subphase, at which the experiential space has a fixed configuration. Synchronic units are at best an approximation of this idea. Furthermore, the above example shows that prominent changes in the various dimensions are not occurring in synchrony with one another. One could say that there is a high degree of ‘intersection’ between the different dimensions: Elements of experience belonging to different dimensions (such as inner images, inner hearings, bodily feelings) do not begin to emerge at the same point in time. As shown in Figure 1, quite the opposite is the case. During but at the end of the visual perception of her face in the mirror, for instance, Clara started to hear innerly spoken words. These words were present while the visual perception of her face disappeared and until she could fully perceive an inner image of it. The bodily feelings she described emerged in a similar asynchronous way to both the visual perception as well as the inner hearings.

Since she stated that it lasted only a fraction of a second, the transition of Clara’s visual perception of her face in the mirror to an inner image of it could be regarded a minimal subphase⁷. However, even within that subphase temporal unfolding is happening. The innerly spoken words ‘I look like shit’ appear during this transition. They should therefore be considered part of this subphase. At the same time, the feelings of compression, warmth, and heaviness, and the ‘depressed feeling’ still persisted in her awareness. The subphase thus defined therefore encompasses temporally evolving visual perception, temporally unfolding innerly heard words, and a couple of distinct and partly compounded experienced bodily sensations (see Figure 1). The preceding and subsequent subphases, that is, the moment Clara was perceiving her reflection in the mirror and the moment she was fully and almost exclusively perceiving an inner image of her face, respectively, involve temporal unfolding as well. The moment she was perceiving her reflection in the mirror involves the evolution of the feelings of compression, warmth, and heaviness which she first experienced in almost her whole torso and subsequently condensed

⁷ I am using the term in a loose sense. What I mean is a very short time interval (not more than a few seconds, often presumably even shorter than a second) which is bounded by some major hinge points, that is changes in one of the dimensions of experience. For this time interval it is the goal to describe in detail how the different elements in experience co-constitute it, how they coalesce and how they are arranged temporally. Accordingly, Valenzuela-Moguillansky & Vásquez-Rosati propose that “the synchronic analysis seeks to understand how the structure of the experience is characterized at a given moment. It can therefore refer to the identification and organization of the different aspects that make up the experience at a given time (in a phase or sub-phase) as well as to the identification and organization of the different components that characterize one aspect of the experience at a given time” (Valenzuela-Moguillansky & Vásquez-Rosati, 2019, p. 131).

around her umbilical region. The fraction of a second later, while she was still perceiving her reflection in the mirror, the sensations in her eyes, jaw, throat, and heart area appeared synchronously. As Stern puts it, ‘mental movement’ “is experienced as internal motion. When we think a thought or feel emotion or have sensations, the mental experience is not static. Subjectively, a thought can rush onto the mental stage and swell, or it can quietly just appear and then fade. So can an emotion. It has a beginning, middle and end” (Stern, 2009, p. 313).

The division into subphases does not reflect an existing division of experience. Moreover, we will not, except for very specific moments such as, for instance, blackouts, find a subphase in which experience does not evolve in time. Quite to the contrary, subphases are (hopefully more deliberately than arbitrarily) defined by the researcher. In the above example I chose to use major hinge points in the visual dimension to define distinct ‘units’ when I could have used any other dimension and its respective hinge points to do so. Besides the fact that the visual dimension played a very prominent role in Clara’s experience of moments preceding experiences of eating and vomiting, the choice may be partly attributed to an implicit personal preference of mine and the fact that its hinge points were most ‘clearly visible’ to me. Accordingly, Valenzuela-Moguillansky and Vásquez-Rosati write: “Since the categorization mechanism that underlies the construction of the structure of an experience is deeply rooted in our sensory-motor development, we may not be aware of our categorization patterns (...). Thus, it is possible that different researchers might identify and organize the diachronic and synchronic units differently according to their categorization patterns and the resulting structures would still be consistent with the experience they were studying” (Valenzuela-Moguillansky & Vásquez-Rosati, 2019, pp. 124-125).

Although Valenzuela-Moguillansky and Vásquez-Rosati refer to the analysis procedure *after* the interview, the researcher inevitably starts to identify and organize the diachronic and synchronic units already throughout the interview process (which is also apparent from the transcript presented in the previous section). Regardless of her categorization patterns, the researcher has to encourage the interviewee to go into synchronic depth of at least those elements of experience deemed most relevant to the research objective.⁸ In the above example, she has to encourage the

⁸ This is of course problematic as the researcher, due to having a specific aim, may miss out on crucial aspects. For a further discussion see the section meta-knowledge.

subject to give a detailed description of the feelings of compression, warmth, and heaviness, of the mode of appearance of her inner image, of the characteristics of the inner hearing, and so forth.

I illustrate the process using the example of the feelings of compression, warmth, and heaviness. In the transcript, the excerpt presented in the previous section immediately follows the one presented in this section (which also demonstrates that one can discuss the synchronic dimension *before* the diachronic one). In contrast to the previous excerpt, this excerpt emphasizes the synchronic dimension more than the diachronic dimension. However, it is also apparent that although we focus on the synchronic characteristics of the feelings, we automatically discuss their temporal unfolding as well.

Constanze: Can you describe in more detail what that uncomfortable warmth felt like?

Clara: Somehow heavy, or like, like *oppressive*, as if something was squeezing me a bit. Lying very, very heavily on top of me. Well, yes, *pressing*.

Constanze: Can you tell where it was pressing?

Clara: Yes, in the same area where I already noticed the warmth. I mean, this stronger warmth.

Constanze: And was it, um, really pressing evenly throughout the body, or was it pressing on a specific point?

Clara: No, I think, well, I would say it, um, how do you say that, pressed into the ground, like heavy downwards, a downward pressure like gravity. (...) my body felt so heavy, it pressed the whole of me into the ground, I would say. As if my body was made of iron or something. (...)

Constanze: Okay, but the heat was in this specific area that we've already discussed (Clara: Mhm) and the heaviness was it in the same area, or was it-

Clara: It was in the same area, yes. (Constanze: *Exactly* in the same area?) Exactly in the same area, yes. (...)

Constanze: (...) And the feeling with the warmth and the heaviness and the being pressed into the ground, that was (Clara (softly): While I) at the same moment when you were observing your face in the mirror?

Clara: Exactly.

Constanze: Was it already there before (Clara: Well) you looked in the mirror?

Clara: No, it wasn't, I mean observed, this feeling came as I saw myself, at that moment, but then it changed, as I longer, longer, I don't know, I can't even say what period of time it was, it can only have been a few seconds, but in the next few seconds, I'll say now, it then changed, um, a bit. But the feeling started at the same time, as I perceived myself, as soon as I perceived myself in the mirror.

Constanze: Okay, but not *before*, but exactly with the perception of your face in the mirror?

Clara: (...) *this* feeling was actually shortly before I perceived myself, and *through* the perception of my face, it then changed, I mean the following change occurred.

Constanze: Okay. How long before, would you say, was it present?

Clara: One second, two maximum.

Constanze: Okay. And then after this, after these one or two seconds, you then looked at yourself in the mirror?

Clara: Yes, then I straightened up a bit and (moves right hand horizontally away from eyes and opens palm) my gaze fell on the mirror, and *at that point* I noticed my, um, face, yes, and then the other thing changed, too. (...)

Constanze: So you straightened up, (Clara nods) but this heavy (Clara shakes her head very briefly and immediately starts nodding) being pressed into the ground was still there?

Clara: Yes. (...) The degree of heaviness did not change through the straightening up itself, only after the, after the look in the mirror it did.

Constanze: Okay. How did looking in the mirror change *this* feeling?

Clara: So, the heaviness was still there, I can, I can hardly say whether it was equally heavy or heavier, but it condensed a bit (makes gesture with both hands) (hesitantly), maybe that's why it felt heavier, by condensed I mean, (makes the same gesture and interlaces fingers) like no longer (strokes fingers over the area of the collarbone) from below the neck and up to the

lower abdomen, but it shifted down a bit, I mean still up to the lower abdomen but, from where, I would say, from stomach level, so, (lowers hands from the collarbone down) it sank from above a bit down towards the stomach, it, the stomach was not the center but the stomach was the upper beginning, so to speak. The center is, I don't know, at the belly button, I don't know, when I now touch [Clara's stomach is not visible on the video], no, a little bit above it. Um and this heavy feeling just condensed onto this smaller (makes the same gesture with hands as before at the word condensed) field. Um, as I said, I don't know if it's heavier, but it certainly felt heavier, but yes.

Constanze: Okay, that means, on the one hand, because the volume decreased it became firmer, so to speak, than it was before? (Clara nods) (Clara: Yes, yes) And (...) it felt heavier?

Clara: It felt heavier. (emphasized) (nods) Yes exactly.

Constanze: But did it feel heavier throughout the body, or did it only feel heavier at that point?

Clara: At the point where it was, it felt heavier.

At any given moment, Clara's experience most commonly encompassed a variety of different dimensions (except for specific phases during eating and vomiting). For each minimal subphase we therefore discussed the structural characteristics of each dimension that was part of her experience in detail. The structural characteristics are, as mentioned earlier, designated by descriptive categories – an inner image may appear on a screen, in a certain distance, in a certain location, with a certain size. Generally, inner images were present for only a brief moment and accompanied by bodily feelings and inner hearing, all related in content. Due to this co-occurrence the appearance or disappearance of inner images was often a suitable anchor point for discussing the synchronic dimension of Clara's experience. As we have seen, the major hinge points most commonly occur asynchronously in the different dimensions of experience. Perceiving her face visually, for instance, appeared to have triggered or at least preceded a profound change in bodily feelings. The perception of her face as well as said change in bodily feelings both triggered or at least preceded the inner hearing 'I look like shit'. At the same time, the bodily feelings as well as the inner hearing outlasted the visual perception of her face and might even have triggered or at least preceded an inner image of her face.

I want to emphasize once more that, except for blackouts during eating and vomiting, we did not encounter a moment in which nothing was unfolding in time. The distinction into subphases is

subjective, and to some degree arbitrary. Although Petitmengin suggests that the “unfolding has two distinct dimensions, a synchronic and a diachronic dimension” (Petitmengin et al., 2019, p. 695), there is a fluent transition between the two. It is not possible to ‘freeze’ experience for a moment, to cut it into little slices until the slices become so thin that none of the dimensions is evolving in time anymore.

Taking the ideas touched upon thus far a bit further, I make some additional methodological considerations concerning the role of meta-knowledge, the term re-enactment, and the micro-phenomenological method’s validity as well as its reliability.

Meta-knowledge

As mentioned earlier, part of the interviewer’s meta-knowledge consists of knowledge of the descriptive categories. It plays a decisive role in helping the interviewee to increase the precision of her awareness. The meta-knowledge has to be malleable, constantly adapting to whatever the researcher encounters throughout the interviews. However, Petitmengin remarks that the “gradual process of emergence and refinement of metaknowledge is still relatively little studied and understood” (Petitmengin, 2006, p. 253).

In my interviews with Clara, I tried to incorporate as many dimensions of experience as possible, especially the visual including inner images, the auditive including inner hearings, various perceptions of the inside and the surface of her body, as well as taste, and smell. Many of the phenomena which are commonly called thinking and feeling consisted of an interplay of these dimensions. Even so, it is important to keep in mind that no one can give an exhaustive list of the dimensions of experience nor is it clear to what degree there is a strict separation between them. The kind of meta-knowledge an interviewer intentionally or unintentionally applies, determines to some extent what will be part of the interviewee’s description. Petitmengin notes that the questioning mode of the micro-phenomenological interview is directive in the sense that it “firmly maintains the interviewee in the framework of the singular experience he is exploring, and direct[s] and guide[s] him resolutely in the exploration of these characteristics, down to the depth required” (Petitmengin, 2006, p. 252). This implies a form of directing which she does not explicitly discuss in that paper. Not only does the interviewer direct the interviewee towards certain dimensions while not deliberately encouraging her to attend to others, it is also primarily

the interviewer who decides to what ‘degree of precision’ specific elements of the experience should be explored. In another paper Petitmengin notes: “It is not possible to explore exhaustively all the diachronic and synchronic dimensions of an experience down to the finest levels of detail. In other words, researchers cannot construct the full range of each instrument for the whole of a type of experience. Depending on the research objective, they have to choose the mode(s) of diachronic and / or synchronic unfolding to favor, and the degree of granularity necessary to reach before stopping the investigation” (Petitmengin et al., 2019, p. 721).

Besides knowledge of the descriptive categories, part of the researcher’s meta-knowledge consists of “knowledge about the structure of the experience which forms the subject of the current research, which is gradually elaborated during the interviews and their analysis” (Petitmengin, 2006, p. 252). In my case, the subject of research was experiences of eating and vomiting and experiences preceding eating and vomiting. Contrary to how Petitmengin puts it, I argue that there is no common structure to *all* instances of the type of experience which forms the subject of research – not within and certainly not between individuals. This argument, of course, depends on what exactly one understands by ‘type of experience’. Since the subject of research is commonly a type of experience whose structure we do not know anything of yet (or at least bracket our knowledge), I do assume that Petitmengin is referring to common-sense terms such as ‘the’ intuitive experience, ‘the’ preictal experience, etc. For Clara, for instance, vomiting was followed by an extremely light and peaceful state in most – but not in all – of the instances. Hence, I deliberately chose to discuss instances of eating and vomiting which were followed by a light and peaceful state, as it was the state she was often longing for before and during eating, as well as shortly before vomiting. Not only is this an example of how my meta-knowledge evolved over the course of our interviews, it also shows how I used my meta-knowledge to choose which instances of experience I deemed relevant to discuss in detail. I used this ‘zooming in’ approach (Nicolini, 2009) both to select the instances of experience to be explored and to select the elements of the diachronic dimension which I discussed in greater synchronic detail. Lastly, as my meta-knowledge about Clara’s experience increased, I ‘zoomed in’ on the temporal evolution of specific descriptive categories such as temperature and brightness, as well as on specific sensations in her torso. Importantly, I did not purposefully leave out any dimensions of experience that occurred during the period of time which we discussed in an interview. Since I could observe certain regularities, however, I questioned Clara about those to a greater degree of precision than about other aspects of her experience.

All of this is not to say that phenomena cannot emerge if the interviewer has no meta-knowledge about them yet. For instance, Petitmengin remarks that during her research she encountered descriptions “of sensations that were neither interoceptive nor exteroceptive, and with no defined sensorial mode” (Petitmengin, 2006, p. 252) which did not fit into any of the descriptive categories of a sensation that she had constructed thus far. The discovery of these sensations led her to create new descriptive categories which she subsequently used to “guide other persons towards becoming conscious” (Petitmengin, 2006, p. 252) of them. While I am not aware of having discovered a yet unknown descriptive category during my interviews with Clara, I did encounter numerous remarkable phenomena which I was not expecting in the slightest.

Retrospect and re-enactment

However short the time interval between the experience and the process of its description may be, experience can only be described retrospectively. Because of this necessary distance between the initial experience and its description, the micro-phenomenological method was developed to enable the interviewee to enter into close and embodied connection with her initial experience. Ideally the “past situation is ‘re-lived’, to the point that it is more present than the interview situation” (Petitmengin, 2006, p. 245). In a sense the present and the past can be regarded deeply interwoven counterparts where the receding of one opens up room for the other. The interviewee is supposed to immerse herself as best as possible in her past experience, successively exploring all its different dimensions. Petitmengin calls a state of deep connection with one’s past experience re-enactment. According to her, there is certain ‘objective’ or observable criteria for the interviewer to assess the quality of re-enactment. Some are verbal, such as the use of the present tense when talking about the past, some are para-verbal, such as the slowing of the word flow, some are co-verbal, such as referential gestures, and some are non-verbal, such as shifting and ‘unfocusing’ of the eyes. I do not fully agree with the idea of a set of objective criteria to evaluate the quality of re-enactment. Certainly, it is true that if the interviewee fulfills this set of criteria, she is very likely in deep connection with her past experience. On the other hand, there might be interviewees, who do not fulfill one of the criteria even if they are in deep connection with the past. Clara, for instance, almost always closed her eyes in order to connect to her past experience. She was very calm, the atmosphere was often almost trancelike, and her flow of

speech slowed down significantly, often there were periods of silence. However, it was not common for her to use the present tense when describing her experience.

In other words, there might be a set of criteria which is helpful for assessing the intensity of re-enactment, but most certainly none which is necessary. Judging the intensity of re-enactment may be a far more subjective process – both from the perspective of the interviewer as well as the one of the interviewee – than the existence of a set of ‘objective’ criteria suggests.

Validity

This has important implications for the validity of the micro-phenomenological interview which Petitmengin suggests to measure not in terms of “representative exactitude, or adequacy in relation to a pre-existing experience, but according to the manner of its genesis, the quality of contact with the experience in which the description originates, and the remoteness of its source” (Petitmengin, 2006, p. 258). Hence, the validity of a description generated during a micro-phenomenological interview is contingent on the intensity of re-enactment, not on the correspondence to the ‘original’ experience. The intensity of re-enactment, however, and in general the validity of qualitative methods cannot be measured objectively (Przyborski & Wohlrab-Sahr, 2014). The interviewer can observe certain indicators, verbal, non-verbal, para-verbal, and the presence of co-verbal gestures but the quality of connection remains a subjective experience which cannot be reduced to observables. The validity of the method is anchored in the subjective experience of the interviewee, the subjective experience of the interviewer and what emerges through the interaction between those two specific individuals in a specific situation.

Re-creating versus re-enacting

Regarding its validity, one objection which Hurlburt and Akhter raise to the micro-phenomenological interview is that interviewees are either asked to “create experience *de novo*” or to “‘re-create’ experiences repeatedly” (Hurlburt & Akhter, 2006, p. 286). In other words, the descriptions generated are not descriptions of ‘naturally’ occurring experiences. While Petitmengin has indeed conducted interviews about experiences which she induced during the interview process itself, such as asking her interviewee to imagine an elephant, this presents a

very specific application of the method⁹ which does not apply to my research. The second reproach, however, is one that I would like to discuss in more depth. The distinction between re-creating and re-enacting is by no means a mere terminological one (Benetka & Slunecko, 2021). Petitmengin explicitly states that “we do not have the epistemological naivety to believe that a description, even if produced with discipline, can be ‘true’ in the sense that it would exactly reflect the initially lived experience. Each moment of explicitation introduces a transformation: the relived experience, the reflected experience, the experience put into words are new experiences” (Petitmengin, 2006, p. 258). As we have seen Petitmengin’s conception of validity does not depend on the truthful re-creation of the experience, but on the quality of the process of becoming aware of it. Hurlburt’s criticism insinuates a conception of validity which relies on “representative exactitude, or adequacy in relation to a pre-existing experience” (Petitmengin, 2006, p. 258). By focusing on “the quality of contact with the experience in which the description originates” (Petitmengin, 2006, p. 258), Petitmengin makes it clear that she is, in fact, not under the false belief that the interviewee forms or should form a replica of the experience she tries to connect to. Hurlburt’s criticism that Petitmengin “seems to make the large, and we think unwarranted, assumption that this enlivened/embodied experience is a faithful replication of some original pristine experience” (Hurlburt & Akhter, 2006, p. 288) is therefore not justified. Even so, adopting Petitmengin’s conception of validity does not exempt us from inquiring into the relation between the re-enacted and the original experience. Even if the re-enactment is not supposed to be a replication of the initial experience, it is supposed to reveal something about its structure. The micro-phenomenological method and its conception of validity are designed to prevent the interviewer and interviewee from deforming the original experience by retrospective interpretations or judgements. However, Petitmengin does not explicitly discuss in which way – if not exactly – the description of the re-enacted experience reflects the structure of the initial experience and in which ways the process of becoming aware may transform it.

⁹ See also the difference between *provoked* and *invoked* micro-phenomenological interviews (Prpa et al., 2020).

Convergence of descriptions

While there appear to be some open questions regarding the method's validity, how to assess its reliability seems quite clear. In principle, the idea is to find homologies, that is, structural similarities across descriptions of one individual as well as across descriptions of different persons. Such convergence of structural features is not appropriate to assess the method's validity. While the presence of structural similarities makes it very likely that descriptions are authentic, their absence does not imply that descriptions are unauthentic. One can easily imagine a singular experience whose structural features are not reproducible but whose description is still authentic. To the matter of convergence Petitmengin says that "the researcher can check through his own experience the accuracy of a description" or "to check the convergence of the descriptions produced by various subjects" (Petitmengin, 2006, p. 255). Contrary to her suggestions, I ensured the authenticity and reliability of the descriptions generated throughout this project by identifying structural similarities amongst the descriptions of one individual (instead of comparing them to my own or other individuals' descriptions). The aim was to show that the structural features of Clara's experiences were not singled out at random but can be found systematically across many of her descriptions. For this purpose, I distinguished between her descriptions of experiences of eating and vomiting and the ones of specific moments preceding such experiences.

The fact that Clara's descriptions of moments preceding eating and vomiting appear to share structural similarities with the descriptions of women with bulimia in DES studies makes these results even more reliable. In summary, although convergence – whether within individual, between individuals, or even across methods – is not necessary for the validity of descriptions, it makes it very likely that they are, in fact, accurately reflecting aspects of the explored experience.

Additional remarks

Related to the above, Hurlburt and Akhter criticize that the micro-phenomenological interview "starts with at most one pristine experience and tries to 're-enact' it as identically as possible. To the extent that that re-enactment is successful, whatever (presupposition-driven) distortions that were in play in the first telling are likely to remain in play in every subsequent re-enactment;

there is no new-experience-driven self-correcting mechanism” (Hurlburt & Akhter, 2006, p. 290). While this is true for projects in which individuals are interviewed multiple times about the same experience, it does not apply to the current project. As Clara and I have explored six experiences of eating and vomiting as well as six moments preceding experiences of eating and vomiting there *was* a ‘new-experience-driven self-correcting mechanism’. However, at no point we discovered that one of our earlier descriptions or assumptions turned out to be inaccurate. Clara was evidently very cautious with choosing her words and making sure that her words matched what she had experienced. It seemed that she always openly stated when she was unable to describe or ‘remember’ something. Very likely, however, we simply missed out on certain aspects of her experience. This was especially apparent in one interview where Clara got so tired that she was unable to re-enact anymore. When we resumed the interview the next day, she was able to give very detailed descriptions of multiple inner images, inner hearings and bodily feelings which she had been unable to access the night before. Moreover, we might have missed out on certain aspects which were not as apparent to her. In one of our interviews, for instance, we discussed an experience where Clara put on her shoes, left the house and got into her car in order to run a couple of errands. She described being aware of innerly heard words and inner images before she got into the car. When she gave me a rough overview in the beginning of the interview, she mentioned that her head felt lighter once she was in the car because she worked out a structure how to handle everything. When we began to generate a detailed description of that exact subphase of the moment, however, she did not mention this feeling until I explicitly drew her attention to it. I was aware of the presence of the feeling as she had mentioned it earlier, if I had not been, it might have not been part of the resulting description.

