The Logical Structure of a World of Pure Experience

Towards a Descriptive Framework for Empirical Approaches to Phenomenology

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Introduction

The general topic and approach of this thesis may be explicated by a short discussion of its title and subtitle:

'The Logical Structure of a World of Pure Experience: Towards a Descriptive Framework for Empirical Approaches to Phenomenology'

This admittedly bulky heading gives a quite comprehensive indication of the themes to be treated here (which is undoubtedly an advantage of bulky titles). But as it turns out, the themes actually appear in the title in reverse order, compared to their succession in the text. So, to give an overview on the content of this thesis, I will provide a short characterization of each of the expressions in the title – but starting at the end, instead of the beginning.

So, first (or last) of all, this thesis is about *phenomenology*, which I am going to understand here quite broadly, comprising any approach to inquiry which assigns a central place to the description and reflection of lived experience, that is, experience as actually lived through in the first-person perspective (more on this in chapter 1). I have to admit right at the start that phenomenology has an unsettled status in the methodological canon of modern science and philosophy. This seems to be mainly due to the fact that the guiding principle for both scientific and philosophical thought is objective or intersubjective validity. In this context, phenomenology has come under the suspicion of trying to conduct 'introspection' of what is 'merely subjective' – which has lead to it being discarded or simply ignored. I take this to be a regrettable restriction blocking productive avenues for inquiry. And it may be high time for these avenues to be explored by us, who often seem to be out of touch with our most concrete lived experience. This thesis is an attempt to make headway in this direction.

The notion that phenomenology cannot be understood as 'merely subjective' also explains its combination with the penultimate expression in my thesis' subtitle. Namely, it talks of *empirical approaches* to phenomenology. Now, while empirical research is widely considered to be the paradigm case of 'objective' conduct, it is argued here that phenomenology can be pursued as an empirical undertaking (and not just as 'armchair reflection') that moves us beyond an 'objectivist' notion of research (this is developed in chapters 2 and 3).

And this specific approach, or so I am going to argue (in chapter 4), is in need of an adequate *descriptive framework*, as indicated at the beginning of the subtitle. So, the main concern of this thesis is methodology for philosophical and empirical inquiry (the difference being actually a gradual one, if you subscribe to the idea of empirical phenomenology).

The main title of the thesis, 'The Logical Structure of A World of Pure Experience', is a combination of the titles of two works that I take as the main inspirations on developing a suggestion on how such a descriptive framework may look like (in chapters 5 and 6). The first is an essay by William James, A World of Pure Experience, first published in 1904 and the second of James' 'Essays in Radical Empiricism', which lay out a specific philosophical perspective revolving around the notion of 'pure experience'. The second is the book The Logical Structure of the World ('Der logische Aufbau der Welt') by Rudolf Carnap (first published in 1928), which developed a somewhat related perspective, but a wholly different methodology, making use of formal descriptions of the 'logical structure' of experience through first-order logic and set theory. What is going to be suggested here is a combination of the Jamesian perspective with the Carnapian methodology (or, at least, certain aspects of it).

As may already be clear from this characterization, I take a rather eclectic approach here, bringing together phenomenology with major figures from the two other main traditions in philosophy of the 20th century, pragmatism (James) and analytic philosophy (Carnap). Thus, my aim does not lie in giving historically comprehensive reconstructions of past debates, but in offering productive methodological possibilities for future research. Accordingly, my starting point is not so much a well-established research question in a particular field of philosophy, but a methodological desideratum that first of all has to be argued for. Thus, the leading questions of the thesis are the following: What is actually a compelling reason for engaging in the description of lived experience? What is the significance of lived experience? And in the light of the answers we may give to these questions, how may we proceed in actually describing and reflecting on lived experience?