Similarly, Hurlburt and Akhter state that “the DES iterative procedure trains its subjects to be better and better prepared to apprehend and report pristine experience and then sends the subject out to observe again. Each sampling day, the subject gets more and more practice (...)” (Hurlburt & Akhter, 2006, p. 290). Since Clara and I discussed a range of *different* singular experiences this is also true for my approach. However, I do not think that getting ‘more and more practice’ is purely beneficial. In a sense, it is. For example, Clara would give almost no satellite

information¹⁰ after our first interviews. Moreover, with time, she very easily found her way (back) into a re-enactment state. In this respect, I had to give her only few directions. On the other hand, she also expected certain questions or at least that I would be interested in specific descriptive categories such as brightness. This might have led to an overemphasis on aspects of experience whose exploration was encouraged from the beginning and might have restricted the freedom with which we explored the subsequent experiences. Furthermore, it had an impact on her experience in everyday life. For instance, as early as our second interview, she described deliberately trying to reflect on her experience as it was happening so she would be able to report exactly how long it lasted.

Clara: I even counted off, 5 seconds approximately, because during these 5 seconds I was still thinking of ‘I have to think, how many seconds is that approximately’

Hence, we should be aware that any form of ‘assisted’ introspection, be it DES or the micro-phenomenological interview, changes the way we, the interviewee as well as the interviewer, subsequently experience.

Another issue which I already touched on earlier is the one of retrospection. For all methods it is similarly true that they can only be applied in retrospect. Hurlburt and Akhter argue that DES minimizes “retrospection as much as possible, requiring the subject to jot down notes immediately after the experience is beeped, and conducting the interview within 24 h” (Hurlburt & Akhter, 2006, p. 291). Since the experiences we discussed all took place on the day of or the day before the interview, respectively, this is also true for my approach. I could have also asked Clara to take notes after certain experiences. Since the core feature of the micro-phenomenological interview is the ‘re-lived’ experience, the decisive question is whether notes would enhance the quality of the ‘re-living’, that is the quality of contact with the original experience – this is still to be tested.

Lastly, Hurlburt and Akhter state that Petitmengin’s methodological framework is pervaded by various presuppositions. At the example of her study of ‘the subjective experience of intuition’ (Petitmengin, 1999), they argue that Petitmengin presupposes that intuition ‘is a unitary process’,

¹⁰ Satellite information is any type of information which does not concern the procedural aspects of the experience. It includes descriptions of the context, of beliefs, of judgments, and of related theoretical knowledge. Moreover, it includes descriptions in which the interviewee is referring to experience *in general* or in a depersonalized way (Valenzuela-Moguillansky & Vásquez-Rosati, 2019).

that it is always accompanied by subjective experience of it, and that “subjective experiences of intuition share common characteristics within and across people” (Hurlburt & Akhter, 2006, p. 293), in particular also in the different sciences, professions and daily life. Moreover, they criticize that she assumes that people are “able to access ‘the moment of intuitive breakthrough’” (Hurlburt & Akhter, 2006, p. 293), and that in consequence interviewer and interviewee may “collude to talk about intuitive experience regardless of whether a pristine intuitive experience ever actually existed” (Hurlburt & Akhter, 2006, p. 293).

I now delineate why the above listed presuppositions do not apply to the present case study (while they may or may not apply to Petitmengin’s study of ‘the subjective experience of intuition’). First and foremost, I did not presuppose that eating and vomiting ‘exists as a general phenomenon’ or that it ‘is a unitary process’. Quite to the contrary, I tried to make clear that even between Clara’s experiences of eating and vomiting there may be instances which share a high degree of structural similarity and others which exhibit a slightly or even profoundly different structure. Furthermore, I did not presuppose that she would be able to access the moment a phenomenon took place. Again, quite to the contrary, Clara was often unable to describe what had happened in a certain period of time. This was the case, not exclusively, but primarily for moments during eating and vomiting. Besides the focus on experiences of eating and vomiting the topic of our research was not fixed. Other moments we explored were very diverse in terms of when, where and with whom they took place. Additionally, since eating and vomiting is something less abstract than ‘an intuitive’ experience, it was obvious that the process we were investigating indeed took place.

Preparing analysis

In the interview, the elements of experience are not discussed in their chronological order. One of the main tasks during analysis consists therefore in determining the diachronic structure of experience. In order to retrieve a chronological description of the experience from the transcript, the researcher first identifies all the utterances which concern the procedural dimension of the experience. In a second step, she excludes commentaries, beliefs, judgments, explanations, and theoretical conceptions about the experience from the final description (the only exception to this rule is information regarding the context, for instance, when, where and with whom the

experience took place). The remaining utterances are then arranged in their chronological order. From the transcription up to the chronological reorganization of the selected utterances, I followed the analysis procedure as described in (Petitmengin et al., 2019) and (Valenzuela-Moguillansky & Vásquez-Rosati, 2019). As discussed earlier in this chapter, I tried to identify homologies, that is, recurring structural features, amongst Clara's descriptions of experiences of eating and vomiting and amongst her descriptions of moments of highly divided attention preceding such experiences. In principle, this approach is still in accordance with both aforementioned papers. Petitmengin, for example, states that "the analysis consists in progressively abstracting from these descriptions generic structures which are independent of the context and content of the singular experiences described" (Petitmengin et al., 2019, p. 701).

The process of abstracting suggested in the two papers, however, is a very rigorous one which depletes the experience of its complexity and richness. It involves an extremely far-reaching categorization and labelling procedure which seems to originate from a quantitative research logic – or at least an attempt to reconcile the method with 'proper' science (Kordeš, 2019). As Kordeš puts it, the "prescription of detailed 'algorithms' as a preventive measure against the researcher's subjectivity (...) is ineffective and – from a constructivist viewpoint – impossible. By accepting the constructive role of the research process, we accept that the results do not necessarily reflect the researched phenomenon, but the interaction between the phenomenon and the research process" (Kordeš, 2019, p. 150).

Accordingly, my approach to analyzing Clara's experiences was less algorithmic than Valenzuela-Moguillansky and Vásquez-Rosati suggest. The presentation of my results, which I begin in the next section, includes plenty of details rather than abstract categories. The reader should thus be well able to form her own impression of Clara's experience.

Six experiences of eating and self-induced vomiting

In the first part of this chapter, I discuss Clara's experiences of eating and self-induced vomiting. Unlike Petitmengin suggests in (Petitmengin et al., 2019), for my structural analysis I did not develop a common diachronic structure of her six experiences of eating and self-induced vomiting. As mentioned in the previous section, Clara's experiences cannot be subjected to an abstraction process which results in her 'typical' experience of eating and vomiting. This is mainly due to two reasons: her experiences are situated (in real-life) and they are long-running. Because they are situated in real-life there is a plethora of factors in her surroundings that shape her experience. The fact that they are long-running contributes even more to their complexity. In order to highlight the diversity that arises from their situatedness and length I give a very brief summary of each of them.

Summaries of Clara's experiences of eating and self-induced vomiting

Prior to the first experience, Clara had bought a large box of different Haribos. She is not planning on vomiting. She is trying out different flavors. She is sitting next to her laptop. She reads an email from her dad. It is about her snakes. He wants her to give them away. Although she does not actually want to, she complies with his ideas. To give them away, she has to write an email to a snake expert. After having eaten a few Haribos she stops eating to focus on writing the email to the snake expert. Right after she has sent the email, she notices that she has about five to ten Haribos in her mouth, she is surprised by it. She does not remember how they got there. She feels nauseous and decides to vomit.

Shortly before the second experience, Clara's therapist told her to take good care of her body. She advised her not to buy a whole ring cake but just a piece. Clara innerly hears herself mimicking her therapist's words. She then innerly hears herself say, 'I don't have to do anything, now more than ever'. She gets up to eat ring cake. With minor exceptions she cannot remember

eating and vomiting. She gains back awareness only when she is already sitting at the table and smoking a cigarette.

Clara and her dad work together. During the third experience, they have lunch. She is caught up in a conversation with him. She has inner images of contracts and related inner hearings. She does not perceive herself or her food. When her visual attention shifts back to her surroundings, she visually notices that she has eaten more than half of her food. Previously she had established the rule to eat half of her food for lunch and the other half for dinner. She is in shock and decides to vomit.

In the fourth experience, Clara feels stressed and decides to treat herself to overeating. It is clear that this also entails vomiting. She celebrates the process. When she waits for her food to cook, she feels joy in anticipation. She is pleasantly focused on food. She feels awake. After having eaten two bowls of food, she starts to feel physical discomfort and decides that now is the time to vomit.

Like in the third experience, Clara has lunch with her dad in experience five. At first, she perceives the taste and temperature of her food. Then she becomes so preoccupied with the conversation with her dad that she is not aware of it anymore. When she sees that she has eaten more than half of her food and that her stomach is nowhere near full, she is disheartened and decides to vomit.

In the sixth experience, Clara eats chocolates and watches a TV-show. She perceives the taste and consistency of the first chocolate. She is also aware of taking a second one into her mouth. From that point on, however, she enters a trance-like state. She cannot remember chewing the second chocolate. The next thing she is aware of is seeing five chocolate wrappings next to her laptop. She takes a sixth chocolate. She does not perceive its taste or consistency; she focuses on the TV-show. After her ninth chocolate she feels a bit nauseous and decides to stop eating. She feels tired and lies down and dozes. Her phone rings, and she wakes up. She talks to her estate agent. Subsequently, she feels annoyed because she wanted to rest and decides to vomit.

The diversity of the experiences and its implications

From the above summaries of Clara's experiences of eating and self-induced vomiting it should be clear that the experiences are extremely diverse and complex.

In two of the experiences, for instance, Clara is talking to her father while she eats. She is preoccupied with the conversation, her inner images, and her inner hearings. As a consequence, she does not visually notice her plate until she has eaten more than half of the food. In experience one her attention is similarly focused elsewhere. When she notices that her mouth is full of Haribos, she is surprised. In experience two and four, on the other hand, she decides to 'treat herself' to eating and vomiting. In these cases, she makes the decision to vomit¹¹ already before she starts eating. In contrast to all other experiences, in experience six Clara even decides to stop eating and doze instead. Only when her rest is interrupted by a call, she decides to vomit.

Despite the extreme differences in the diachronic structure of Clara's experiences, there are highly interesting homologies which I describe in detail in the following sections. The homologies concern different aspects of her experience. First, I describe changes concerning the perception of her own body and how certain bodily states are tied to very specific stages of the process of eating and self-induced vomiting. Second, I focus on the changes in Clara's 'attention position'. Here I discuss two aspects: *what* her attention is directed at, in particular, whether she is preoccupied with inner images or inner hearings and to what extent she perceives her surroundings and her body; and furthermore, *how many* elements constitute her experience at a given time.

Bodily state

I start by discussing homologies which concern Clara's perceptions of her own body. Above we began to see, for instance, that in all of the six experiences her decision to vomit is immediately

¹¹ Whenever I am talking about Clara's 'decision to vomit', I am referring to an innerly heard sentence. Of course, it is conceivable that these decisions are not made at *one* specific point in time or that they emerge (unconsciously) way before they are innerly verbalized. It is, however, extremely interesting that the decisions were manifest as inner hearings in *each* of the six experiences.

preceded by a negative feeling¹². The feelings – such as feeling nauseous in experience one; feeling patronized in experience two; feeling shocked in experience three; feeling stressed in experience four; feeling disheartened that she is still not full in experience five; and feeling annoyed in experience six – *all* have a bodily component. First, I give a rough timeline of what bodily state occurs at which stage of the process for each of the six experiences. In a second step I give more detailed synchronic descriptions of those states. When reading this section, one should bear in mind that Clara's perceptions of her bodily state are embedded within a network of other sensory perceptions. I describe this network only insofar as it is necessary for the reader to have a rough understanding of the chronology of the experience.

Experience one

After having eaten the second Haribo Clara feels pressure on her chest. At the same time, she feels a pulling towards the Haribos. The two sensations are opposing in terms of direction. Shortly after, she is surprised by the mint taste of the third Haribo. The surprise extinguishes the pressure and the pulling. She is reading on her laptop. She feels hurt. It feels as if she was close to tears, her whole body becomes cool, breathing feels heavier, faster, and shallower. She feels heavy and as if she was stooped over. She stops eating to focus on writing the email. The closer she gets to sending the email, the heavier and the more stooped over she feels. The feeling of hurt is gone when she is surprised by multiple flavors in her mouth. She feels nauseous. She hears an inner voice say, 'I can't do it anymore'. During the ten to twenty seconds that it takes her to go to the bathroom she hears the words about fifty times. At the same time, she feels geborgen¹³ and happy. It is the joy in anticipation of how she will feel after vomiting. Three seconds before she vomits, she starts to feel heavy again. It is the same feeling she felt when she started reading on her laptop. She adapts the same stooped over posture as before. While she is vomiting the feeling slides off her. After vomiting she feels light, flexible, and relaxed. Breathing is easy. She feels happy, geborgen, and calm.

¹² I have no specific definition of the term 'feeling'. I hope, however, that in the course of this chapter it will become clear what kinds of complex phenomena I am referring to.

¹³ I use the German terms 'geborgen' and 'Geborgenheit' as there exists no adequate English translation. They are often translated as feeling safe, secure, sheltered, or comfortable. In the section 'Synchronic descriptions of Clara's feelings' I delineate what her feelings of Geborgenheit consist of.

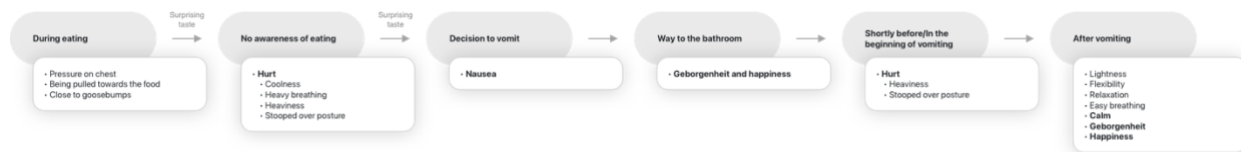


Figure 2 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience one.

Experience two

Clara is lying on her back on the sofa. She hears herself mimicking her therapist's words. She feels a pulling and pushing in her chest. It is connected to her breathing heavier. The pulling feels as if a fist sized part of her chest contracted, the pushing is directed backwards, towards her spine. She also has a tingling sensation on her skin which partly permeates her body. The sensations vanish when an inner image of a ring cake appears. Innerly she hears the words 'I don't have to do anything, now more than ever'. The decision is enwrapped in a light, gentle, and soft blanket in her head. Underneath the blanket, in the middle of her head, a point is being pulled towards her body's core. She feels her mouth watering. It takes her about four to five seconds to get to the kitchen. Her surroundings are extremely blurry. The next element in her awareness is the rancid flavor of an old hot chocolate. Innerly she hears herself say, 'Whoa, the hot chocolate is disgusting'. Subsequently, she also perceives the ring cake in her mouth. With few exceptions, she cannot connect to any dimension of her experience until after vomiting. The next thing she can connect to is sitting at the table and smoking her electric cigarette. She feels light and flexible.

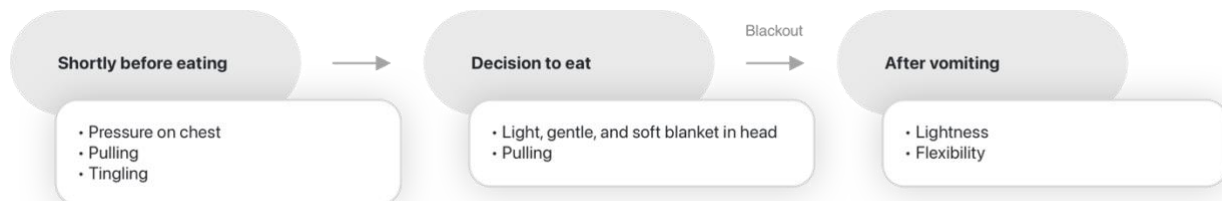


Figure 3 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience two.

Experience three

Clara is about to have lunch with her dad at the office. They got two different dishes for takeaway. She feels worried that she serves her dad the wrong one. It feels as if she became smaller, as if she was crouching. When he starts eating without making any further remarks, the worry is gone. They have a conversation in which she tells him that her bathroom is arriving later than planned. About a second after his unsatisfying verbal reaction, she feels a twitching in her stomach area. The conversation goes on. She feels relieved. The relief entails that she regains visual awareness of her surroundings. As a result, she also sees that she has eaten a little more than half of her food. She is in shock. Innerly she hears herself say, ‘Okay, now it doesn’t matter anymore’. Simultaneously with the words, the feeling of shock dissolves. About a second after the words have gone, it is completely disappeared as well. She continues eating. Shortly after, her dad goes to lie down. As a precautionary measure she waits about fifteen minutes before she vomits. In order not to wake him, she does not close the bathroom door. She does not feel anything besides her stomach and her gag reflex. She hears herself vomiting. It seems a bit loud to her. Innerly she hears herself say, ‘Oh god, I hope he doesn’t hear’. When she notices that it does not become louder, she innerly hears herself say, ‘Okay, no, that’s fine’. She is squatting with a crouched posture. The voice originates from the middle of her body, from her stomach. In the area where the voice originates, she feels that an about egg-sized spot on the surface of her body is a bit cooler than the rest. Her body temperature is pretty warm at that point. The cool spot is completely and abruptly gone as soon as the second sentence is over. After washing her hands, she feels relieved and light. Her body temperature is normal and pleasant. She feels as if she had more freedom of movement in her shoulder and back area. She feels taller. Her body feels more relaxed.

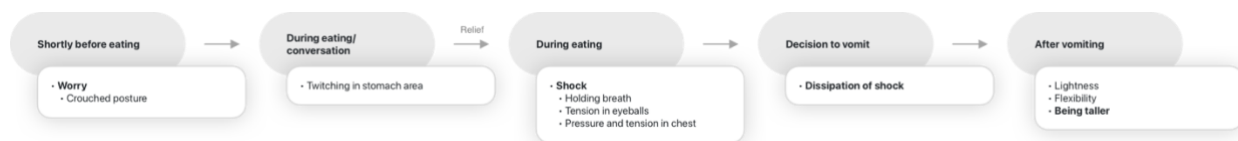


Figure 4 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience three.

Experience four

Clara is leaning on the windowsill and looks outside the window. Innerly she hears herself say, 'Oh God, they're going to cover all the free space with buildings'. She feels tension in her upper body. Breathing is difficult. When she innerly hears herself say, 'But it would also be quite nice to live in a terraced house', the tension and the uncomfortable breathing dissolve. She feels as if her upper chest opened up a bit. She can breathe freely. She feels pleasantly cool. She calls back a worker. She does not perceive anything of her surroundings anymore. She is preoccupied with the call and her inner images. She feels slightly tense. From time to time, she briefly holds her breath. She calls her dad to tell him about additional costs. He says that there is nothing they can do about it. Innerly she hears herself say, 'Yeah great, it's only my money anyway'. During the phone call she has the same stooped posture and shallow breathing as in the beginning. When her dad hangs up, she places her phone on the windowsill. Innerly she hears herself say, 'The only thing that helps now is binge eating'. She starts preparing the food and sets the table. She feels a pleasant tingling in her abdomen.

While the food is cooking, she lies down on the sofa and messages on her phone. She feels loose in her chest area. Her whole body is relaxed. She can breathe freely. She feels pleasantly warm. The tingling sensation and the relaxation last about twenty minutes while her food is cooking. When the timer rings, the relaxation is gone. She feels fidgety and tenser. There is a pulling in her muscles which makes her feel more alert. The fatigue from before is gone. Her mouth is watering. On her way to straining the pasta-rice mix in the sink, she sees an inner film of about three to five seconds in which she is already eating. Simultaneously her body feels light and flexible. She breathes deeply. She feels geborgen. After having eaten only two bowls of food her stomach feels heavy and inflated. The area below her stomach feels not as heavy, but also bloated and firm. She is breathing into her ribcage; she is breathing faster. She hears a voice say, 'What's happening now?'. She eats a little more. When she notices that the feeling does not change, she innerly hears a female voice say that she is going to vomit now. After vomiting she perceives her surroundings clearly. She does not feel exceptionally tired, nor does she feel exceptionally awake. She feels that her feet have to carry some weight. Her abdomen is not tense anymore. In contrast to before it is no longer constricted by her pants. It feels pleasantly loose. She does not perceive her stomach anymore.

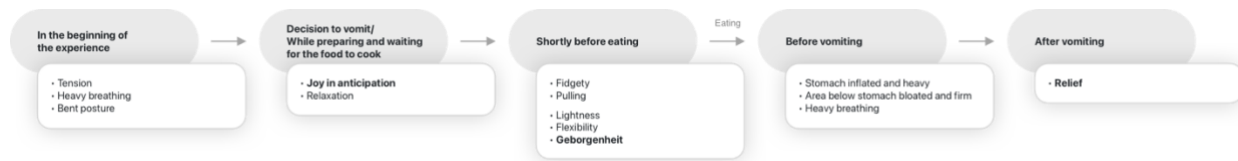


Figure 5 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience four.

Experience five

Clara has lunch with her dad. She is hungry. She feels extremely light. It feels as if her stomach was contracting. She starts eating. During eating she perceives the taste and temperature of her food, the hunger is gone. She feels surprised by sensing cool and soft tomato pieces in her mouth. It feels like goosebumps on the outside of both of her upper arms. She feels relief when she tells her dad that the health issues of her dog are probably not that severe. It is a liberating, relaxed, expansive feeling in her chest. She can breathe better. She sees that she has eaten more than half of her food. At the same time, she feels that her stomach is nowhere near full. It is a cool, light feeling in her stomach, similar to the one earlier but less intense. She finds it disheartening. It is as if she grimaced. Innerly she hears herself say, 'There is still room for more', and 'Besides, I can throw up anyway'. She continues eating. She does not taste the food anymore. When she stands up, she notices that her foot has fallen asleep. She feels tired. Her eyes are heavy. Visually she perceives her movements like in slow-motion. On the way to the bathroom, she innerly hears herself say, 'Actually totally unnecessary'. She still feels a tiny, tiny pulling in her stomach, she is still not full. At the same time, she has a bad conscience. She feels it in the upper chest area and above her navel. In the chest area it feels like something was lying and pressing on it. It is a heavy feeling. In the stomach it is a pulling from the middle to the sides. During vomiting she feels her stomach contracting. After vomiting she feels light and flexible. In comparison to the feeling of slow-motion from before, she feels that she can perform movements much more weightlessly now. Her body parts do not feel as heavy. It feels as if she was smiling. She feels happy and geborgen.

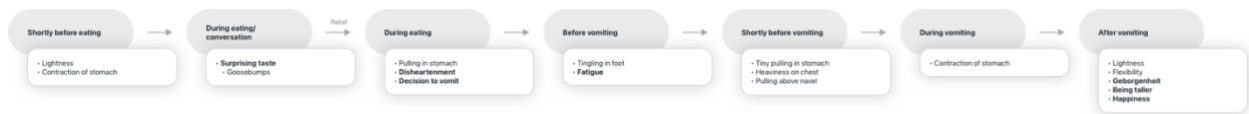


Figure 6 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience five.

Experience six

Clara lies on the sofa and eats chocolates. She reads an e-mail saying that her dad will come to the office later than expected. She feels relieved. Her stomach area feels more relaxed than usual. Innerly she hears herself say, 'Ah, now I can lie down before he arrives'. She perceives the taste and consistency of the first chocolate. After having eaten the ninth chocolate she notices that she is starting to feel a little nauseous. It feels as if someone was squashing her stomach with their hands. In the front and on the sides of her throat she also feels a slight but unpleasant squashing. Innerly she hears herself say, 'Ugh, now I feel sick'. She feels tired. She watches a TV-show, but her vision is not smooth. In between frames her gaze is fixed on one point and her vision is blurry. Keeping her eyes open feels difficult to her. She feels a general heaviness, as if she was pressed into the sofa. Innerly she hears herself say that she is going to lie down now. While she is dozing, she does not perceive anything. Her phone rings. Her chest tenses. Because of the ringtone she immediately realizes that it is not her dad calling. Her chest relaxes. After the phone call she feels annoyed. Innerly she hears a voice say that she is going to throw up now. After vomiting she feels relieved. Her abdomen feels flat, and she feels light. Shortly afterwards, she feels relaxed. She does not perceive any severe tension and she can breathe more easily. Then she also feels joyful. It is a slight pulling from the front of her chest area up to her cheekbones. She goes back to the sofa and lies down. On the sofa she notices that she feels geborgen.

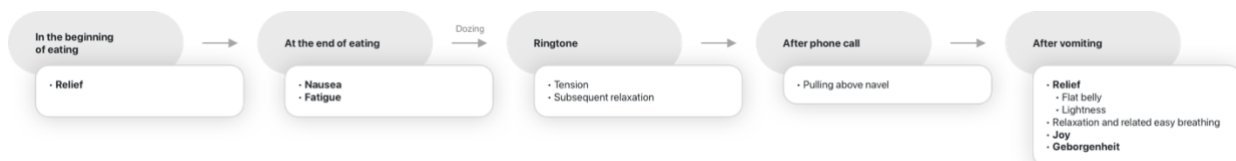


Figure 7 depicts the temporal unfolding of Clara's most prominent perceptions of her bodily state during experience six.

Comparison and conclusions

Before vomiting

As complex and as diverse as Clara's experiences of eating and vomiting are, there are a number of characteristics that they all have in common. Before vomiting, she experiences various forms of tension in her body. Oftentimes she describes it as a form of 'pulling'. Moreover, she often feels pressure, heaviness, fatigue, and a stooped posture. Related to at least some of the before, she experiences breathing as more strenuous. These feelings are in most cases *not* the result of overeating. Only in experience four Clara describes feeling heavy and breathing more heavily because of overeating.

After vomiting

By contrast, Clara feels extremely light after vomiting. Again, experience four is an exception, as she does not feel extremely light – though still lighter than before vomiting. In some experiences she also feels extremely relaxed after vomiting. Related to the relaxation she can breathe more easily. Sometimes she also feels as if she was taller. In half of the experiences, she has strong feelings of Geborgenheit and happiness after vomiting.

Positive bodily states in anticipation

Only in experiences one and four, Clara feels geborgen and has intense positive bodily sensations *before* vomiting and even *before* eating, respectively. In both experiences, however, she has these perceptions precisely because she anticipates them to be there at a later stage of the process. In experience one she experiences Geborgenheit and happiness on the way to the bathroom because she anticipates them to be there *after* vomiting. As seen in Figure 1, they indeed return after vomiting. Similarly, she has positive feelings while she is waiting for her food to cook as well as at the time as she is seeing an inner film in which she is already eating in experience four. In this case – though anticipated – the positive feelings do not return at a later point in time.

It is helpful to keep these two 'exceptions' in mind when reading the following paragraphs.

While they do represent instances of positive bodily states that occur *before* vomiting, they occur in a very specific context: they are experienced in anticipation of a positive feeling at a later stage in the process.

Lightness as a form of relief

Clara often used the words relieved and relieving to indicate how she was feeling after vomiting. The relief itself, however, appears to consist of a variety of different bodily sensations and ‘attention positions’. After vomiting, the most frequent one of them is a form of lightness. This seems especially comprehensible as the German words for relieved and relieving, *erleichtert* and *erleichternd*, contain the prefix *er-* and *leichter*, the comparative of *leicht*. The prefix may indicate a gain, or the process of becoming bigger and *leichter* translates to the English word *lighter*. The relief Clara experiences after vomiting *always* encompasses her feeling *lighter* than before.

The probably most figurative moment of becoming lighter occurs in experience one. Clara feels hurt prior to vomiting. The hurt partly consists of her feeling a blanket on her shoulders whose weight causes her to stoop over. Simultaneously she innerly sees herself carrying the blanket. During vomiting the blanket slides off her and her gaze flows from the inner image of herself carrying the blanket to ‘reality’. After vomiting she feels light.

The perception of self and surroundings as a form of relief

The feelings of relief Clara experiences before vomiting during the conversations with her dad in experiences three and five, on the other hand, do not encompass such an extreme feeling of lightness. The relief in experience three is predominantly characterized by Clara’s attention shifting to her surroundings and her body, when before she was perceiving them only poorly or not at all. I discuss this in further detail in the section ‘Allocation of attention’. In experience five Clara describes the relief as a liberating, relaxed, expansive feeling in her chest where she is temporarily able to breathe more easily. Similar to experience three, however, Clara visually perceives her dad only blurry and her food not at all before she feels relieved. In both cases she visually notices that she has eaten ‘too much’ right after experiencing the relief. In Figure 3 and 5, respectively, these two feelings of relief are depicted on the arrows between the preceding and following bodily states to indicate that they play an essential role in enabling the transition from one to the other. I discuss possible links between a shift of attention position and feelings of relief – including the ones experienced after vomiting – in the section ‘Allocation of attention’.

Surprising tastes ‘erasing’ preceding feelings and inducing a shift in attention

Just like the above discussed feelings of relief, I positioned Clara’s feelings of surprise in experience one on the arrows between the preceding and following bodily states (see Figure 1). As I mentioned in the description of experience one, Clara said that as soon as she noticed the mint flavor, everything else – including the feelings of pressure and pulling – were gone. She moreover said that the surprise ‘erased everything else’. Afterwards she perceived a lot more of ‘reality’.

Her visually perceiving more of her laptop and reading on it, triggered the subsequent feeling of hurt. In turn, the feeling of hurt persists until she is surprised by a lot of different flavors in her mouth. Immediately she feels nauseous – a feeling which she did *not* perceive before and which did not emerge gradually.

It is conceivable that – under certain circumstances – Clara’s sense of taste demands a great share of her capacity to pay attention and is therefore a means to redirect it from feelings, inner images, and inner hearings to what is happening ‘in the now’. Similarly, in another experience, Clara describes how pain is relieving her by distracting her from her constant thoughts. In our interview about experience four, she moreover says that she likes to eat her food ‘burning hot’. There are multiple other points at which Clara makes similar statements. I come back to them in the section ‘Allocation of attention’.

Since the feelings of relief and the surprising tastes discussed above both entail a major shift in Clara’s ‘attention position’, they are positioned on the arrows rather than the boxes in the respective figures. This is to highlight their roles as hinge points in Clara’s experience, instead of referring to the bodily perceptions they involve. However, it becomes very clear that the reason I divided my analysis into one of Clara’s bodily states and one of her attention positions is merely to reduce the complexity of the problem. In reality these two aspects are inextricably linked to each other.

The dissolution of negative feelings in connection with the decision to vomit

Just as the feeling of hurt persists until Clara is surprised by an unexpected taste in her mouth, she is aware of the subsequent nausea until she decides to vomit. In fact, the decision to vomit ‘dissolves’ negative feelings in at least three other experiences.

In experience two, for instance, the pulling and pushing in Clara's chest vanish as soon as the inner image of a ring cake appears. The image of the ring cake becomes gradually sharper. When it is sharp, Clara decides to vomit.

In experience three, Clara's shock about noticing that she has eaten more than half of her food starts to dissolve as soon as she decides to vomit. It is completely gone about a second later.

In experience four Clara feels tense, she has a stooped posture, and her breathing is shallow right before she makes the decision to vomit. By contrast, she feels a pleasant tingling in her stomach right after.

Taken together these examples show that the decision to vomit may immediately 'dissolve' whatever negative feeling was present prior to it. Moreover, it is immediately followed by an exceptionally positive feeling in two of the six experiences.

The relationship between nausea/physical discomfort and the decision to vomit

Interestingly and perhaps contrary to commonsense, there is only one experience in which the negative feeling that is being 'dissolved' by Clara's decision to vomit is nausea. What is more, she only feels nauseous twice throughout all the experiences. Experience one, is the one where the nausea coincides with Clara's decision to vomit. By contrast, she decides to take a rest when she starts feeling nauseous in experience six.

Experience four is the only experience in which Clara feels physical discomfort because she has eaten too much. Indeed, she is surprised by experiencing discomfort after having eaten only two bowls of food.

All in all, we can say that Clara's decision to vomit usually does *not* coincide with experiencing nausea or physical discomfort because of overeating. More so, it appears to be related to feelings triggered by incidents involving other people (in experiences two, four, and six), as well as her internal rules and concepts regarding how much she is allowed to eat (experiences three and five). This suggests that her decision to vomit is largely *not* triggered by 'feeling too full' or actually overeating.

Hunger

A similar pattern we can see with Clara's perception of hunger. Interestingly enough, there is only one experience in which she describes feeling hungry. Throughout this experience there are three moments in which she describes feeling hungry. Importantly while the intensity of the feeling is decreasing from the first to the third moment, she still feels slightly hungry *right before* vomiting. So not only – as discussed in the paragraph above – is her decision to vomit likely *not* triggered by 'feeling too full' she, moreover, *does not* revoke it even when she is still feeling hungry. Everything discussed so far points to the crucial role of internal rules, concepts, and bodily states other than feelings of hunger and satiety in the decisions to eat and vomit.

This impression is especially strengthened by a statement Clara made during our interview about experience four:

Clara: I don't know why today it's difficult for me, it's normally never difficult for me to talk about it, but today it's difficult somehow, because today it triggers me somehow, no idea why, I never had that before, or not consciously, super weird, when I talk about food now, I immediately get the urge to eat again, and I don't usually have that.

Constanze: Are you hungry right now?

Clara: Am I hungry right now? Yes, maybe, no idea, I can't really say exactly how hunger, well, I often can't tell the difference between being hungry and being tired (laughs) that's really difficult for me, I just ate two scoops of ice cream, I can't be hungry (laughs)

For one, she states that she is not allowed to be hungry¹⁴ because she had eaten two scoops of ice-cream before our interview. Moreover, she is unable to tell me whether she is, in fact, hungry or not. While it is possible that she would have been able to perceive it if I had tried to help her becoming aware of it, she does not seem to perceive it spontaneously. She also states that she is often unable to distinguish between feeling hungry and feeling tired. Similarly, she states that it is sometimes difficult for her to distinguish between feeling extremely hungry and feeling nauseous during our interview about experience one:

¹⁴ The English translation 'I can't be hungry' is ambiguous. How Clara phrased it in German, namely 'ich darf keinen Hunger haben', clearly indicates that she is not allowed to be hungry.

Clara: It was a bit of a strange feeling in the stomach, I'd call it that. Maybe a little bit nauseous. Sometimes I have difficulty distinguishing nausea from pain. Um, especially lately. But I would call it nausea now.

Constanze: You have difficulty distinguishing nausea (Clara opens eyes) from pain?

Clara: In the stomach, yes.

Constanze: Okay. What kind of pain do you mean?

Clara: (closes eyes) Um, the pain, like when I, for exam-, I mean, when you're really hungry, it's a bit painful somehow, well, this I have difficulty distinguishing from nausea. Like when I have a stomach stitch or something, I can distinguish that from nausea. But this extreme feeling of hunger and nausea is, (opens eyes) yes, difficult for me to distinguish. (nods)

While Clara appears to have the ability to become aware of her bodily states – otherwise we could not have conducted our interviews in a meaningful way – it seems especially difficult for her to spontaneously distinguish between nausea and hunger, or tiredness and hunger.

Fatigue

There are three experiences in which Clara explicitly talks about feeling *tired* or *awake*. In experience six she talks about feeling *tired*. It is difficult for her to keep her eyes open, and she feels a heaviness in her whole body. Although her rest is interrupted by a phone call, she does not feel tired after vomiting.

When she talks about feeling tired in experience five, she too says that her eyes feel heavy. Moreover, she visually perceives her movements like in slow-motion. In contrast to this, she feels that she can perform movements much more weightlessly after vomiting; her body parts feel lighter than before.

In experience four she talks about feeling *more awake* as soon as her food is ready. Here too, her movements and her body feel light.

All in all, it seems that heaviness and lightness are linked to what she calls being tired and being awake. Since her bodily state after vomiting is most saliently marked by a form of lightness and she not once described feeling tired after vomiting – while she did explicitly state feeling tired

before vomiting in some of the experiences –, fatigue may play an interesting role in the process of eating and vomiting.

Body temperature

After Clara begins to feel tired in experience six, she notices that she starts feeling a little chilly on her left arm and the left side of her back. By contrast, she specifically says that she has a warm feeling on and in the backside of her left upper arm and shoulder blade which extends down to her hip *after* vomiting. She feels this warmth in other body parts as well. I discuss this and all the other feelings mentioned in this paragraph in detail in the section ‘Synchronic descriptions of Clara’s feelings’.

In experience five she too feels warmth in certain body parts *after* vomiting. Moreover, her abdominal area feels unpleasantly cool when she sees that she has eaten more than half of her food. This is also the moment when she decides to vomit.

In experience four she feels warmth while she is waiting for her food to cook as well as when her food is ready.

There is no moment in which Clara feels exceptionally warm or cold during experience three. Only during the moment of relief and after vomiting, she describes her body temperature as pleasant but neither warm nor cold.

In experience two she feels cool while she innerly hears herself mimicking her therapist’s words. Apart from that, she had no awareness of or did not describe her body temperature throughout our interview. However, she had little awareness of the experience as a whole.

The feeling of hurt and helplessness Clara describes in experience one, too, encompasses that she feels cool. By contrast, the feelings of Geborgenheit and happiness shortly before and after vomiting encompass that she feels warmth in different parts of her body.

Conclusively, Clara *never* feels cool after vomiting. There are four experiences in which she feels Geborgenheit. In each of these experiences, warmth is an essential feature of the feeling of Geborgenheit. Coolness, on the other hand, seems to be related to negative feelings, such as the hurt in experience one as well as the reaction to a conversation with her therapist in experience two. In those two cases the coolness occurs rather in the beginning of the respective experience.

Moreover, it may be that Clara's body temperature rises during vomiting. While she is not explicitly describing it *during* vomiting in most experiences, she often describes her body temperature *after* vomiting as 'being back to normal' or being cooler *again*. She also states that vomiting is the 'most heated' moment in the process of eating and vomiting. While this is a generalization and therefore – according to the micro-phenomenological method – not admissible, it is very conceivable that it may be what is happening on a physiological level. There are many possible reasons why Clara did not describe and/or was not aware of her body temperature being exceptionally high during vomiting. The descriptions of the time periods during which she was vomiting are *in general* – not only concerning body temperature – not as detailed as the descriptions of other stages of her experiences.

Lastly, Clara often states that she *always* feels cold and was often surprised when she felt warm during our interviews.

The analysis of our interviews and her statements taken together indicate the specific role body temperature plays in the constitution of certain positive (warmth) and negative (coolness) feelings as well as a potential effect of vomiting on body temperature.

Final remarks

All in all, we can see that – although the most extreme changes in Clara's bodily state appear to occur *after* vomiting – other hinge points, in particular the anticipation of the feeling while eating or after vomiting as well as the decision to vomit, appear to entail major positive changes in her bodily state already *before* vomiting.

In the following I describe in more detail the feelings and bodily states which have often merely been labelled in the current section.

Synchronic descriptions of Clara's feelings

It is safe to say that no two of Clara's feelings are completely identical. However, there are many feelings, such as her feelings of Geborgenheit, which show an often astonishingly high degree of

similarity¹⁵. In this section, I structure my analysis around ‘recurring’ bodily states, rather than going through each feeling in each experience. Clara’s feelings seem to encompass multiple sensory modalities which is why, in many cases, I mention sensations which are not perceptions of her body. That is, I mention a bit of the context in which her bodily states occur.

Food, for instance, is visually unusually salient to Clara, or she has inner images of food when she feels that her body is being ‘pulled towards it’. In the next paragraph I describe three examples of Clara ‘being attracted’ by food.

Being pulled towards food

In the beginning of eating in experience one Clara feels pressure on her chest. It feels as if something heavy, like a medicine ball, was lying on top of it. The point at which the pressure is strongest is located on her sternum about a finger length below her clavicle. It extends in all directions. Simultaneously she feels a craving in all her body parts as far as to the elbows and the thighs. She feels that she is being pulled towards the Haribos. The pressure and the pulling are opposing each other. The pressure is directed towards the back and the pulling more towards the front. The pulling feels similar to how it feels when she gets cold shortly before she gets goosebumps. When she notices that she will get goosebumps in a moment, but they are not there yet. It feels as if she was being pulled towards the Haribos by invisible strings. Visually she perceives the Haribo package brighter, glarier, and more colorful.

When Clara innerly hears herself mimicking her therapist’s words in experience two, she has a similarly structured feeling. She feels a pulling: a contraction of a fist-sized part of her chest starting approximately ten centimeters below her clavicle with a radius of five centimeters. The contraction includes bones and part of her lungs. Simultaneously she feels pressure: It feels as if a round weight of approximately two to three kilos is lying on top of her chest. Just like in experience one the pressure is directed to the back, towards the spine. The pulling is directed towards a point in the middle of her chest, it is pulling from the front and from the sides towards this center point. At the same time, she is breathing more heavily. The innerly heard words are like a veil of mist inside and around her: It is a glibbery, cool, slick sensation on the skin of her face, her hands, and her arms up to the rolled-up sleeves of her pullover; it feels like it does not

¹⁵ This is probably why she used the same terms to refer to them across different interviews.

belong to her. She feels a tingling sensation¹⁶ on her skin which partially permeates the body, it is as if the words are on her skin and are absorbed by her body. In the arms and hands, she feels it to the bones; in the head entirely; in the rest of her body to the end of the fat tissue. While she has these feelings¹⁷, she lies on the sofa. They emerge after her gaze has come out of the back of her head and she begins to visually perceive herself from above. She sees not only herself from above, but also the veil of mist around her. The feelings and the innerly heard words last until her gaze returns back into her head and an inner image of a ring cake appears.

When the ringing of the timer indicates that Clara's food is ready in experience four, she feels a pulling in all of her body. The pulling is directed differently in different body parts. In her left lower thigh, for instance, the pulling is directed sideways, diagonally upwards. In her right upper thigh, the pulling is directed to the front and a bit upward. In her left underarm, it is directed horizontally to the side, parallel to the ground. The shoulders are being pulled sideways and up; the left shoulder to the left, the right to the right. The back muscles are being pulled to the back, the abdomen to the front. In the chest the pulling is directed inwards. It is the same direction as the back muscles, the chest is being pulled from the front to the back and the back muscles are being pulled from the back to the back. Her mouth is watering. Innerly she sees a film in which she is already eating.

The feeling in experience four differentiates from the previous two in that Clara does not feel pressure on her chest. This *may* be due to the fact that – unlike in the other two experiences – she *already 'allowed' herself to overeat* and hence has no inner conflict about it. By contrast, she 'makes the decision' to eat the Gugelhupf shortly *after* feeling the pulling and the pressure in experience two. Similarly, in experience one she unconsciously puts Haribos in her mouth shortly *after* feeling the pressure and the pulling.

It makes sense that Clara feels a strong attraction to food in experiences one, two, and four, but not in experiences three, five, and six. In experience three and five she is caught up in a conversation with her dad and is not aware of food or eating; hence, she cannot be 'pulled towards it'. In experience six there is no point at which she has any form of intention to overeat;

¹⁶ Unlike most other parts of this thesis, the German word translated here is 'Prickeln' and *not* 'Kribbeln'.

¹⁷ Clara described the feelings as restrictive and unclear. The feelings of pulling and pressure she called 'a type of uncertainty in her chest area'.

she simply wants to rest. Here, too, it makes sense that she feels no strong ‘pulling towards the food’.

Next, I discuss feelings which encompass that Clara has the bodily sensation of being stooped over.

Negative feelings and posture

In experience one Clara is close to tears. It is a sensation in her eyes, it feels like she is crying but she is not. Innerly she is growling. She feels that she is breathing more heavily. Her whole body becomes cool as if she was standing outdoors in the open air, left alone. She has a cold feeling from behind; from her back, from slightly above, as if someone was putting a cool blanket on top of her. It feels like there is nothing she can do about it. The blanket is being put onto her and she cannot shake it off. It feels quite big and carries some weight. It weighs on her. She cannot unfold as much anymore. She feels a little more rounded like a turtle or something that curls up. The closer she gets to sending the e-mail, the heavier it feels. She feels even more stooped than before. She feels smaller, more helpless, and unprotected. Innerly she sees herself crouching within a green wire mesh fence. She is covered by a velvety grey-silver blanket.

When Clara is worried that she serves her dad the wrong dish in experience three she feels as if she became internally smaller, as if she was internally crouching. She feels as if certain muscles were activated. Although she does not *actually* crouch, her muscles feel as if she did. She feels it in her shoulders and her upper back. Additionally, it feels like her head is moving forwards and down. She feels it in the back of her head. Her skin feels tense, as if she was actually crouching. She feels it at the back of her neck, her shoulder blades and her spine. In actuality, she has a sloppy – but for her normal – upright sitting position. Innerly she hears the low, trembling, high pitched, tearful voice of a female child. From the back and a little to her right, at about the height of her waistline (which corresponds to the head height of a child), Clara hears the words ‘Oh my God, what if I serve him the wrong one’. Visually she perceives her surroundings darker than they actually are.

When Clara hears a voice say, ‘Oh God, they’re going to cover all the free space with buildings’, in experience four, she is unable to breathe freely. She feels tension in her upper body area including her shoulders. The tension extends down to her lower abdomen; the further down the

less tense it gets. It is a tedious breathing; she is unable to breathe as deeply as she wants to. Rather than breathing into her belly, she is breathing higher up into her chest. With her elbows she is leaning against the windowsill, her head outside. She feels that she gets a bit more oxygen outside compared to inside; nevertheless, breathing is not exactly comfortable. She does not perceive her body temperature. She visually perceives her surroundings: her reflection in the mirror and the fact that the t-shirt she is wearing is too big on her; a mother with a child passing by; a woman with a small brown dog; her neighbor standing outside, wearing colorful pants (she likes them a lot) and speaking to someone on the phone; a silver car of her driving school passing by.

When she observes the couple on the property to be sold, the men fiddling in the woman's hair, the sun shining in their direction, she innerly hears herself say, 'Yeah, would be quite nice to live in a terraced house'. Her voice is very low, almost timid; it originates outside of her body at the height of her stomach area. She feels as if her upper chest opened up a bit; there is more space in it. The tension and the uncomfortable breathing gradually dissolve until she is able to breathe completely freely. She feels as if she got a lot more air into her lungs. She feels pleasantly cool. She hears a bird singing and her neighbor speaking on the phone.

Her voice is interrupted by the phone call of a worker. She calls him back. As soon as the worker starts speaking, a nontransparent image of her new apartment is superimposing itself on reality. She feels slightly tense. She momentarily holds her breath. She does not perceive her surroundings anymore – neither visually nor auditorily.

Afterwards she calls her dad. Visually she perceives a little bit of her surroundings again. Other than her dad speaking, she does not hear anything. He says that there is nothing they can do about the additional costs. She innerly hears her voice say, 'Perfect, it's just my money anyways'. It sounds as if the voice was inside of her head. Her breathing is a bit shallower; she still stands at the window; her posture is stooped. It feels exactly as in the beginning.

From the above examples it is very clear that Clara's negative feelings are often triggered by perceptions of her surroundings: In experience one by reading an e-mail from her dad; in experience three by worrying that she might serve her dad the wrong dish; in experience four by observing the property at the opposite side of her street and fearing that it might be built upon; a little later during the same experience by phone calls with a worker and her dad. She has a short

moment of relief between the negative feelings in experience four when she thinks about living in a terraced house.

The negative feelings above are all marked by Clara sensing that she has a stooped over posture. Sometimes, she also explicitly says that she feels *smaller* or as if she became smaller. It stands in direct opposition to her often feeling as if she was *taller* after vomiting. A very similar contrast can be observed during the moment of relief when she feels as if her upper chest opened up a bit and there is *more space* in it.

From this and other of the above examples it is also apparent how holding tension or ‘having space’ in the chest area are inseparable from the quality of breath. It seems that the quality of breath is contingent on the muscle tone.

Moreover, it seems that the feeling of becoming smaller is tied to her feeling helpless or not in control. Sometimes she explicitly states it (for instance in experience one) and sometimes the situation is of such a kind that her control (over what makes her anxious) is indeed limited (for instance in experience four). The feeling of becoming smaller is also present in some of the experiences preceding eating and vomiting (see for instance the eighth paragraph in the chapter ‘Clara’s experience when she is *not* eating or vomiting’).

Feelings and the stomach area

Despite having eaten only about ten Haribos, Clara feels nauseous in experience one. A moment later when she decides to vomit (but has *not* vomited yet), she does not feel nauseous anymore. She feels a pleasant happy warmth in her whole body and a tingling sensation from her navel up to her stomach area.

When Clara is having a conversation with her dad in experience three and he says, ‘Shit, but that’s just the way it is’, she feels a twitching in her stomach area. It is a pricking at the center point between but underneath where her costal arches join. It is *inside* her abdomen, not directly underneath her skin. Visually she perceives her surroundings darker than they actually are.

After having eaten two bowls of pasta and rice in experience four, Clara intensely perceives her stomach and abdominal areas. In her stomach it feels inflated and heavy at the same time. The area underneath her stomach does not feel as heavy but bloated. Because of the weight she perceives that the food is located in her stomach; the area underneath is less heavy but also firm.

Since her abdomen is bulging, her pants are tight. She has trouble breathing because she is so full. She breathes into her ribcage. It is not as elastic as her abdomen which is why breathing is troublesome and she is automatically breathing faster. She hears a female voice say, 'What's going on, why am I so full already?'. It sounds as if the voice originated in her stomach.

Shortly before Clara starts eating in experience five, she feels hungry. She feels a slight pulling in her stomach, as if it was contracting. She also feels light: not as if she was being pressed into the chair but as if she came to sit on it relatively normal. A little later when she sees that she has eaten more than half of her food, she feels that her stomach is still nowhere near full. It feels like there is a lot of space still. It is almost like the pulling from before, just not as severe; a little less intense, but the same pulling. Her abdominal region, approximately from her stomach down to her navel, feels unpleasantly cool. She finds it quite disheartening. It is a feeling as if she grimaced. Innerly she hears herself say, 'There's still space for more'. The voice originates a little below the height of her stomach; about two fingers below her navel. Then she innerly hears herself say, 'I can throw up anyway'. This time her voice originates at the height of her stomach. She continues eating. Shortly before vomiting, she is still not full. Innerly she hears her voice say, 'Actually totally unnecessary'. It originates from her stomach area. There is a tiny, tiny pulling in her stomach compared to earlier. The feeling of hunger is still there. Simultaneously she has a guilty conscience because she ate too much. It is an eight-centimeter-wide line in the upper chest and a two-finger-wide one above the navel. Both are expanding from the middle about twenty centimeters sideward. In the chest area it is as if something was resting on it and pressing on it. A little heavy but neither warm nor cold. It is just a heavy feeling. Above the navel it is a pulling from the middle outwards. As if someone ran their fingers very firmly over her abdomen so that her inside is pulling. She does not feel it *on* her skin but *in* her abdominal wall underneath her fat tissue. Other than those feelings she does not feel anything in her body.

In the paragraph 'Being pulled towards food', I also describe feelings including pressure in the chest area and pulling in different body parts. There I mention that the pulling and the pressure may 'embody' an inner conflict. Of course, this is merely a conjecture. The above feeling, however, is yet another example in which the sensation of pressure and pulling may embody an inner conflict: On the one hand, Clara has already decided to vomit even though she still feels hungry, on the other hand, she feels guilty for having eaten too much.

During vomiting she feels her stomach contracting and squeezing upwards. She does not perceive anything else, in particular not the feeling of pressure and pulling.

In experience six Clara innerly hears herself say, ‘Ew, now I feel sick’; the voice originates in her stomach area. There is a strange feeling in her stomach and throat areas. It feels like someone compressing her stomach with their hands – evenly from all around. It is a light pressure but not pleasant. In the throat she also feels compression, but just from the sides and the front. It is a very light pressure (a little less strong than in the stomach) but also not pleasant. She feels the pressure in an area which is approximately one finger wide and spreads across her neck like half of a necklace. She feels the pressure evenly in this area. She does not perceive her body temperature. She feels a fatigue in her eyes. It is difficult for her to keep her eyes open. The fatigue also consists of a general heaviness. Her whole body is being pressed into the sofa. She decides to take a nap.

After she had been woken up by her phone ringing and after having talked to her estate agent, a feeling originates above the navel and radiates circularly. It is a pulling from the center of the circle in all directions. At the same time, it is as if her body told her ‘Now I’m going to throw up’; the voice is both masculine *and* feminine. It is high, deep, rough, and soft all at once. It sounds as if the voice originated from further away in front of her. *On* her body she feels a slight vibration on the front side of her upper body. Her body is slightly vibrating. She does not feel nauseous.

Importantly, Clara either explicitly says that she does *not* feel her stomach anymore after vomiting or she does not describe having any awareness of her stomach after vomiting in *all* of the six experiences.

From the above descriptions of Clara’s perceptions of her stomach and abdominal area the following can be said: Clara perceives nausea, hunger, and discomfort because of overeating in this area. However, these are not the only ‘unpleasant’ sensations in this area. Other unpleasant sensations in this area are linked to something her dad says in experience three, a guilty conscience in experience five, and annoyance that she got woken up by a phone call in experience six.

It appears that Clara experiences various forms of tension in the muscles around her stomach. For instance, she is aware of a twitching when she is talking to her dad, a pulling when she is hungry,

and compression when she feels nauseous. She experiences these different forms of tension *before* she vomits. While she is vomiting, she often feels the muscles around her stomach contract. *After* vomiting, she does *not* perceive (or does not describe perceiving) the muscles *at all*. This may indicate that the muscular layers surrounding the stomach are relaxed after vomiting.¹⁸

Recapitulated, the following can be said: it is not only concrete actions such as (not) eating or vomiting which affect Clara's perceptions of her stomach. Many of the sensations in the stomach area are an integral part of feelings unrelated to such actions. It appears that figures of speech, such as 'to feel sick to (the pit of) one's stomach', 'to have a sinking feeling in the pit of one's stomach', 'to have no stomach for someone/something', 'to make one's stomach turn', and 'to have butterflies in one's stomach', may not be so metaphorical after all. Especially the last saying is actually very well underpinned by Clara's descriptions. In the beginning I mentioned that Clara has a tingling sensation from her navel up to her stomach area in experience one. This sensation is part of what constitutes the happiness she feels on the way to the bathroom. In the next paragraph I would like to discuss such feelings – which she experiences in four of the six experiences and in total five times – in more detail. Very interestingly, such feelings *always* co-occur with the feeling of Geborgenheit.

Geborgenheit, happiness, and lightness

When Clara feels nauseous in experience one, she repeatedly hears a voice say, 'I can't do it anymore'. She longs for the feeling *after* vomiting. On the way to the bathroom, she is already aware of the feeling because she knows that it will be there later. She is aware of it in anticipation of the feeling she is going to have after vomiting. It is a familiar feeling; she feels at home. She feels safe. She belongs here and it belongs to her. She knows what is coming. There are no surprises. Everything is expected, comfortable. Very geborgen. It is a fluffy feeling in her whole chest area. It is soft and pleasant as if someone was caressing her. As if someone was standing behind her and taking her into their arms. She feels a body, arms but no hands. It is nicely soft, pleasant, geborgen, secure and familiar. She does not feel nauseous anymore. She feels her

¹⁸ This is especially conceivable as Clara has an overarching sense of relaxation after vomiting.

abdomen pressing slightly from the inside out, but the feeling of Geborgenheit is stronger. At the same time, she feels a pleasant warmth in her whole body. She feels a tingling sensation from her navel up to her stomach area.

Also in experience one, this time after vomiting, she feels relieved, geborgen, and happy. It feels as if someone was embracing her gently without clasping. At the same time, she feels as if she could fly. She feels much lighter. The back of her neck, too, feels lighter. As if she could move it more easily. She feels like she has the ability to perform any movement, just like a contortionist. Everything is airy; she does not feel pain. She can breathe easily, much more deeply, completely relaxed. She feels light, relaxed, and loose in all of her joints. She has a tingling sensation in her abdomen. Everything appears brighter. Her body temperature is cooler compared to when she was vomiting. She feels a softness on her skin. Her pulse is slowing down. She feels balanced and really, really calm, as if everything was much quieter. Similar to being in a field on a winter night. It is totally calm and peaceful; a felt quietness. It feels clear.

In experience two Clara feels relieved after vomiting. It feels as if she was lighter, as if her body was less heavy. She also feels more flexible.

The relief Clara feels after vomiting in experience three is not as intense as usual. Her legs do not press as heavy into the ground anymore: She feels her feet touching the ground, but the pressure the body puts down onto the soles of the feet is not as high as usual. She feels lighter. She feels as if she had more freedom of movement in her shoulder and back area. She does not actually move but she feels as if she moved her back. She feels taller. Sometimes she feels, for example, her breasts pushing onto her thorax but now it feels as if everything was more protracted, looser, and less compressed. The temperature feels pleasant. In contrast to before, her surroundings are not brighter but as bright as they actually are.

As soon as she starts preparing her food in experience four, Clara feels a tingling in her abdomen, approximately two fingers above her navel. It is an oblong area over her whole abdomen, but to the inside, underneath the skin. It starts approximately three fingers below of where the costal arches meet.

A few moments later when her food is cooking, Clara lies on her back on the sofa. She feels a sort of opening in her chest area, she feels it up to her shoulder blades. It feels more open, more relaxed. Her breathing is relaxed and her whole body feels relaxed. She feels comfortably warm.

She is lying on top of a blanket, it feels cozy. The blanket reflects her body warmth, she feels the warmth that it reflects on her skin. Simultaneously the tingling persists for around twenty minutes, until she starts eating.

When Clara hears the timer ringing, indicating that her food is ready, she feels agitated. As if there was current flowing through her whole body, a bit tense. An electrifying feeling, a pulling in all of her body.¹⁹ It is not unpleasant but energizing; it makes her feel more awake. Unlike before, she does not feel sluggish anymore. In contrast to when she is tired, her movements and her body feel light; nothing feels difficult. Her eyes are not as heavy. She does not have as many thoughts anymore; all her energy and focus are directed towards eating. On her way to straining the pasta-rice mix in the sink, she sees an about three to five seconds long inner film in which she is eating. All the other thoughts are gone. She imagines that she is eating, and since she knows the feeling, she also imagines the feeling she has when she is eating. It is a time which belongs to her alone; there is nothing else she needs to do. It is a liberating feeling. As if she was fifty kilograms lighter and more flexible. Her body does not press so heavily into the ground anymore. It is also a feeling of *Geborgenheit*, a protected feeling. She does not have to be anxious; she feels safe because she knows it. It feels like an embrace, like a light but stable blanket. Like a blanket that adjusts to her body and stays that way. It cannot be taken away by the wind; it stays as if it was heavy, but it does not feel heavy. She feels it on her shoulders, her arms, and her back. On her arms she feels it until her fingers. She does *not* feel the blanket on her skin. She feels the blanket in the sense that she does not feel anything from the outside anymore. Stimuli from the outside cannot reach her anymore. The temperature is adjusted to her body temperature. Her body temperature is a little warmer than usual, it is pleasant. In the chest and stomach area it feels blank, here she still perceives a lot more. In the front she perceives her breathing. The front feels different from the back. She breathes relatively deeply, deeper than when she does not perceive it consciously. She feels her abdomen²⁰ and her ribcage moving. She breathes into both areas. Her abdomen is moving until one or two fingers below her navel, and not completely but almost up to both sides. Her mouth is watering. She smells the pasta and the rice. The feeling of *Geborgenheit* and the liberating feeling disappear at the same time as the inner film disappears.

¹⁹ I describe the pulling in more detail in the section 'Being pulled towards food'.

²⁰ Throughout this thesis I am using the term stomach to refer to the German word 'Magen' and abdomen to refer to the German word 'Bauch'.

In contrast to the lightness, she often experiences after vomiting, this time she feels that her body has some weight and that her feet have to carry it. She perceives her environment completely clearly. She feels fully functional, not especially tired but also not especially awake. Her belly is not tense anymore and she does not feel her pants cutting into it anymore. The area is pleasantly loose. She also does not perceive her stomach anymore.

In experience five Clara feels light after vomiting. Her feet are not pressing into the ground as heavily as before. Her stomach has calmed down after the contraction during vomiting. Compared to before eating, she feels emptier but not hungrier. She does not really feel her stomach; neither full nor hungry; it is less heavy than directly before vomiting. There is a general lightness in her body; she feels flexible. Before, everything was in slow motion and now – for instance in her rotational movement and while washing her hands – she notices that everything happens much more weightlessly. Her body parts feel less heavy. Her upper body feels very soft as if it was covered by a fur. She feels it on her shoulder, on the outside of her arms until her wrists, and on her back until the end of her butt cheeks. She feels it *on* her skin. Inside of her body it is a bit warmer than before – also warmer than when she was vomiting. It feels pleasantly warm. She only feels warmer where she also feels the softness on her skin. Her legs and the front side of her upper body have the same temperature as before. She feels taller; her gaze is different. As if she was seeing everything from a little further up. There is a hook on her bathroom door which usually is above her head. In this moment it feels as if it was at the level of her eyes. She has an upright posture. She feels it in her back. Her head is lighter and is sitting more lightly on her neck; her back is straight. Her breathing is not notable, but it is notably easier than before vomiting. She feels content and happy. Her face feels like she is smiling. She feels the happiness in her abdomen. It is a soft, warm feeling from a little above until below the navel. As if she had warm cotton in her abdomen. The feeling is oval. It is *in* the abdomen until the skin. It is warmer than the rest of her body and extremely light; not as if something heavy was lying in it but very, very light. The contentment is more in the back, in the upper body and in the chest. It is a lightness. Everything is very, very light. Unlike the temperature in her abdomen, the temperature in these areas is not salient to her; it is normal. It is an expansive feeling as if this whole area was more expansive than it actually is. As if there was an extreme amount of space for air. She feels it starting from her clavicle down until the lower half of her ribcage as well as in the according area in her back – continuously from front to back. She feels it until the inside of her skin.

In experience six, Clara feels completely at ease after vomiting. Similar to experience five, it is a soft, warm feeling. It feels like a fake lambskin placed upon her shoulders and parts of her back. She also feels it on her abdomen. In the backside of her body, she feels it on the back of her left upper arm, on her shoulder blade, and down to her hip. Between this area and her stomach there is a strip on the left side of her body where she does not feel it. On the abdomen she feels it from two or three fingers underneath her hipbones until her stomach. The feeling is not only *on* her body but also *in* her body. It is as if the fur was also placed upon the inside of her abdominal wall. She feels the fur from the inside and the outside – like a sandwich. Her body temperature is a little warmer in the areas where she has the soft feeling compared to the rest of her body. She feels the warmth evenly, not just inside the sandwich but also underneath. On her upper back the warmth is on her skin and extends two to three centimeters into her body. She sees pieces of pink cotton candy superimposed on her vision of reality. They appear simultaneously with the feeling of ease.

All the above feelings have in common that Clara feels at ease. The feelings after vomiting and the ones in anticipation of eating or vomiting are marked by the absence of any type of anxiety or stress. She often talks about feeling secure or protected. By contrast, she feels uncertainty, worry, and helplessness in the beginning of experiences one, two, and three.

The feelings of Geborgenheit in experiences one and four, Clara even explicitly describes as encompassing the absence of uncertainty. In experience one Clara says that she knows what is coming, that there are no surprises, and that everything is expected. In experience four she says that she does not have to be anxious, and that she feels safe because she knows it. We can see clearly that these feelings have a lot to do with being able to predict and control *what is coming*. On the other hand, she says that the fog in experience two is *restrictive* and *unclear*. She calls the feeling of pulling and pressure she feels at that time *a type of uncertainty*.

In a sense the problem of predictability is very much related to the feeling of being in control. Through vomiting, Clara is able to actively dissolve the uncomfortable state she is in, or is ‘deliberately’ putting herself in, before vomiting. This is apparent, for instance, in experience one where she feels helpless and weighed down by a blanket which then slides off her during vomiting. In addition to other negative bodily sensations before eating, Clara feels extreme physical discomfort after ‘deliberately’ overeating in experience four. It appears that through overeating Clara generates a state of bodily discomfort that is in some regard even more intense

than some of her other unpleasant bodily states. Unlike other unpleasant bodily states, however, she is able to resolve and hence control the bodily discomfort caused by overeating. The positive feelings after vomiting *not only* consist in very specific *pleasant* sensations but also in the absence of the negative sensations from before (and during) vomiting. Her state after vomiting is therefore *not only* marked by extreme positive bodily sensations but also by the extreme difference between before and after. Similar to experience four, Clara describes her bodily state after vomiting in experience five in terms of such differences. She says that her stomach has calmed down after the contraction during vomiting, that compared to before eating, she feels *emptier but not hungrier*, and that she does not really feel her stomach; neither full nor hungry; that it is *less heavy* than directly before vomiting. She also says that her breathing is not notable, but that it is *notably easier* than before vomiting. Her awareness is marked by *not feeling* her stomach and the ‘not feeling’ – the awareness of not having a salient sensation – arises from the comparison with the prior awareness of an unpleasant sensation in the area.

Beyond the absence of unpleasant sensations, we can see that the positive feelings described above, namely, Geborgenheit, happiness, and lightness, manifest in highly similar ways in the different experiences. Primarily they are marked by warmth, tingling sensations in the abdominal area, lightness, flexibility, feeling taller (as opposed to her feeling smaller when she feels helpless) and easy breathing. Often times Clara also feels softness (e.g., on her skin) and as if someone was embracing her.

Allocation of attention

In the last sections I primarily described Clara’s perceptions of her body and how they unfold over time. Although I focused on her bodily states, we have seen that Clara’s experience usually includes multiple other dimensions. Perceptions of her body always co-occur with either perceptions of her surroundings²¹, inner images, inner hearings, or any combination of the before. In this section, I therefore elaborate a bit more on what *types of phenomena* Clara is aware of at specific stages of the experiences of eating and vomiting. For reasons of research economy, I do

²¹ I phrase this broadly so that it may include every dimension of experience which helps to access qualities of things which are located outside the body in its common definition. Perceptions of the surroundings therefore include awareness in the visual, auditive, gustatory, and olfactory dimensions, to name a few.

not go into as much detail as I did in the last sections. I give the reader an overview of general tendencies rather than fine-grained diachronic or even synchronic descriptions. Using the example of experience one, I delineate at what stages Clara's attention is primarily preoccupied with inner images or inner hearings, to what extent she perceives her surroundings and her body, and how the perceptions of all of the before stand in relation to one another. Concurrently, it becomes clear that the types and the variety of phenomena which she is aware of at a given time greatly vary and can be tied to specific stages of the process.

Food and eating as primary focus

In the beginning of experience one Clara is focused on trying out different Haribos. She has a bowl with different kinds. The first Haribo, a mouse, she perceives visually; she also perceives its consistency between her fingers. She smells the bowl of Haribos, but she cannot discern the smell of the mouse. After having put it into her mouth, she perceives its taste and its consistency while she is chewing. Peripherally she hears the TV and the sound her laptop makes when a USB device is disconnected. Visually she perceives the charger of her electric cigarette and the screen of her laptop. Innerly she hears herself say, 'Actually not that bad, I can deal with having no chocolate for the next couple of days if I can at least have this'.

When she swallows she hears herself say, 'I want something new'. Her voice is a little lower than before; it originates in her stomach. Simultaneously she has an inner image of a ravenous cartoon character. It reacts to her inner hearing. It is cut out and superimposed on her vision of reality. Around it she visually perceives her laptop, its keyboard, the charger of her electric cigarette, and the bowl of Haribos. The brightness is normal. She does not hear the sounds of the TV anymore. When the cartoon character fades out, in its stead she perceives the part of her laptop that has 'Intel' written on it.

She takes another Haribo. She visually perceives that it is of an orange-brown color. Innerly she hears herself say, 'Alright, what's this now?'. As soon as she puts it into her mouth, she does not visually perceive the charger of her electric cigarette anymore. When she is chewing it, she notices that it tastes sourer and is harder than the mouse. It tastes like coke and feels smooth. It is colder than the mouse. Visually she perceives the bowl of Haribos and her laptop. She does not

perceive any sounds in her surroundings anymore. Innerly she hears herself say, ‘Ah, doesn’t taste bad’. Compared to before the bowl of Haribos appears brighter visually.

When she swallows, she has the feeling of being pulled towards the Haribos.²² The Haribos are even more colorful and brighter than before. The only other thing she visually perceives is the screen of her laptop. More specifically five digits, five ones.

As described above Clara’s attention is very narrowly focused on food in the beginning of experience one. All the dimensions of experience are dominated by it. Visually the Haribos are more salient than everything else, and the more other dimensions of experience indicate that she gravitates to them, the more salient they become. She perceives their smell, their consistency, and their taste. From the beginning her auditive perception of her surroundings is unclear; after she has eaten the first Haribo it fades completely. Visually she perceives a bit of her surroundings. Similar to the auditive dimension, the visual perception of her surroundings becomes less comprehensive over time. While in the beginning she visually perceives the charger of her electric cigarette, she does no longer perceive it after she puts the second Haribo into her mouth. For both the visual and the auditive dimensions, it is moreover apparent that perceiving inner images or inner hearings always goes hand in hand with a decrease of the perception of the surroundings. For instance, Clara does not visually perceive her surroundings at the location where the inner image of the cartoon character is superimposed on it. Similarly, Clara has no auditive perception of her surroundings at all for most of the experience. By contrast, she has inner hearings at the time she is chewing and swallowing the first Haribo, and at the time she is choosing and chewing the second one. This is not to say, however, that, for instance, her having inner images only reduces the visual perception of her surroundings, or her having inner hearings only reduces the auditive perception of her surroundings. More likely, her having inner images or inner hearings affects all the other dimensions of experience. For instance, her having inner images may also reduce the auditive perception of her surroundings and so forth.

The above example shows that food sometimes ‘demands’ Clara’s full attention; the process of eating involves multiple dimensions of experience at once. The different sensory modalities seem to be in synergy with one another. Clara has almost no awareness of phenomena unrelated to the

²² I describe this feeling in detail in the subsection ‘Being pulled towards food’ of the section ‘Synchronic descriptions of Clara’s feelings’.

process of eating. This coalescing of the different sensory modalities appears to be very specific to the process of eating.²³ In our interview about experience four, Clara explicitly refers to this effect food and eating – or in this case: their anticipation alone – have on her.

Constanze: This ‘more alert’, did you also feel that, for example, somehow at the eyes or somewhere, I mean, at a certain, could you name, for example, some place on your body where it was noticeable? Or was that just in general?

Clara: Yes, I would say I was somehow, well felt, also in the eyes, I mean, they weren’t that heavy, but I’d rather say I, or I’d additionally say it was somehow my, uh, my thoughts, that I didn’t have so many thoughts anymore, my only thought was food, so to speak, somehow like that, I mean, no verbal thoughts, they were kind of, how, how can, I don’t know, what kind of thoughts were they, more like pictures or like a film, well I just wasn’t concentrated on the rest of the day anymore (...)

Constanze: So this alertness (Clara: Mhm) that means this alertness had something to do with the fact that your thoughts were focused on food? (Clara: Mhm) (Clara nods) In what way did it have to do with that?

Clara: Mmm, so I generally have a rather hard time concentrating on anything and I just feel, for me it’s just a, a sign of alertness when I can be focused, no matter on what it is, um, in, in this case on food and yeah when I just direct all my energy and attention and so on only in, on the one thing, so to speak, yeah, I can do that quite well when it comes to food.

Since Clara generalizes in her last response, we cannot use it for the description of the experience. However, it is highly interesting that she is under the impression that it is generally difficult for her to ‘be focused’ but that she can focus quite well when it comes to eating. This impression is supported by the descriptions of the twelve experiences we discussed. For one, Clara is indeed ‘hyper aware’ of food and eating, i.e., she has few perceptions unrelated to it, during some time period of the four experiences in which she did not simultaneously have a conversation with her dad. On the other hand, she has multiple inner images, inner hearings, and

²³ It is specific but not unique to the process of eating. For instance, in the chapter ‘Clara’s experience when she is *not* eating or vomiting’, I describe how multiple dimensions of experience are in harmony while she is ‘daydreaming’.

other perceptions within just a few seconds in all of the six interviews about brief moments unrelated to eating and vomiting.²⁴

Conclusively, it appears that Clara's attention can be completely focused on the process of eating; in those phases she appears to be fully immersed in it. In connection with the narrowing of her focus, she also feels more alert. This is particularly interesting because it seems to be very uncommon for her to have a narrow focus or to be completely focused on and immersed in what is happening 'in the now'.

Unconscious eating

I resume the temporal unfolding of where Clara's attention directs itself at in experience one. In the last section I stopped at the moment in which she perceived five 'ones' on the screen of her laptop. She has the feeling of pulling and pressure which I describe in the section 'Synchronic descriptions of Clara's feelings'. She feels that she is being pulled towards the Haribos. She takes a third Haribo, she visually perceives that it is a pinkish blue crocodile. Next, she notices a mint taste in her mouth. She is surprised by it. It must stem from her electric cigarette, but she has no awareness of taking a drag. Because of the surprise the feelings of pulling and pressure are gone. She perceives more of reality again. She reads on the screen of her laptop. Subsequently, a feeling of hurt and helplessness emerges.²⁵ After hearing herself say, 'Oh God, I need a solution', with a desperate, tearful voice timbre, she starts responding to the e-mail. During writing the e-mail she feels helpless and unprotected; she sees herself from an outside perspective. Except for her visual perception of the laptop screen, she has no visual perception of her surroundings. She also does not perceive a taste in her mouth anymore. All in all, it takes her about two minutes to finish the email. Throughout this time, she is fighting with tears, she is breathing heavily, she is completely preoccupied with her inner struggle and with writing the e-mail. She has inner hearings and inner images. The weight which rests on her becomes heavier the closer she gets to sending the e-mail. When she sends the e-mail, she is surprised by a taste of orange. She must

²⁴ I discuss these interviews in more depth in the chapter 'Clara's experience when she is *not* eating or vomiting'.

²⁵ This feeling, too, I describe in the section 'Synchronic descriptions of Clara's feelings'.

have reached into the bowl of Haribos and taken about five to ten of them into her mouth, but she has no awareness of doing so.

While Clara was aware of eating in the beginning of experience one, we can see how gradually she becomes more and more preoccupied with her feelings, including bodily perceptions, inner hearings, and inner images. She is so engaged with these feelings and inner phenomena that she has no awareness at all of putting food into her mouth.

Very similar and other forms of unconscious eating we can observe in at least five of the six experiences. In experiences three and five Clara is preoccupied by conversations with her dad and by what they elicit in her. In both cases she visually notices that she has eaten more than half of her food only after feeling relief in connection with the conversation; in both cases she is unaware of eating more than she usually ‘allows’ herself to. In experience two she ‘decides’ to ‘overeat’ but has for the most part no awareness of eating and very little awareness in general. In experience six she perceives the taste and consistency of the first chocolate. She is aware of taking a second one into her mouth, but not anymore of chewing it. She has no awareness at all until she visually perceives five chocolate wrappings next to her laptop.

In all of the aforementioned experiences there is a period of time during which Clara is eating, but completely unaware of doing so. We can distinct between two ‘types’ of unconscious eating: in the first case, Clara is preoccupied with, e.g., conversation, her feelings, inner images, and inner hearings; in the second case, she seems to have no conscious perceptions at all for certain time intervals.²⁶ There may be an interesting common characteristic of the experiences in which Clara is ‘distracted’ from eating: Although at first glance it may seem that Clara’s attention is preoccupied by ‘outer’ phenomena, for instance, conversation and reading, or ‘inner’ phenomena, for instance, feelings, inner images and inner hearings, ‘outer’ phenomena may be of great importance in triggering ‘inner’ phenomena. Hence, they not only directly but also indirectly cause her attention to be preoccupied by something other than eating.

²⁶ At least in the experiences we discussed in our interviews, the first case occurs more frequent than the second one. Perhaps this can be attributed more to the wide variation in the context of the experiences rather than to a generally greater frequency.

Perceptions of the body as most prominent dimension of experience

Once more I resume the description of experience one. Clara notices that she has a lot of food in her mouth. She feels disgusted. Simultaneously she innerly hears herself say, ‘No, that’s too much, I can’t do it anymore’. She feels nauseous. She has no inner images. She also does not perceive the screen of her laptop anymore. The only thing she visually perceives is the Haribos, but they are not as bright, colorful, or glary anymore; they appear ‘normal’. It feels like she innerly hears ‘I can’t do it anymore’ about fifty times during the ten to twenty seconds it takes her to get to the toilet. The voice is familiar, Clara feels at home.²⁷ She finds the way to the bathroom automatically, she has no awareness of her surroundings. She is also unaware whether the toilet seat is open or closed when she enters the bathroom. In the bathroom she feels heavy again. She wants to relieve herself: it is a feeling in her chest area; as if ‘everything was shooting out of her’, just like when she is actually vomiting. Innerly she hears herself say, ‘I have to get it over with now’. The heavy feeling is the same as before; innerly she sees an image of herself. The perspective is as if she was watching herself from the top right, as if she was standing next to her right side, watching herself carrying the silver blanket. While she is vomiting the blanket slides off her. Her gaze ‘flows back into her head’.

From the moment Clara notices that she has unconsciously put multiple Haribos into her mouth until after vomiting, she is primarily aware of her body and inner hearings related to what she perceives of her body. She has few visual perceptions except for one inner image of herself, and no auditive perceptions except her inner hearings. A little above, I describe how Clara’s focus is considerably narrower when she is preoccupied with food and eating. Here we see a similar phenomenon with her intense perceptions of her body considerably restricting the awareness in other dimensions of experience.

The structure of Clara’s experience is similar in the cases in which she is aware of the time period before and during vomiting. In experience three she is completely focused on perceptions of her body during vomiting; here too, the only other phenomena she is aware of is the sound of her vomiting and an inner hearing in which she worries that her dad might hear her; where the voice originates, she perceives a cool spot on her abdomen. By contrast, she does not perceive the taste

²⁷ I describe this feeling in the section ‘Synchronic descriptions of Clara’s feelings’.

of her vomit. In experience four she describes being highly aware of her abdominal area on the way to the bathroom. Moreover, she is aware of her body temperature being higher than usual. In experience five her visual perception of her surroundings is blurry; here too, she is preoccupied with perceiving her body (a slight feeling of hunger and a bad conscience). Importantly, she is preoccupied by very specific sensations in her body, she does *not* perceive the tiredness or the tingling in her foot which she perceived just a moment ago. The only thing she perceives during vomiting is her stomach contracting; she does *not* perceive the taste of her vomit, she does not smell anything, she has no visual and no auditive perceptions. In experience six her visual perception on the way to the bathroom is blurry; she hears the sound of her tablet but does not perceive the meaning of what is spoken. She has some awareness of the soles of her feet touching the ground. Apart from that, she does not ‘think or feel’ anything.

Shortly before and during vomiting, Clara appears to be completely preoccupied by her intense and, if you will, negative perceptions of her body and *very few* inner hearings related to them or the process. She has *very little to no awareness* in all the other dimensions of experience – including, for instance, the gustatory (she does not perceive the taste of her vomit). Hence, we see that it is not only food and eating which reduce the number of phenomena Clara is experiencing simultaneously. It is also the intense negative bodily perceptions she experiences before she reliefs herself.

Clearly perceiving self and surroundings

Above I suspended the description of experience one by saying that Clara’s gaze ‘flew back into her head’. From that point on she visually perceives reality again. She feels very happy, it is a tingling in her stomach. Everything feels brighter suddenly. She feels lighter, loose in all of her joints, and as if she can perform any movement. She can breathe more deeply and relaxed. She sees the toilet and her vomit in it. Some light colored Haribos are floating on top of the water after she already flushed it. She is very surprised; it is as if she opened her eyes wide. Innerly she hears herself say, ‘Hey, why is this floating?’. She feels cooler than when she was vomiting. She flushes and washes her hands. About half a second later she feels content, peaceful and geborgen.

Here we can see how Clara is fully present after vomiting. She is connected to her surroundings, perceives it visually, it appears brighter. She has no inner images and just one inner hearing. Primarily she is aware of many different yet interconnected pleasant bodily feelings.

The structure of Clara's experience after vomiting is very similar in all the six cases. She is always hyperaware of her positive bodily states. Sometimes she visually perceives her surroundings brighter for a moment, or due to her straight posture from a little further up. There appears to be a tendency for her to have a greater visual awareness of her surroundings. She has no inner images (except for some pieces of pink cotton candy in experience six which accompany her bodily sensation of feeling at ease when she is already lying on the sofa again). Except for the above-described inner hearing in experience one, she has no inner hearings.

Conclusions

The paragraphs in this section are arranged in a way that is – with minor exceptions – representative for the temporal unfolding of how Clara allocates attention throughout her experiences of eating and vomiting. In the first paragraph, I describe how her attention is often highly focused on food and eating. This focus involves multiple dimensions of experience such as the visual, the gustatory, the olfactory, and the tactile. Focusing on food and eating and the fact that it involves multiple dimensions of experience appears to help her stay present. At least it appears to prevent other phenomena, such as thoughts and feelings concerning the past or the future, from emerging into her awareness. Following this initial hyperfocus on food, Clara enters a phase in which she is completely unaware of eating. During that time, she is either preoccupied with other dimensions of experience (for instance, conversation or reading that is triggering inner images, inner hearings, and bodily sensations), or has little to no awareness altogether (i.e., she has 'blackouts'). Once she realizes that she has 'overeaten', 'decides' to vomit, or at the latest when she starts vomiting (in the experiences involving her dad) she has few perceptions of her surroundings, with the exception of experience one, no inner images, and is fully preoccupied with her bodily sensations, and inner hearings concerning the present situation. Lastly, Clara is 'fully present' after vomiting. Visually she perceives her surroundings clearly and sometimes brighter; she also perceives a plethora of positive bodily sensations. Inner hearings are again concerning the present situation and she has no inner images.

There are at least two stages of the experiences of eating and vomiting – the hyperfocus on food and eating and the hyperfocus on (negative) sensations in the body shortly before and during vomiting – at which Clara’s attention is fully captured by the process; at which she is narrowly focused on food and sensing the food, or on perceiving her bodily state without having much awareness of her surroundings. During those two stages all her inner hearings and inner images are concerned with the process (in contrast to topics related to the ‘past or the future’). The last stage, the one after vomiting, is, similar to the stage of shortly before and during vomiting, marked by Clara being hyperaware of (now positive) sensations in her body. However, in contrast to shortly before and during vomiting, she finally perceives her surroundings clearly and has few inner images and inner hearings. In this last stage, she appears to be fully present, aware of both her body and her surroundings.

Clara's experience when she is *not* eating or vomiting

I now move on to describe the structure of Clara's awareness in moments preceding experiences of eating and vomiting. The six moments we discussed were very brief, a few seconds each, yet their structures are highly complex. That is why, similar to the section 'Allocation of attention', I am going to delineate the structure of only one of the six experiences in more detail.

Subsequently, I point out in which way the structure of this particular experience relates to the structure of the others.

The experience which I take to carve out a more general structure is the moment before Clara received my first phone call. Shortly before I called her, she was in her car on her way to her physiotherapist. While standing at an intersection, she experienced multiple phenomena within a few seconds.²⁸ Before I proceed with describing these phenomena in detail, it is useful for the reader to know a bit about the context. The crossing leads to Clara's old apartment which she was about to sell at that time. Within her field of view there were, amongst others, a restaurant and a car dealer. A man employed at the car dealer had made a pass on her in the past, which had caused conflict between Clara and her boyfriend.

One of the phenomena Clara experiences while standing at the intersection – and chronologically the earliest of the ones I describe – is that she imagines herself sitting in a Porsche. The imagination involves multiple dimensions of experience. One of them is the visual: she simultaneously visually perceives her surroundings and an inner image of herself sitting in a Porsche. She described this inner image in detail. For the sake of brevity and because it is not relevant to the more abstract structure I am trying to delineate, I am merely tending to some of its features.

She sees herself from the front, sitting inside the car. She looks slightly different than in real life, but she knows that it is her. Her facial features are *softer*, she has clear skin, the skin of a baby. There are sunglasses on the top of her head which she would like to own but does not own in real

²⁸ She was not sure whether the experience exceeded a second. She said it certainly did not exceed five seconds.

life.²⁹ Apart from the inner image she also perceives the sun in the leaves of the trees on the crossing. She feels content because she does not feel cold; in fact, she feels hot. She still feels hot although the car windows are already open. The pain that she normally feels in her hip is duller, a little in the background, but noticeable. She has the feeling she is sitting in that other car; hence, also the way she is sitting feels as if she was sitting in that other car and not her actual one. It feels as if she had a different seat, a more comfortable one, a *softer* one. She does not know whether her hands are actually on the steering wheel, but it feels like they are. She also smells a ‘fragrance tree’, an artificial air freshener, and asks herself if it is in fact the ‘fragrance tree’ and why it is suddenly smelling again. The feeling in the imaginary car, springtime, and the smell; it is harmonious, it matches.

What can be seen in the above paragraph is an interaction of different dimensions of experience characteristic of Clara’s descriptions. As I lay out below, all of her inner images in this experience occur simultaneously with inner hearings and feelings. Not only do they occur simultaneously, but Clara perceives them as intertwined. In the specific case of the fantasy described above, her ‘inner phenomena’, moreover, ‘match’ or are in harmony with the perception of her surroundings, for instance, her visual and olfactory sensations. The fusing of reality and imagination becomes especially apparent by the fact that Clara is unsure whether her hands are actually on the steering wheel, or whether it just *feels* as if they are.

She sees the restaurant at the corner of the intersection. It is clouding her fantasy. She is trying to stay in the good feeling. An inner image of the restaurant slides into her visual field from the right. To the left she sees the image of herself in the car, to the right she sees the image of the restaurant. The two inner images – the one of the restaurant and the one of herself sitting in a car – slide back and forth. Clara sees a screen that is divided into two parts. The images take up only about half of her visual field. In the upper part of it she sees the images in the lower part she sees reality. The area where she sees reality stays the same, the back and forth sliding concerns only the inner images.

While the restaurant is yellow in reality, the image she sees is grayish. The house looks abandoned, the windows are dirty. The image of the restaurant prevails, it slides over the image of the car. Since Clara and her dad have a company, she is able to sympathize with someone

²⁹ This is not merely descriptive, but a small piece of context.

losing their business. She innerly hears herself say, ‘Oh my God, if that happened to us’. She feels fear, the fear of not knowing what lies ahead and the loss of control.

The feeling of losing control in connection with losing one’s business transitions into a similar negative feeling connected to a man employed at the car dealer. She reminisces about a situation involving him. Back then she too felt that she did not have control of the situation. It is as if an image of the man standing in the workshop appears from the left-hand side. Unlike the back and forth between the image of herself in the car and the image of the restaurant, the image of the car salesman slides, like a wall, quickly from left to right. For the fraction of a second it is the only inner image visible to her. She innerly hears herself say, ‘Oh my God, this guy and the shitty situation with my boyfriend, almost ruined the relationship, I hope I won’t get in this situation again’. She has a guilty conscience.³⁰ She also feels helpless; babyish; dependent and not wanting to be dependent; wanting to gain control. It feels like being trapped in a cube which has no door. She feels that she becomes smaller, crammed, compressed, cramped. Her body feels contorted. Her posture is stooped, crouched; similar to the position of an embryo but *more angular*. Simultaneously she feels that she is breathing heavily. At the same time, she notices a car that she has seen before. Innerly she hears herself say, ‘How cool, I caught up with him, even though I didn’t run the red light’. She reads a Lamborghini sign and also sees that there are different cars at the car dealer; the car she is usually looking at is gone. The image of herself sitting in a Porsche which was overrun by the one of the restaurant is still there. She does not *see* it³¹, but she *feels* it. She does not see it anymore because it is more to the right and the image of the car salesman is more to the left; it is simply because of her visual field that she only sees the image of the car salesman.

Above one can observe how Clara’s experience becomes increasingly complex in a very brief moment – keep in mind that the *whole* experience was only a few seconds long. At this point she already had three inner images – *all* of which are still in her awareness. However, she *sees* only the chronologically last image. The first two images she no longer *sees*; she *feels* their presence. What she perceives as the ‘objects’ of her awareness, i.e., the inner images, remains the same. It is the nature and degree of awareness of these ‘objects’ that changes with their increasing

³⁰ She explained her guilty conscience by the fact that it had been a validation for her that the car salesman had given her his number.

³¹ At this point Clara seems to perceive the image of herself in the car and the image of the restaurant as a unit.

number. One could even say that the dimensions which are involved in her awareness of these ‘objects’ change over time. Moreover, it also seems worthwhile to look more closely at the hinge points between the different experiential complexes.³² The decisive factors for the car and the restaurant complex to emerge may have been that Clara visually perceived the car dealer and the actual restaurant, respectively. For the car salesman complex, on the other hand, – rather than some visual cue – the feeling of not being in control may have been the more closely linked antecedent. Similarly, the awareness of previous relationship problems with her boyfriend in the course of the car salesman complex seems to be relevant for the emergence of the next experiential complex. As I describe below, Clara’s next inner image includes her boyfriend’s face and occurs simultaneously with worries about their relationship.

From the upper right-hand side an image of her old apartment and the face of her boyfriend appear. This image completely superimposes itself on all of the other inner images. The other inner images are *behind* it; as if there was a partition wall in between. The image consists of a collage of multiple rooms of the apartment she was about to give up at that time. The atmosphere is cool, unpleasant, it does not feel like home. The face of her boyfriend is superimposed on the collage, but *she sees through it*. It takes up about a fourth of the entire image. All of the elements of the collage are cut out *angularly*, the face of her boyfriend is the only element which is cut out *circularly*. It is not only that the elements of the collage are *angular*, also her feeling is *angular* or *rigid*. In this moment she is not only aware of herself and the apartment but also of her relationship. The feeling that she wants to stay together with her boyfriend but does not know how is firmly anchored. Innerly she hears herself say that everything is so complicated, that she does not want it to be complicated, but that she wants it regardless. The dull pain in her hip is more noticeable. Instead of sharp as usual, it is pinching and radiates to her abdominal region.

What we have seen in the first parts of this experience carries on in the above paragraph. Clara’s inner images continue to ‘pile up’. Like before, Clara is aware of inner hearings and feelings while seeing the inner image. It also becomes apparent that shapes, e.g., angular and circular, consistencies, e.g., soft and rigid, and transparency play a key part in how she is aware of things. When Clara imagines herself sitting in a car, she uses the word soft to describe her facial features

³² Since this experience consists of the succession of many different inner images and respective simultaneously occurring inner hearings and feelings, I refer to them in the following as complexes. This is to highlight their connectedness and for the sake of simplicity.

as well as how she feels in the car. Hence, consistency appears to be a quality which she perceives in more than just one dimension. Similarly, she feels rigid or angular when she is aware of her old apartment and her relationship problems. This feeling, too, is reflected in the visual dimension where all the pieces of the collage are cut out angularly except for the face of her boyfriend which is cut out circularly. The face of her boyfriend is also the only *transparent* part of an inner image so far.

Moreover, one can start to observe how Clara's awareness of the pain in her hip evolves significantly and in a highly specific manner throughout the experience. While it was noticeable but duller and more in the background during the car fantasy, it is now pinching and radiates to her abdominal region. Interestingly, she also describes it as if a spot in this area was squeezing itself, in German 'als würde sich da was *einquetschen*'. In this and also in the previous chapter we have seen that Clara often uses similar terms to describe feeling helpless or out of control.

In the following moment, the awareness of consistency, transparency, and pain continue to evolve in a highly interesting way.

Clara is sorry but also not sorry to leave her old apartment; she is also looking forward to her new one. An image of what her future apartment could look like slides from below over the image of the old one. It is a brief switch. There are now three walls or three inner images³³ in a row. In the front the image of what the new apartment could look like, next the image of the old apartment and her boyfriend, and behind the car salesman, the restaurant, and herself sitting in a car. The image of the new apartment is also a bit like a collage, but more blurred. It is extremely bright, welcoming, *warm*, and *soft*. It feels similarly good to imagining herself sitting in the car; simply harmonious.³⁴ Instead of visually perceiving reality only below the inner image – as she did with all the other images so far –, the image is rather centered and surrounded by reality. The image is angular. The elements of the collage are angular as well, but instead of a cut there is a gradient between them. The 'feelings and thoughts' in relation to the car salesman, the restaurant, and herself sitting in the car are completely gone. The image of her old apartment including her boyfriend is still behind; but it is a bit at the top right and small; almost extending into reality. The image of the new apartment is very present but more *transparent* than the other images;

³³ Note that some of the inner images are now perceived as a unit. Clara also describes them as walls.

³⁴ In actuality the apartment was old-fashioned and 'disgusting' at the time of the experience.

reality shines through it. Since the image of her old apartment is not transparent reality does not shine through at the spot where it is located. She innerly hears herself say that there is still a lot of work to do. She does not have a feeling in connection to these words. Her feeling is that it will be beautiful and right. She feels joy. She feels it spreading from her center, she feels it in her whole body, small fireworks. It feels *soft*. She feels light, as if gravity was suspended. She feels as if she radiated, as if she was bright. She does not feel anything else.³⁵

This marks the end of the part of the experience we discussed in detail. As I mentioned earlier, we can continue observing the evolution of consistency, transparency, and pain in this last part. Clara describes the image as well as her feeling as soft.³⁶ Although the elements of the collage are angular, there is a gradient between them – no sharp edges. The image is entirely transparent – reality shines through. It is the only transparent inner image in this experience. Finally, she is not aware of the pain in her hip anymore – her bodily sensations are purely positive.

The image disappears but the feeling stays with her. Her feeling is that the image is still there, merely not in her sight. When she becomes aware of the traffic light again, it has already turned green. Normally she does not like to pick up her phone if the number is unknown. Because the feeling is right, she thinks to herself ‘I’ll just pick it up’.

Interpretation

What Clara experiences here is what one could call mind-wandering. The initial moments, when she is imagining herself in a car, and when she is thinking of a restaurant, may have emerged as a consequence of visually perceiving the car dealer and the restaurant. Already during the moment when she sees the inner image of the restaurant, she starts to feel anxious because she could lose her own business. This feeling may have led her to become aware of a past situation in which she had a similar feeling, namely when a car salesman made a pass on her. This in turn may have reminded her of the relationship problems that the situation caused between her and her boyfriend. In the following, she is aware of inner phenomena regarding their relationship. One of

³⁵ She has no awareness of the pain in her hip anymore.

³⁶ She said that imagining herself in the car and imagining her new apartment both felt soft, but that imagining her new apartment felt fluffy on top of that.

them is an inner image of her boyfriend's face superimposed on images of her old apartment.³⁷ The awareness of her old apartment and the circumstance that she was about to move may have led her to imagine what her new apartment could look like.³⁸

There appears to be great disparity in the quality of the above-mentioned phases. At first, Clara's mind-wandering is rather intentional³⁹ and what one could call positive constructive daydreaming (McMillan et al., 2013). The initial entirely positive⁴⁰ imagination is followed by a few negative phenomena related to the past and an uncertain future. The experience ends with an even more intense positive imagination. Hence, Clara's mind-wandering is not restricted to either negative or positive phenomena – within the few seconds discussed in this chapter both forms occurred to a somewhat equal extent.⁴¹ Except for hinge points between different complexes, there appeared to be no moment in which negative and positive phenomena coincided. Clara's experience appeared to be either entirely negative or entirely positive. By this I mean that the different dimensions of experience did not diverge in terms of their 'moods' or 'atmosphere'. Positive feelings, for instance, coincided with positive inner images, and so forth. Remarkably, to achieve this harmony of the different dimensions the awareness of pain was partly or even entirely absent during positive moments and intensified during a negative one. Moreover, Clara was aware of positive features of her surroundings, such as the sunlight in the leaves of the trees or the smell of an artificial air freshener during a positive moment but not during negative ones. It is very well possible that Clara's awareness is in general more permeable to stimuli from her surroundings during positive moments. For example, only the last inner image – an exceptionally positive one – was transparent. This made it possible for her to visually perceive reality even in the place where the image was located. In all moments, even in the positive ones, the high complexity of Clara's experience, i.e., the rapid changes and the co-occurrence of a high number of phenomena, substantially limits the awareness of her surroundings. For instance, she saw that the traffic light

³⁷ She had bought the apartment for her and her boyfriend to move in together. He moved out because it did not work out. Since he moved out, she *managed* to sleep there only three times. She always sleeps in the office.

³⁸ I am purposefully using the term 'may' repeatedly. I do not want to make any definite statement about causation. My interpretation might be wrong in some or all of the above cases, and the preceding awareness may or may not have been causally relevant to the subsequent one. For now, this seems to be a viable interpretation.

³⁹ She told me that she thinks of having a Porsche regularly when she is driving by the car dealer; that she thought if she drove by often and thought of it each time then she might actually own one someday.

⁴⁰ I use the terms 'positive' and 'negative' loosely here.

⁴¹ I do not want to insinuate that this equal occurrence of positive and negative phenomena can be observed outside this particular experience. Quite to the contrary, I hypothesize that negative phenomena may be generally speaking more predominant.

was green only after it had already turned green. According to the description we generated, she saw five inner images in the matter of a few seconds. Each of them was accompanied by inner hearings and feelings. Even though it was just a few seconds long, the complexity of her experience made it impossible for me to ask about every aspect of it in detail. Some aspects we missed altogether. For instance, Clara told me that she felt tension in her whole body throughout all the inner images except the one of her new apartment. She told me this in the beginning and in the end of our interview but not in between when we were discussing the different complexes in detail.

Conclusions

In which respect is the structure of this experience representative of that of the other experiences? It is representative in the sense that in all of the experiences Clara is aware of a flood of phenomena in a very short amount of time. It is representative in the sense that when Clara sees an inner image, she always has inner hearings and feelings at the same time. The description of the second experience, for instance, also includes exactly five inner images, as well as even more inner hearings and feelings. The description of the last experience, on the other hand, includes only one inner image. However, it includes at least six inner hearings and multiple feelings as well as a similar evolution of pain. Therefore, although it does not include as many inner images, it is still no less complex.⁴²

This leads us to the question of how representative the structures of these six experiences are of her general experience. In other words, whether Clara's experience is so complex most of the time, or whether this impression is only due to the selection of specific moments. This is a very difficult question to answer. I am inclined to assume that her experience is similarly complex most of the time. For one, the experiences we discussed took place at different times of the day and in very different contexts. Hence, the first argument is the diversity of situations in which Clara's experience appeared to be complex. Secondly, they involve situations in which the

⁴² The smaller number of inner images could be attributed to the fact that Clara had just woken up. We discussed the *very first* moment after waking up. She noticed that she had a headache. This was followed by a flood of worries about the day; how to manage everything she was supposed to do considering her physical condition. Her headache became instantly less severe when she *thought of* taking a painkiller.

structure of experience could be expected to include *relatively* little inner phenomena, such as *right after* waking up or in front of the TV. Thirdly, similar structures were evident before Clara started eating or sometimes when she was eating unconsciously.⁴³ This extends the number of experiences in which we can observe such a structure to those of eating and vomiting. Finally, Clara repeatedly told me that she is generally unable to focus well and that even when she is relaxed there is a lot happening ‘inside of her’.

All in all, the results of our interviews are well in accordance with what women with bulimia nervosa reported to experience in previous DES studies. First, their experience was characterized by a high number of co-occurring phenomena. Second, they frequently reported phenomena similar to Clara ‘sensing’ the presence of inner images but not looking at them.⁴⁴ Third, they often failed to distinguish between thoughts and feelings. Considering that Clara’s feelings were highly dependent on what she was thinking about⁴⁵, and that all dimensions of experience matched in atmosphere at any given moment⁴⁶, this is not a surprising result.

In conclusion, women with bulimia may have an unusually complex experience characterized by an extraordinarily high number of co-occurring and rapidly evolving different phenomena. In relation and in addition to this, the nature and degree of awareness of the ‘content’ of experience may change dramatically over the course of very short time intervals. As we have seen in this chapter, Clara is simply not ‘fully’ aware of each of the phenomena she is experiencing simultaneously. Moreover, the overwhelming amount of inner phenomena substantially reduces the perception of her surroundings.

⁴³ Notice, however, that these tendencies were only evident before Clara started eating and sometimes when she was eating unconsciously. In all of the other phases of her experiences of eating and vomiting she was very much aware of what was happening ‘in the now’.

⁴⁴ One participant described it using the aquarium analogy I mention in the chapter ‘How I came to investigate Clara’s experience’.

⁴⁵ I do not mean to imply that this relationship is unidirectional.

⁴⁶ In particular, Clara’s inner hearings were always related to her bodily sensations.

Putting everything into context

In the previous two chapters we have seen that Clara's overall experience is marked by highly divided attention and negative feelings *before* vomiting, and a focus on her bodily sensations, in particular positive feelings, and her surroundings *after* vomiting. In this chapter, I therefore discuss these topics from a more general perspective.

Disconnection

Chronic disconnection

Our ability to become aware is what allows us to connect to our body and our surroundings – by sensing them we make contact with them. However, our capacity for attending to different phenomena at once is limited (Miller, 1956; Treisman, 1969). Therefore, if we are preoccupied with, for instance, inner images and inner hearings, we are relatively disconnected from our body and our surroundings.⁴⁷ It is worthwhile to examine how the term 'dissociation' relates to all of this. In 'The Domain of Dissociation' Cardeña writes that "within the fields of personality and clinical psychology, dissociation has been described in (...) distinct ways" (Cardeña, 1994, p. 16). One of the views being that dissociation represents "an alteration in consciousness wherein the individual and some aspects of his or her self or environment become disconnected or disengaged from one another" (Cardeña, 1994, p. 16). Hence, being disconnected from aspects of one's self or one's surroundings can be regarded a form of dissociation. However, Cardeña suggests that "to be useful as a concept, dissociation should not be applied to ordinary instances of less-than-full engagement with one's surroundings, experiences, and actions. Rather, it should pertain to qualitative departures from one's ordinary modes of experiencing, wherein an unusual disconnection or disengagement from the self and/or the surroundings occurs as a central aspect of the experience" (Cardeña, 1994, p. 23). Contrary to this suggestion, specific forms of disconnection or disengagement from the self and/or the surroundings are the norm rather than

⁴⁷ Similarly, interoceptive awareness seems to 'compete' with visual awareness. Salomon et al. showed that "conscious access for visual stimuli synchronous to participants' heartbeat is suppressed compared to the same stimuli presented asynchronously to their heartbeat" (Salomon et al., 2016, p. 5115).

the exception for Clara. This primarily concerns her extreme and frequent mind-wandering. Since her mind-wandering appears to be part of her ordinary mode of experience, the proposed conceptualization of dissociation does not apply to it. However, for most other people it may be unusual to experience mind-wandering in such an extreme and frequent manner. Thus, if we compare Clara's experience with that of many other individuals, it may be unusual, and hence dissociative, after all. Accordingly, there appears to be a common distinction between 'trait' and 'state' dissociation in the literature. Hallings-Pott et al. propose that "dissociation can be a general characteristic of the individual, present in all situations (i.e., a trait), or it can be a time-limited reaction to a specific situation (i.e., a state)" (Hallings-Pott et al., 2005, p. 37). Although this categorization is most likely too simplistic, it shows that chronic states of disconnection are also referred to as dissociative. In a similar context Soffer-Dudek argues that "many psychopathologies stem from normal or common experiences that have become abnormal in their intensity (e.g., apprehension, sadness), so the commonness of an experience alone does not necessarily attest to its linear association with psychopathology" (Soffer-Dudek, 2019, p. 52).

Dissociative experiences

I argued above that Clara's problem with dissociation is chronic rather than a qualitative departure from her ordinary modes of experiencing. However, she *also* has dissociative experiences which *do* depart from her ordinary modes of experiencing. These unusual forms of disconnection occur primarily during the experiences of eating and vomiting.⁴⁸ To underpin that they are indeed dissociative experiences in the mainstream understanding of the term I refer to the Clinician-Administered Dissociative States Scale (CADSS) (Bremner et al., 1998). The CADSS is an instrument to measure present-state dissociative symptoms. Its subjective component includes 19 items which are supposed to indicate the presence of amnesia, depersonalization, and derealization. Many of them apply overtly and without question to some of Clara's experiences of eating and vomiting. For instance, some of the items regarding depersonalization, namely "Do you feel as if you are looking at things from outside of your body?", "Do you feel as if you are watching the situation as an observer or spectator?", and

⁴⁸ This may be due to the fact that the other experiences were only a few seconds long.

“Does your sense of your own body feel changed: for instance, does your own body feel unusually large or unusually small?”⁴⁹ (Bremner et al., 1998, p. 131).

The two items which are supposed to measure the presence of amnesia also clearly apply to at least two of Clara’s experiences of eating and vomiting.⁵⁰ The respective questions are “Do things happen that you later cannot account for?”, and “Do you space out, or in some other way lose track of what is going on?” (Bremner et al., 1998, p. 131). In experience two, for instance, Clara has large gaps in memory. There are only few moments in which she is aware of eating, and she cannot remember vomiting at all.

Some of the derealization items, such as “Do things seem to be moving in slow motion?”, “Do sounds almost disappear or become much stronger than you would have expected?”, “Do things seem to be very real, as if there is a special sense of clarity?”, or “Do colors seem much brighter than you would have expected?” (Bremner et al., 1998, p. 131), also clearly apply to many of Clara’s experiences of eating and vomiting.

Some of the items, such as “Do you have some experience that separates you from what is happening; for instance, do you feel as if you are in a movie or a play, or as if you are a robot?” (Bremner et al., 1998, p. 131), are phrased ambiguously. Although Clara did not use the same words to describe her experience, I would not exclude that some of her experiences correspond to what is meant by the items. Altogether, most of the items of the CADSS seem to apply to some degree to at least one of her experiences of eating and vomiting.

⁴⁹ Clara visually perceiving her body as smaller and more rectangular is an example of a dissociative experience which did *not* take place during eating and vomiting. When the experience took place, she was at her boyfriend’s apartment, lying next to him on the sofa. However, she went home and vomited later that evening and she already had inner hearings relating to it when she was sitting on the sofa. The idea that dissociative experiences are more frequent and intense during eating and vomiting aligns with findings discussed later in this chapter. In short, one study found that dissociative symptoms “were higher during bingeing and purging [than at a random time not associated with bingeing or purging]”, and that “dissociation varied within the binge-purge cycle, rising throughout the cycle until after the purge, then declining slightly” (McShane & Zirkel, 2008, p. 463).

⁵⁰ Most of Clara’s experiences of eating would not be considered a binge episode. I strongly suspect that the presence of amnesia is considerably higher during binge episodes compared to ‘normal’ or less excessive forms of eating.

The two forms of disconnection during eating

So far, I pointed out that there are at least two distinct forms of disconnection in Clara's experiences: a chronic disconnection due to her mind-wandering, and dissociative states which occur primarily during the experiences of eating and vomiting. Both forms of disconnection play a key role during eating.

In three of the six experiences, Clara was completely unaware of eating for some time because she was preoccupied with conversations or reading *and* – more importantly – inner images and hearings. In those three cases, it is very conceivable that she would not have 'overeaten' had she been aware of it.⁵¹ Furthermore, as I mention in the previous section, Clara sometimes has mild to extreme forms of amnesia during eating.

Her experiences of eating can therefore be somewhat separated into the ones during which she experiences mind-wandering, and the ones during which she does not. I assume that there is a profound qualitative difference between the two, and that they could be studied separately to obtain a more specific generic structure. Clara did not intend to vomit or relax when she experienced mind-wandering during eating. During 'binge episodes', on the other hand, she did not experience mind-wandering.

Dissociative experiences during eating and vomiting

As I discuss above, Clara has dissociative experiences during the process of eating and vomiting. However, with a few exceptions of some phases during three of the experiences of eating, she does not experience the excessive mind-wandering which is otherwise typical for her. Instead, at the latest shortly before and during vomiting, she is mainly aware of negative bodily sensations. She has very limited awareness in the other dimensions of experience during that time. In particular, she has hardly any inner images and few inner hearings.⁵² Her attention appears to be

⁵¹ Importantly, being aware of eating would have merely solved the problem of 'overeating' not the one of restrictive/unintuitive eating.

⁵² If she does innerly see or hear anything, it concerns the present moment. For instance, in experience one, she innerly sees herself vomiting while she is vomiting.

narrowed and largely focused on what is happening in the now. However, she has only vague perception of her surroundings.

After vomiting she is fully present. Her mind is not wandering, and she does not appear to have intense dissociative experiences.⁵³ Rather, she appears to have a strong connection to her self and her surroundings.

The dissociative experiences during eating and vomiting thus seem to be associated with Clara's attention being narrowed. However, it is only after vomiting that Clara perceives her self and her surroundings clearly.

There is one study which strongly supports the ideas outlined in this chapter, and in particular the ones outlined in this section. It included 12 women with bulimia nervosa (BN) who completed the CADSS “during 5 sequential binge-purge cycles and at a random time not associated with bingeing or purging” (McShane & Zirkel, 2008, p. 463). The women reported experiencing higher levels of dissociative symptoms during ‘binge-purge episodes’, and dissociative symptoms returned to normal levels after purging. Moreover, the authors suggest that the findings are supporting of models of bingeing as an escape.

Similarly, the authors of another study propose that “dissociation and binge eating appear to have equivalent functions, lowering awareness of generalized threat and negative self-esteem” (Hallings-Pott et al., 2005, p. 37). Moreover, they point to previous studies which have shown that the subliminal presentation of threat cues leads to increased bulimic behaviors. In their own study, a subliminal threat cue significantly increased state dissociation (particularly derealization levels) in women with bulimia, but had no effect on the control group without bulimia. This strengthens the impression that bulimic behaviors and dissociative states stand in a highly specific relationship to each other.

Another study indicating this relationship investigated the experience of 65 women with bulimia, thirty-two who self-identified as having been sexually abused as children, and thirty-three who reported no sexual abuse as children (Swirsky & Mitchell, 1996). The authors come to the

⁵³ Two items of the CADSS, namely “Do things seem to be very real, as if there is a special sense of clarity?”, and “Do colors seem much brighter than you would have expected?”, also apply shortly after vomiting. However, it is questionable whether these items, especially the one concerning clarity, necessarily describe dissociative experiences. If they do, there may be a profound qualitative difference between various kinds of dissociative experiences.

conclusion that “binge eating and purging can be conceptualized as a set of behaviors that facilitate or maintain a dissociative response to fragmenting affects, needs and memories” (Swirsky & Mitchell, 1996, p. 24), and that “the dissociative aspect of the cycle – the numb, depersonalized state attained through the intense narrowing of focus and heightened concentration on the task of binge eating and purging – seems to be one way that affects can be regulated” (Swirsky & Mitchell, 1996, p. 25). This is very much in line with the findings I present in the chapter ‘Allocation of attention’. Interestingly, women who reported abuse did not score significantly different on the Dissociative Experiences Scale compared to women who reported no abuse. The findings that dissociation scores do not differ depending on whether or not individuals with bulimia have experienced sexual abuse are in line with the results of a study I discuss below. They make it more likely that the relationship between bulimic behaviors and dissociative experiences is direct rather than mediated by specific traumatic experiences.

Taken together, these studies speak for the role of eating and vomiting and the related dissociative experiences as a coping mechanism. The authors of the three studies phrase this circumstance slightly differently, namely as ‘bingeing as an escape’, ‘bingeing as lowering the awareness of generalized threat’, and ‘using bingeing defensively’. Although it is not entirely clear why or what individuals with bulimia dissociate from, the authors seem to agree that they use bingeing and purging to dissociate.⁵⁴ As quoted above, one suggestion is that dissociation and binge eating ‘lower awareness of generalized threat and negative self-esteem’.

Indeed, Clara experienced much worrying and anxiety about different topics. However, it also seemed to be the overwhelming quantity and rapid evolution rather than just the mere presence of thoughts and feelings that was burdensome to her. As opposed to relieving her solely from negative thoughts and feelings, eating and vomiting appeared to relieve her from the overwhelming quantity and rapid evolution of negative *and* positive thoughts and feelings.⁵⁵

⁵⁴ This is in line with the results of Clara’s case study, as the narrowing of her focus during eating and vomiting coincides with her being ‘dissociated’ from her otherwise overwhelmingly complex inner experience, but also from her surroundings and parts of herself. It is only after vomiting that she shows no signs of dissociation and is fully present.

⁵⁵ To highlight that it may also be the structure, rather than merely the content, of experience that individuals with bulimia dissociate from, I discuss findings concerning the links between bulimia and attention deficit hyperactivity disorder (ADHD) later in this chapter.

Dissociation levels and bulimic symptomatology

The studies discussed so far focus on the link between the act of bingeing and purging and dissociative experiences. Other studies indicate a more general link between dissociation levels and bulimic symptomatology. One study, for instance, investigated “the links between dissociation (as measured by the Dissociative Experiences Scale - DES II) and eating psychopathology in a clinical group of bulimic women and a nonclinical group of undergraduates” (Everill et al., 1995, p. 127). The nonclinical group showed specific correlations between the bulimia subscale of the EAT-26 and the absorption and derealization scales of the DES II. Women with bulimia showed significant correlations between frequency of bingeing and scores on each of the DES II scales; this relationship was due to a specific association with the absorption scale.⁵⁶

Another study examined dissociation and childhood sexual abuse in a community sample of individuals with current and past bulimia as well as non-bulimic controls. The authors found that dissociation was highest among current bulimics, that past bulimics had lower levels of dissociation than current bulimics, and that past bulimics had still higher levels of dissociation than non-bulimic controls (Groth-Marnat & Michel, 2000). Importantly, the authors did not find an association between level of dissociation and incidence of reported childhood sexual abuse, indicating once more that heightened levels of dissociation are not dependent on whether or not individuals with bulimia experienced sexual abuse. Even so, current bulimics who reported childhood sexual abuse were more likely to report a greater frequency of sexual abuse than were the other groups. Current bulimics also reported a greater frequency of childhood psychological abuse, along with more unhappiness and stress. Although the occurrence of sexual abuse alone was not associated with the level of dissociation, it appears that individuals with bulimia perceive themselves as having experienced a more distressing childhood.

⁵⁶ I was using the term mind-wandering in this thesis to indicate when Clara’s attention was ‘absorbed’ by experiencing inner phenomena to the detriment of being aware of her surroundings. For a discussion of the differences and similarities between the constructs of mind-wandering, absorption, and inattention, see (Soffer-Dudek, 2019).

Bulimia nervosa and attention deficit hyperactivity disorder

ADHD is probably the most well-known diagnosis when it comes to problems with attention.⁵⁷ Establishing a link between being diagnosed with ADHD and being diagnosed with bulimia therefore supports the hypothesis that there is a link between bulimic behaviors and problems with attention.⁵⁸ One study underpinning such a link found that in two “samples of adults with and without ADHD, significantly greater rates of bulimia nervosa were identified in women with versus without ADHD” (Surman, 2006, p. 351).⁵⁹ Other studies point in a similar direction (Quinn, 2008; Mikami et al., 2010; Seitz et al., 2013). Moreover, there is one study demonstrating altered brain mechanisms in bulimia associated with all three attentional networks (Seitz et al., 2016), and another study which found increased positive connectivity between the ventral attention (VAN) and the default mode network (DMN) in adolescents with BN (Domakonda et al., 2019), indicating that the brain areas which are correlated with attentional processes work differently in individuals with bulimia. The authors of a narrative review conclude that “results from functional network connectivity studies are diverse, but findings tend to converge on indicating disrupted resting-state connectivity in executive networks, the default-mode network and the salience network” across eating disorders (Steward et al., 2018, p. 1150). The authors of a systematic review of the published literature on neuroimaging in bulimia and binge eating disorder (BED) conclude that individuals in the acute phase of illness with BN or BED consistently exhibit diminished attentional capacity and early learning (Donnelly et al., 2018).

⁵⁷ It is important to keep in mind that ADHD is merely a diagnosis and not a fully understood unique pattern of symptoms and underlying mechanisms. As Furman highlights: “‘Core’ ADHD symptoms of inattentiveness, hyperactivity and impulsivity are not unique to ADHD. Rates of ‘comorbid’ psychiatric and learning problems, including depression and anxiety, range from 12 to 60%” (Furman, 2005, p. 994).

⁵⁸ Problems with attention would point to problems with regard to the structure rather than merely the content of experience, for example, negative self-esteem.

⁵⁹ However, no significant differences in rates of bulimia nervosa were identified in men or children with ADHD when compared to controls with the same sex (Surman et al., 2006). Thus, gender may play an important role in individuals with ADHD. Quinn suggests that “the emerging picture of higher rates of comorbidities, particularly depression and eating disorders, associated with ADHD in females only underscores the psychological suffering that females with ADHD experience as they struggle to meet gender role norms and to deal with their ADHD on a daily basis” (Quinn, 2008, p. 422).

I did not carry out a systematic literature research. However, it was interesting to see that the majority of functional magnetic resonance imaging (fMRI) studies appeared to be concerned with a handful of specific questions including reward processing, in particular concerning food (J. A. Wonderlich et al., 2021). Moreover, when using the search term ‘bulimia fmri’ in Google Scholar, three of the studies listed on the first page investigated questions related to body image (Spangler & Allen, 2012; Mohr et al., 2011; Vocks et al., 2010). Similarly, even though the two fMRI studies quoted above were not concerned with investigating body image, they used body image to explain their results. Seitz and colleagues hypothesize that “failure to deactivate the DMN and increased parieto-occipital activation required for alerting might be associated with a constant preoccupation with food or body image-related thoughts” (Seitz et al., 2016, p. 1). Domakonda and colleagues suggest that “bulimia nervosa (...) is characterized by excessive attention to self and specifically to body shape and weight” and that “the ventral attention (...) and default mode (...) networks that support attentional and self-referential processes are understudied in BN” (Domakonda et al., 2019, p. 1). In their study, VAN-DMN connectivity was associated with bulimia severity and body shape/weight concerns in the group consisting of individuals with bulimia. The study design as well as the presentation of its results imply that the authors suspect that there is a causal and not merely correlational relationship between body shape and weight concerns and altered brain connectivity. Conclusively, although both of the studies investigated attentional networks, their motivation or at least their attempt to explain the respective results was limited to body shape and weight or food related thoughts. Here it becomes clear that it is necessary to conduct qualitative research in order to be able to interpret quantitative results. Clara, for instance, appears to have a severe problem with focusing her attention *in general* – not merely caused by or regarding body shape and weight concerns or food related thoughts.

Implications for treatment

Considering that eating and vomiting help Clara to narrow her attention, to resolve her chronic mind-wandering, and eventually to be more aware of her body and surroundings, having other means to support these goals might help her to eat and vomit less frequently.

In accordance with this assumption, a few case reports found that stimulant medications which are commonly used to treat ADHD appear to ameliorate bulimic symptomatology in individuals

with comorbid ADHD. One study including six patients with comorbid bulimia and ADHD who were treated with the stimulant medication dextroamphetamine found that all of the six patients reported complete abstinence from binge eating and purging, while none of the patients discontinued taking the medication because of side effects (Dukarm, 2005). In particular, all six patients remained within a healthy weight range. Ioannidis and colleagues summarize:

“To date, there have been six published case reports and case series describing the comorbidity of ADHD and BN treated with stimulants in a total of 17 cases (...) Full remission of eating disorder symptoms was the most common outcome and was reported in 10 out of 17 cases. Improvement and significant improvement was reported in six out of 17 cases” (Ioannidis et al., 2014, p. 431).

Beyond the case reports there is one double-blind, randomized, crossover trial from 1983 with eight participants. In this study, patients received methylamphetamine on one day and placebo on another, with an interval of a week and in random order (Ong et al., 1983). Four participants ‘experienced a typical episode of bulimia’ after receiving the placebo, but no patient ‘experienced bulimia’ after the administration of methylamphetamine.

While the treatment with stimulants certainly has downsides, such as weight loss, increased heart rate, and nervousness, to name only a few, it is very interesting that despite these promising preliminary findings, there were no further publications exploring this treatment option until last year. Indeed McElroy and colleagues point out:

“Empirical study into the pharmacologic treatment of bulimia nervosa (...) has substantially lagged behind that into other serious mental disorders. Indeed, only one drug (the selective serotonin reuptake inhibitor fluoxetine) has regulatory approval for the treatment of individuals with BN” (McElroy et al., 2019, p. 31). Moreover, they conclude that few studies of pharmacologic agents in individuals with BN were ongoing at the time.

One of these ongoing studies was investigating the safety and effects of treating individuals with bulimia with the stimulant lisdexamfetamine dimesylate. The results are published by now (Keshen et al., 2021). Since the study followed participants only for eight weeks, the authors emphasize that the results, while encouraging, are preliminary and “should be interpreted with caution given the small sample size, absence of a control group, randomization, and long-term

follow-up, and sample made up of only women who were primarily white” (Keshen et al., 2021, p. 877).

While lisdexamfetamine dimesylate is not approved for the treatment of bulimia, it is approved for the treatment of moderate-to-severe BED in adults. Furthermore, there is also non-stimulant ADHD drugs which have been shown to reduce binge eating in individuals with BED (McElroy et al., 2019). This is an indicator that non-stimulant ADHD drugs may also be helpful for the treatment of bulimia. Moreover, it shows that while there is little to no research into the pharmacological treatment of bulimia, there is ample research investigating the pharmacological treatment of binge eating disorder. This is a pattern which repeats itself when it comes to non-pharmacological treatments.

Non-pharmacological treatment options to mitigate the experience of highly divided attention may be mindfulness practices or concentration techniques. However, when searching for ‘meditation bulimia’, ‘mindfulness bulimia’, or ‘yoga bulimia’ in Google Scholar there appear to be few to no studies specifically concerned with investigating the effects of such practices on bulimic symptomatology. Some studies focus on eating disorders in general,⁶⁰ but the majority appears to be concerned with binge eating disorder.

In 2015, Nieman notes that while there is research on deep mindfulness interventions for eating disorders, studies on bulimia are limited by small sample sizes and methodology (Nieman, 2015).⁶¹ Matching the picture, Karlsen and colleagues observe that there are no publications concerning the effects of yoga as treatment for eating disorders such as bulimia or eating disorder not otherwise specified in adults. They found one study which had follow-up, but it was limited to one month after the intervention (Karlsen et al., 2018). Said study included young adults with anorexia nervosa, bulimia nervosa, and eating disorder not otherwise specified (Carei et al.,

⁶⁰ I got the impression that studies investigating groups composed of individuals with *distinct* eating disorders are extremely common – also beyond the topic discussed in this paragraph.

⁶¹ She cites six studies in total. In (Proulx, 2007) six women with bulimia took part in an eight-week mindfulness-based eating disorder treatment. In (Hepworth, 2010) only 30.3% of the participants, 10 individuals, had bulimia. The 10-week mindfulness program was given as an adjunct to long-term treatment and revolved around the topic of eating. All of the studies by Kristeller and colleagues are concerning the effects of mindfulness-based eating awareness training on individuals with binge eating disorder, not bulimia (Kristeller & Hallett, 1999; Kristeller et al., 2006; J. Kristeller et al., 2014).

2010). Only 17% of the participants, nine individuals, had bulimia. This is an example of the quite common praxis to investigate different eating disorders in one bulk.

Karlsen and colleagues also emphasize that there is encouraging evidence regarding the therapeutic potential of yoga in the treatment of other eating disorders. For instance, it may reduce binge eating and food preoccupation, increase awareness of binge eating triggers, and could be used as an affect regulator (Karlsen et al., 2018).⁶² Although these conclusions are not up to date, they support my initial impression that there is few studies investigating how the practice of concentration and mindfulness techniques affect bulimic symptomatology and that, conversely, there is many studies investigating such effects when it comes to binge eating disorder.

In their own study, which included individuals with bulimia as well as individuals with eating disorder not otherwise specified, Karlsen and colleagues compared Eating Disorders Examination (EDE) scores of a yoga and a control group. The yoga group received 90-min of Hatha yoga classes two times per week for eleven weeks. The control group was offered two 90-min group meetings covering the aspects of nutrition, physical activity, and eating disorder. They found a larger decline in EDE scores over time within the intervention group compared to the control group. Interestingly, reductions in eating disorder psychopathology were observed at posttest and at six-month follow-up. While these results indicate that yoga may ameliorate some aspects of eating disorder psychopathology, they do not indicate how helpful it is compared to other treatments.

All in all, despite the fact that many studies seem to conclude that there is a link between ADHD and bulimia as well as dissociation and bulimia, studies investigating treatment options specifically targeted at modulating attention appear to be scarce.

⁶² Here Karlsen and colleagues cite the aforementioned study by Carei and colleagues as well as (J. L. Kristeller & Hallett, 1999) and (McIver et al., 2009) who investigated the effects of a mediation-based and a yoga intervention, respectively, in the treatment of binge eating disorder.

Self-harm

Clara seems to have a predilection for mild forms of pain, such as ramming her fingernails into her fingertips, snapping a hair tie against her skin, or eating her food burning hot. In the following I lay out why these and similar attention demanding, intense forms of sensual input may be helpful to ‘redirect her attention’ in the short term.

In one experience in which she rams her fingernails into her fingertips, she describes how she pauses for half a second between ramming and how this transition distracts her from her thoughts. She says that the transition is a relief because the pain eases, and that it is a redeeming feeling similar to when she vomits. Interestingly, two of the items of the CDASS apply strongly to her experience at that moment: She visually perceives her body smaller, but broader, and almost square-shaped and she has the feeling that her surroundings are brighter than they actually are.

Therefore, it is possible that Clara not only uses pain in an attempt to ‘distract herself from her thoughts’, but also, and possibly related to it, to prevent herself from dissociating. As Delhom articulates, pain is a form of pre-reflective, nonintentional form of self-awareness. Although there is a diminutive distance to one’s life even in pain, the moment of immediate awareness is constitutive for it, in particular for physical pain. Different from intentional awareness, this immediate awareness has to be described first and foremost in terms of intensity and (in)tolerability. It shows the tendency to exclude any other – also pre-reflective – form of awareness. It does so, not like one option excludes other options in the moment of choice, but by making any choice impossible (Delhom, 2000).

This would explain why Clara may use the immediate awareness of pain in an attempt to reduce awareness of her ‘thoughts and feelings’.

Self-harm is very prevalent amongst individuals with bulimia. Researchers have been trying to determine why some individuals with bulimia are more prone to self-harm than others, and what role comorbid borderline personality disorder or impulsivity play (Anderson et al., 2002; Reas et al., 2015).

In accordance with my hypothesis that Clara may use pain to prevent herself from dissociating, Anderson and colleagues found that individuals with self-harm scored significantly higher on the

self-transcendence scale of the Temperament and Character Inventory. They suggest that this may signal a greater sense of dissociation and disconnectedness in women with bulimia who self-harm compared to those who do not. Moreover, they hypothesize that “the act of self-harm may occur partly in response to feelings of dissociation and depersonalization. In this case, the act of self-harm may function to ‘bring them back’ into a direct experience of the world via the sensual experience of self-inflicted injury” (Anderson et al., 2002, p. 238). As I lay out in the subsection ‘Surprising tastes ‘erasing’ preceding feelings and inducing a shift in attention’, taste may have a similar function to that of pain.⁶³

Interoception

Possibly related to the above, the authors of a systematic review of research on inner body perception in anorexia and bulimia conclude that individuals with bulimia present lower sensitivity to pain. According to the reviewers, this seems to be a stable phenomenon which persists under various experimental conditions. Moreover, pain sensitivity remains low in women who are long-term recovered from bulimia (Malighetti et al., 2022).

The authors of a systematic review of interoceptive sensory processing in bulimia come to the same conclusions concerning pain (Klabunde et al., 2017). However, they report inconclusive results concerning heartbeat perception, mixed findings when examining measures of taste detection and perception, and inconsistent findings concerning the neurobiology underlying interoceptive sensory processing. As the authors suggest, these discrepancies in findings may be due to methodological differences.

There may be further reasons. Ferentzi and colleagues argue that interoception is a process consisting of various different modalities, wherein one type of measurement, such as the heartbeat detection task, does not reflect general interoceptive ability (Ferentzi et al., 2018). In their experiment, they used ten measures across six modalities: heartbeat perception, gastric

⁶³ For instance, we have seen this twice in experience one, when Clara is so surprised by tastes in her mouth that it ‘erases’ the awareness of preceding feelings. First, when Clara perceives the taste of mint in her mouth; in this moment her negative feelings are erased and ‘a lot more of reality returns’. In particular, she has a better visual perception of reality. Second, when she is surprised by the taste of orange. Here, too, her negative feelings are erased. However, other negative feelings emerge as a result of having unconsciously eaten.

perception, bitterness, and proprioceptive sensitivity. Only variables belonging to the same sensory modality were associated with one another. Already in an earlier study, the authors did not find any significant correlations among variables representing different sensory modalities (Ferentzi et al., 2017). In the same study the authors also investigated possible associations between different sensory measurements, body awareness, and somatosensory amplification. They found that somatosensory amplification, i.e., the tendency to experience somatic sensation as intense, noxious, and disturbing, was not strongly correlated with pain threshold, pain tolerance, and body awareness. Moreover, it was not significantly correlated with the ability to detect one's heartbeat. This is very interesting considering that three of the ten items of the Somatosensory Amplification Scale, which was used to measure somatosensory amplification, are "I have a low tolerance for pain", "I am often aware of various things happening within my body", and "I can sometimes hear my pulse or my heartbeat throbbing in my ear" (Barsky et al., 1990, p. 327). This may indicate that even if individuals self-report to be highly sensitive to sensations in their bodies, and even if this is true in certain situations, this sensitivity may not consist in a de facto perpetually amplified sensitivity. The descriptions of Clara's experiences show that the awareness of certain aspects of one's own body varies over time and is hugely influenced by a person's overall condition. For instance, when Clara is having lunch with her dad in experience three, she feels relief during the conversation with him. The relief partly consists of her perception 'returning', her perception 'being more active compared to before'. For one, this concerns her visual perception. She visually perceives her surroundings better than she did before, and the brightness returns to normal.⁶⁴ More importantly, she senses her body again. For instance, she perceives the temperature of her food which she did not perceive before the relief emerged.

Conflicting findings concerning interoception in bulimia may therefore be due to methodological issues and the variability of interoceptive awareness across different sensory modalities. In addition, Clara's case study suggests that interoception may vary within an individual depending on her overall condition.

⁶⁴ Before the feeling of relief emerges, she perceives the room as darker than it actually is. This is also a good example for the transition from dissociation to association. Clara herself highlighted that the feeling of relief consisted partly in overcoming dissociation, by saying that feeling relieved and freed are not completely accurate terms, but that she was simply more in reality again.

Conclusively, more comprehensive studies are required to understand the role of interoception in bulimia.⁶⁵ Similar to the case of (non)pharmacological treatment options and binge eating disorder, studies investigating certain aspects of interoception in bulimia are relatively scarce compared to studies on anorexia. Malighetti and colleagues conclude that the majority of the reviewed articles focused on individuals with anorexia instead of bulimia, and that this suggests a lack of studies on proprioception and interoception in individuals with bulimia (Malighetti et al., 2022).

Feelings

Next to the topic of attention I gave detailed synchronic and diachronic descriptions of Clara's bodily states throughout the different phases of eating and vomiting. In short, Clara's experience before vomiting is marked by the awareness of different forms of tension. Moreover, she often feels pressure, heaviness, fatigue, and a stooped posture. In connection to the previous, she sometimes also experiences breathing as more strenuous.

By contrast, she feels extremely light after vomiting. In some experiences she also feels extremely relaxed, related to this she can breathe more easily. In two of the experiences, she not only feels light and flexible but also as if she was taller. In half of the experiences, she has strong feelings of Geborgenheit and happiness after vomiting. All in all, vomiting seems to induce a more positive bodily state.

In the introduction to their study, Alpers and Tuschen-Caffier summarize the results of research on the role of mood states in bulimia. They highlight the importance of negative mood states as antecedents or correlates of bulimic binge-eating episodes. For one, it appears that binge eating is preceded by lower mood. Moreover, "if negative mood is experimentally induced loss of control is greater and the occurrence of binge eating is increased in eating disordered women" (Alpers & Tuschen-Caffier, 2001, p. 340).

Importantly, they also refer to naturalistic field studies, amongst others to (Johnson & Larson, 1982) in which individuals with bulimia were asked to record their mood states every two hours.

⁶⁵ For instance, also to determine *why* pain thresholds are elevated. There appears to be a tendency for establishing correlations without facilitating a deeper understanding of phenomena.

Johnson and Larson found that individuals with bulimia were significantly sadder, lonelier, and weaker as well as more irritable, passive, and constrained than the control group. Moreover, their mood was more negative before binge eating and got worse during binge eating. After purging mood improved but did not return to their normal levels. Since Johnson and Larson measured different aspects of mood such as feelings of (in)adequacy, alertness, guilt, hunger, and so on, the story is more complex than that. However, the proposed evolution of mood appeared to be an overall tendency.

Another naturalistic study, namely (Davis et al., 1988), found that individuals with bulimia reported more negative moods in the hour prior to a binge compared to the time before normal meals. Although Clara vomited after all of the experiences of eating, the quantity of food she consumed and the way she consumed it were highly dissimilar, sometimes equating to what I assume researchers call binge eating but more often not. Therefore, these findings may support the impressions I lay out in the section ‘The two forms of disconnection during eating’. In this section, I suggest that there are profound qualitative differences in how Clara experiences eating and that it may yield a more specific generic structure if her experiences would be separated into different categories.

In their study, Alpers and Tuschen-Caffier asked 120 participants, one-third each of whom were women with bulimia, women with panic disorder, and women with no diagnosed disorder, to record their feelings and eating behavior while in their ‘natural environment’.⁶⁶ Not only did the authors compare between groups but they also studied mood changes within the binge-purge episodes of individuals with bulimia. An interesting outcome of the comparison between groups was that there were no significant differences in the pattern of negative feelings between the group with bulimia and the one with panic disorder. In particular, this also concerned anxiety ratings, which were expected to be higher in women with panic disorder than in women with bulimia. As hypothesized the correlation coefficients of feelings and the desire to eat were significantly higher in women with bulimia than in the two control groups.⁶⁷ Contrarily, hunger and desire to eat were not highly correlated for individuals with bulimia. These results align well

⁶⁶ The participants were asked to record their feelings hourly over two consecutive days. Participants also recorded their food intake. Additionally, individuals with bulimia were asked to make three ratings immediately after eating when they perceived it as a binge-purge episode: their mood before and during the episode, and their mood after purging.

⁶⁷ The correlation coefficients were negative for positively valenced feelings.

with the descriptions of Clara's experiences. For one, she had strict rules regarding eating. Her eating behavior apart from when she 'lost control' seemed to be governed more by her rules than by hunger cues. Similarly, as I lay out in the section 'The relationship between nausea/physical discomfort and the decision to vomit', she does not decide to vomit because she feels nauseous or too full. Instead, the antecedents of 'bingeing' and vomiting present themselves in the following ways: In two experiences, she breaks her rule of eating only half of her food. The moment she realizes that she unintentionally has eaten more than her rule allows her to, negative feelings emerge (shock and hunger/disheartenment, respectively) and she decides to vomit. In another experience, she unconsciously puts food in her mouth when she already experiences negative feelings. Here, too, negative feelings emerge when she becomes aware that she has unconsciously put food in her mouth, and she decides to vomit. In two experiences negative feelings trigger the decision to 'binge' which entails the need to vomit.⁶⁸ In one experience she stops eating, dozes, and has no intention to vomit. However, when she is woken up by a phone call, negative feelings emerge, and she decides to vomit. All in all, it seemed that sensations of hunger and satiety were not determining Clara's eating and vomiting behavior.

Matching the picture that the desire to eat and negative (as well as positive) feelings were highly correlated for individuals with bulimia, Alpers and Tuschen-Caffier also found that eating was preceded by negative feelings. Women with bulimia rated most feelings, with the exception of anxiety and sadness, as worse in the hour prior to a binge compared with the rest of the day.⁶⁹ Regarding the mood changes within the binge-purge episodes one of the authors' findings was that women with bulimia rated their global mood state significantly worse after binge eating. Even though I did not 'measure' Clara's feelings, this first finding appears to be compatible with the descriptions of her experiences after eating. However, the authors report that although after purging the ratings of mood improved, the post-purge ratings of mood returned to the pre-binge

⁶⁸ In one of those two experiences, she actually notices that she feels full at a certain point and stops eating 'prematurely'. She would have expected to be able to eat a larger quantity. Even though it was decided that she was going to vomit eventually, the decision *when* to vomit exactly followed to some degree her satiety cues. It is interesting that she was practicing yoga around that time which is not common for her.

⁶⁹ Similarly, Berg and colleagues found that guilt was higher than the other facets of negative affect, namely fear, hostility, and sadness. Moreover, guilt was the only facet of negative affect that still showed significant linear effects before and after bulimic behaviors when controlling for the other facets of negative affect (Berg et al., 2013). It is interesting that certain negative feelings, for instance sadness, are not as strongly associated with bulimic behaviors as others. Qualitative studies may be useful to gain insight into the relationship between specific negative feelings, such as sadness or guilt, and bulimic behaviors. The possibility that some of them, for instance sadness, might even counteract bulimic behaviors cannot be ruled out.

level. They conclude that “there is no indication that global mood improves as a result of the binge-purge episode” (Alpers & Tuschen-Caffier, 2001, p. 349). The finding that the participants’ mood improved after vomiting – but only to ‘pre-binge level’ – is not in accordance with how Clara describes her experience after vomiting.

However, there is ample explanations of why Alpers and Tuschen-Caffier’s findings are not reflecting the fact that individuals may have a highly positive experience after vomiting. One reason could be differences in methodology, in particular how individuals report their experience and when exactly they do so. The difficulty lies also in the fact that the positive experiences after vomiting are most likely of short duration, in Clara’s case of about 15 minutes. Thus, results are highly dependent on how researchers define the term ‘post-purge’ and what time period the participants’ recordings actually reflect.⁷⁰ In another study participants rated their feelings at four different time points around and during bingeing and vomiting (Corstorphine et al., 2006). The authors found that “taking the broad comparison between the point immediately before bingeing and an hour after vomiting, the only significant differences were that the women felt less hunger and more guilt (...). However, the pattern was more complex within that time envelope” (Corstorphine et al., 2006, p. 8). For instance, happiness levels did not change after bingeing, but rose substantially after vomiting. The happiness rating fell over the following hour, but it remained higher than it had been immediately before vomiting. Contrary to the above, this result is very much in line with Clara’s experience. Moreover, it shows that ‘significant differences’ may get lost depending on when the measurement is taken.

Additionally, it introduces the notion that there is a difference between measuring the absence of negative feelings and the presence of positive ones. In particular, it is also important to distinguish between different negative feelings, see for instance (Berg et al., 2013).

In accordance with these arguments, Alpers and Tuschen-Caffier note that the global mood rating they used is unable to capture changes such as the alleviation of specific negative feelings, for instance, tension, and the induction of others, for instance, guilt and shame. Just like I did above, they, too, suggest that mood states directly after vomiting may not be stable. They support this

⁷⁰ Even if participants are told to rate their mood *immediately* after vomiting, it is conceivable that they rate their mood, e.g., ten minutes after vomiting. Alpers and Tuschen-Caffier do not address this topic in their paper.

assumption with a study indicating an increase in negative and a decrease in positive affect one hour after binge eating compared to directly after eating (Sherwood et al., 2000).

While the findings which are in agreement with Clara's experience, namely that negative feelings increase until before vomiting and decrease during and after vomiting, appear to be consistent across different studies (Mizes & Arbitell, 1991; Ruzumna, 1999; Swirsky & Mitchell, 1996), the finding that mood returns to 'pre-binge levels' immediately after vomiting is not. This is also reflected in the fact that Alpers and Tuschen-Caffier initially hypothesized that individuals with bulimia would report more negative global mood states before binge eating than after purging.

Ruzumna, too, hypothesized that "mood state prior to and subsequent to binge-eating would be characterized by an increase in negative mood compared to mood following purging (Ruzumna, 1999, p. 22).⁷¹ However, similar to Alpers and Tuschen-Caffier, she found that the level of negative mood state before bingeing and after purging was comparable for most mood states measured.⁷² She makes arguments concerning the time of measurement similar to the ones I made above. She writes that "researchers have suggested that the immediate effects of binge-eating are satisfying, but fleeting" (Ruzumna, 1999, p. 22), and that "perhaps our measurement of mood state prior to bingeing reflected some of the exciting and pleasurable feelings which have been associated with the early effects of bingeing" (Ruzumna, 1999, p. 23).⁷³ Moreover, although she did not find a '*consistent* increase in negative mood' before bingeing compared to following purging, there were *specific* negative feelings for which this was true. For instance, she found that individuals experienced fewer feelings of confusion following purging than before or after binge-eating, and also that tension sharply decreased following purging.

⁷¹ Note also the phrasing 'an increase in negative mood prior to and subsequent to binge-eating compared to mood following purging', as opposed to 'an increase in positive mood following purging compared to prior to and subsequent to binge-eating'. The two phrasings seem to imply different forms of causation.

⁷² She also states that "this finding is inconsistent with earlier studies which show that negative mood states precipitate binge-eating" (Ruzumna, 1999, p. 22). This is in line with my arguments. However, the two studies she cites do not compare the experience before bingeing to the one after purging. Cooper et al. started measuring their participants' mood during, not prior to, bingeing (Cooper et al., 1988). Only a few of the individuals in Lingswiler's et al. study actually purged and the authors did not report any findings on the effects of purging on mood (Lingswiler et al., 1989).

⁷³ There were only two experiences in which Clara was 'bingeing' before she vomited. Indeed, in both of these experiences she had moderate or intense positive feelings shortly before she started eating. Importantly, the feelings before she decided to binge, that is, the feelings preceding the positive feelings in anticipation of the binge, were negative.

Interestingly, Swirsky and Mitchell, using a structured questionnaire to inquire the subjective experience of disturbed eating behavior, found that 65% of participants reported feeling relieved, soothed, and/or in control after the purge and that only one person reported feeling any signs of anxiety. The authors give illustrative quotations, such as “‘Relief of built up tension’; ‘I feel cleansed and pure and light. My mind forgets about any real ailments or pain in my life and I just want to sleep’” (Swirsky & Mitchell, 1996, pp. 22-23).

As time passes, the participants experience more conflicting feelings. Along with the relief they become aware of remorse, self-hate, and dysphoria. Still, 41% of participants report feeling soothed, and 33% feel negative feelings. A quote from one woman illustrates the presence of conflicting feelings: “‘Can be very different reactions. Body usually feels relaxed, some lingering pleasure (like after an orgasm) – I’m usually pretty chipper, a little excited, at a distance from people, so free. I might be depressed or feel some shame in some cases but not usually’” (Swirsky & Mitchell, 1996, p. 23).

When asked whether they feel any different at the end of a cycle compared to prior to binge eating, 71% felt soothed, calmed, and better than they did before – also *despite* the presence of negative feelings. For instance, one participant says that she gets a strong feeling of relief during the purge, and that it feels like punishment, but that it feels good to be punished. Another says that she forgets whatever feelings were haunting her and that she focuses instead on the guilt of binging and purging. Quantitative studies like Berg and colleagues’, which simply measured the intensity of guilt, would not have been able to capture its complex role (Berg et al., 2013).

Two other topics I would like to discuss briefly are body temperature and breathing. We have seen that the positive feelings Clara experiences after vomiting are marked by sensations of warmth in certain parts of her body. There is a treatment method which incorporates warm rest after eating (either in a warm room or with a thermal blanket) next to restricted exercise, as well as adjustments of eating rate and awareness of satiety (Bergh et al., 2013). Bergh and colleagues suggest that patients with eating disorders feel cold continually and that increased physical activity may be an (unconscious) attempt to upregulate body temperature.⁷⁴ The reason they implemented warm rest into their treatment method was to calm the patients and “to avoid the use

⁷⁴ Indeed, Clara noted more than once that she usually feels cold.

of calories for thermoregulation” (Bergh et al., 2013, p. 880).⁷⁵ Referring to Bergh and colleagues, Troscianko and Leon note that warm rest after meals also helps counter postprandial anxiety in all patients (Troscianko & Leon, 2020). Unfortunately, I was not able to find this information in the referenced papers (Bergh et al., 2013; Södersten et al., 2017). Regardless, using warmth in the treatment of bulimia is an interesting and yet to be investigated approach. In particular, its effects should also be investigated separately from other interventions. The findings of Clara’s case study indicate that warmth could be used with the intention to induce positive bodily feelings, rather than attempting to ‘avoid the use of calories for thermoregulation’.

Lastly, I want to discuss the topic of breathing. Clara described that breathing felt notably easier after vomiting compared to any other phase of her experience. Voluntary induced vomiting is not per se pathological, for instance, it is also a yogic cleansing technique. There is a study which investigated the effects of this technique on the quality of breathing (Balakrishnan et al., 2018). The authors performed pulmonary function tests before and after ten minutes of rest following vomiting. The changes were different for experienced and unexperienced participants. For the purpose of this thesis, I focus on the changes observed in experienced practitioners. In experienced practitioners, the authors found significant increases in slow vital capacity, that is, the maximum volume of air that can be exhaled slowly after slow maximum inhalation, and in forced inspiratory volume in first second. Moreover, they found a non-significant increase in expiratory reserve volume, that is, the maximal volume of air that can be exhaled from the end-expiratory position. Importantly, they found a reduction in respiratory rate, that is, the number of breaths taken per minute. These results suggest that exhalation may become deeper, and breathing may slow down after vomiting. Since full exhalation and slow breathing are both associated with relaxation, this may be empirical evidence for the relaxing effects of vomiting.

However, as Swirsky and Mitchell put it:

“At the end of the cycle, when the momentary feeling of wholeness, of calmness and externally induced soothing is fading, anxiety begins to mount and a need to repeat the process gets underway” (Swirsky & Mitchell, 1996, p. 23).

⁷⁵ Bergh and colleagues argue quite aggressively against the idea that eating disorders are caused by ‘an underlying mental health disorder’. Although their treatment method is certainly helpful for many individuals, I want to distance myself from some of the ideas put forward in the cited paper.

All in all, although there appears to be conflicting evidence on whether or not individuals have a more positive experience shortly after vomiting compared to shortly before eating, the following appear to be consistent findings: Mood is relatively low prior to eating, gets worse thereafter, and improves as a result of vomiting. In the hour(s) after vomiting it gradually deteriorates again.

Clara's case study adds to the conflicting evidence concerning individuals' feelings after vomiting. It suggests that more precise time points and more differentiated methods of capturing (rather than measuring) feelings may be necessary to show that vomiting may – at least temporarily – elicit exceptionally positive feelings.

Limitations, strengths, and future directions

The fact that the present study is a case study is both a limitation and a strength. It is a limitation because it does not allow for an estimate of whether or not the herein discussed phenomena, such as Clara's highly divided attention, are common for individuals with bulimia. At the same time, studying Clara's experience in meticulous detail also allowed for insights which could not have been gained by looking at a greater number of individuals more superficially. These insights can be a direction for future research – qualitative as well as quantitative.

In the last chapter of this thesis, I have shown that the findings of Clara's case study can inform and reinterpret quantitative research. Based on my qualitative findings alone, I have identified areas in quantitative research which have received little attention, or which have led to little investigation into treatment options. Examples for this are the high comorbidity of bulimia and ADHD and the scarcity of studies investigating (non)pharmacological interventions for ADHD in individuals with bulimia.⁷⁶

Furthermore, I assume that detailed qualitative descriptions of experience are in themselves a good starting point for the development of new interventions. They may be of use in determining when and how the experience can be influenced such that a person no longer feels the need to

⁷⁶ In the clinical setting, standard screening for ADHD in individuals with bulimia would be particularly important in this context.

engage in harmful behaviors as frequently. In Clara's case, one approach could be to try to induce a state similar to that after vomiting using other means.⁷⁷

Descriptions of experience have the potential to inform not only the understanding and treatment of bulimia nervosa, but also that of other disorders. In particular, it is conceivable that seemingly distinct disorders (such as ADHD, anxiety disorders, mania, or different forms of addiction) share certain characteristics like divided attention.⁷⁸ More qualitative research into disorders, in particular studies using the micro-phenomenological interview, could reveal such common mechanisms.

In conclusion, there is a number of directions for future research: There is a need for more qualitative research into the experience of individuals with bulimia. Such research might reveal whether at least a certain proportion of individuals with bulimia share a similarly structured experience. In particular, this concerns how the structure of attention, different forms of dissociation, and feelings evolve throughout the day and around eating and vomiting. Findings may indicate which already existing treatments can be appropriated for individuals with bulimia. For potential treatment approaches, intervention studies are needed to determine their efficacy. This is particularly important because there seems to be a great lack of intervention studies on pharmacological treatments and mindfulness interventions. In addition, qualitative case studies could provide the basis for developing individualized treatments. Such treatments could incorporate different aspects, for instance the active modulation of attention, the regulation of body temperature, relaxation techniques, and possibly medication other than selective serotonin reuptake inhibitors. Here, too, intervention studies are needed to determine efficacy.

Similar directions apply for quantitative research. Quantitative studies are able to include a larger number of participants than qualitative ones. This could help to generalize results. However, we have seen that the results of quantitative research have to be interpreted with caution. Qualitative

⁷⁷ In her case, these could include relaxation techniques, generating length and warmth in her body, working on her ability to focus her attention, and many more.

⁷⁸ In a similar way, altered perception of time appears to be a common characteristic across diseases, most likely strongly intertwined with that of attention. There is research concerning the temporal experience in anxiety, depression, mania, addiction, post-traumatic stress disorder, autism, and in recovery from psychosis (Moskalewicz & Schwartz, 2020). Individuals with depression have been shown to over-reproduce a time interval of 6 seconds, while individuals with mania have been shown to under-reproduce a time interval of 37 seconds (Mahlberg et al., 2008). Zhao and colleagues report similar results (Zhao et al., 2010). This may reflect a slowed and an accelerated experience of time, respectively. These specific alterations in how individuals with depression and mania experience time have also been found in (Bschor et al., 2004).

research can inform the interpretation of quantitative findings and should be the starting point for forming the hypotheses that underlie quantitative research.

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Zusammenfassung

Qualitative Studien, in denen eine Methode namens *Descriptive Experience Sampling* verwendet wurde, deuten darauf hin, dass Frauen mit Bulimie oft eine auffallend große Anzahl verschiedener Phänomene gleichzeitig erleben. Diese ungewöhnliche Struktur des Erlebens wurde als *multiples inneres Erleben* und *Fragmentierung der Aufmerksamkeit* bezeichnet. In der vorliegenden Fallstudie untersuche ich das Erleben einer Frau, die Bulimie hat, mit einer anderen Methode – dem mikrophänomenologischen Interview. Ich war interessiert daran, ob die Aufmerksamkeit meiner Interviewpartnerin in ähnlicher Weise zwischen einer großen Anzahl von Phänomenen gespalten ist und wie sie den Prozess des Essens und Erbrechens erlebt.

In Momenten, in denen sie nicht aß und erbrach, war ihre Aufmerksamkeit in der Tat zwischen einer außerordentlich großen Anzahl gleichzeitig auftretender und sich schnell verändernder Phänomene wie innerer Bilder, innerer Stimmen und Körperempfindungen gespalten, d.h. sie erlebte stark ausgeprägtes *Mind-Wandering* und zahlreiche Gefühle innerhalb weniger Sekunden. Während des Essens und Erbrechens erlebte sie kaum *Mind-Wandering*, hatte jedoch auffallend häufig dissoziative Erlebnisse. Nach dem Erbrechen hatte sie ein deutliches Bewusstsein für sich selbst, für ihre Umgebung und für äußerst positive Gefühle wie Geborgenheit und Glück. Im Gegensatz dazu war ihr Bewusstsein vor dem Erbrechen durch verschiedene negative Körperempfindungen gekennzeichnet. Es schien also, dass meine Interviewpartnerin durch das Essen und Erbrechen in der Lage war, negative körperliche Zustände aufzulösen, ihre Aufmerksamkeit neu zu fokussieren, und überdies äußerst positive Gefühle und eine starke Verbindung zu ihrem Körper und ihrer Umgebung zu erleben.

Die Ergebnisse dieser Fallstudie stehen im Einklang mit früheren qualitativen Studien zu dem Thema. Sie stehen auch im Einklang mit quantitativer Forschung zu veränderten Hirnfunktionen in den Aufmerksamkeitsnetzwerken von Frauen mit Bulimie, zu Zusammenhängen zwischen Bulimie und Aufmerksamkeitsdefizit-Hyperaktivitätsstörung, sowie zu Zusammenhängen zwischen Bulimie und dissoziativen Zuständen. Die Rolle der Aufmerksamkeit bei Bulimie muss weiter erforscht werden, um die Ergebnisse in Behandlungsansätze zu übertragen. Darüber hinaus könnte die detaillierte Analyse von Gefühlen und ihrer körperlichen Komponenten die Entwicklung individualisierter Behandlungen ermöglichen, die auf Faktoren wie Körpertemperatur, Muskeltonus und Atemqualität abzielen.