Chapter 1, 'The Methodological Significance of Phenomenology', starts out by providing a sketch of a general understanding of phenomenology, which comes out as a rather wide one. According to this wide understanding, phenomenology comprises just any approach that builds on the description and reflection of experience as lived through in the first-person perspective. This implies an account of what is to be meant with 'lived experience' as opposed to the 'things in the world' that we take as being experienced, and to which we are usually attentive in what phenomenologists came to call the 'natural attitude' of both everyday practice and of theoretical inquiry.

The pervasive concentration on things generates a major challenge for the methodological approach of phenomenology. Namely, lived experience is elusive, it is *not* what we are used to deal with in the natural attitude that is 'natural' in the sense of being the 'default' attitude we usually think and act from.

Moreover, the natural attitude also gives rise to the ideal of objectivity as a way to attend to the things independently of putative subjective distortions. Phenomenology is typically eschewed out of the fear that its concentration on lived experience invites such distortions.

This has motivated different 'objectivist' construals of lived experience itself, as I am going to illustrate. Thus, in modern philosophy of mind and beyond, experience is characterized in terms of 'mind' and 'consciousness', which in turn are understood as mere occurrences or properties in a world of things. And this world of things is assumed to be basically accessible to an objective description.

Against this 'objectivist' conception of experience, I make the case for phenomenology (in the proposed wide sense) by arguing that the first-person perspective of lived experience cannot be ignored in the described way. Turning the reason for discounting phenomenology – the orientation towards objectivity – into the opposite direction, I argue that we need phenomenology precisely to make sense of intersubjectivity and objectivity (and not only of subjectivity) in the first place. Along this line of thought, the basic motivation for phenomenology runs as follows: True, we live our lives in a world of things – in fact, this is what we all *experience*, day in and day out, in the natural attitude. But the everyday life that confronts us with things incessantly is *itself* nothing but lived experience. This means especially that the very concept of objectivity, that motivates the dismissal of lived experience, cannot be independent of putatively 'un-objective' experience. And this, in turn, provides the paradigm example for the case that phenomenology cannot be avoided as a method.

As a first step to make this case, I will specify a requirement that every account of objectivity has to fulfill, the 'demand of objective purport'. This requirement expresses the demand for things to 'speak for themselves' in our interaction with them. The importance of experience for objectivity (that motivates the indispensability of phenomenology as a

method) lies in the notion that a thing as an object of experience can only 'speak for itself' through experience. In this way, lived experience is methodologically indispensable or even primary.

Specifically how this primacy is to be understood, is of course the crucial question for the motivation of phenomenology. I distinguish and discuss three different, but not necessarily exclusive, understandings: primacy of experience as 'accessive', as 'foundational' and as 'immersive'.

Accessive primacy is included in the notion of 'intentionality' or 'object-directedness' of experience. The accessive primacy of experience may be expressed by inverting the famous slogan that 'experience is experience of objects': 'objects are objects for experience'. Understood in this way, accessive primacy is the reason why experience comes to bear on the demand of objective purport. What figures in objective knowledge claims are precisely intentional objects, that is, experienced objects.

Foundational primacy of experience builds on and goes beyond accessive primacy: it expresses that our thought about things is constrained by the experiences of these things. This is often expressed by the slogan that there is a 'given' aspect to experience (also called 'the Given', for short). The notion of the Given, in turn, has given rise to the famous concern that it may succumb to a 'Myth of the Given' (voiced most prominently by Wilfrid Sellars). I argue that this problem can be avoided by an adequate understanding of the epistemological role of the Given, in the form of an 'immediate support foundationalism' (as formulated by Scott Aikin). This moderate form of foundationalism is what I take to express the 'foundational primacy' of experience. The characterization of the foundational primacy of experience through immediate support foundationalism shows how the Myth of the Given can be avoided. And this resolves a common in-principle objection against phenomenology.

Nonetheless, neither foundational primacy nor accessive primacy by themselves are enough to give a *positive* motivation for phenomenology. Namely, in both cases, accessive and foundational primacy, third-person accounts are also conceivable. So, they show that experience is important, but not yet that *description* of experience is important. I argue that *if* anything can give sufficient motivation for phenomenology, it is the notion of immersive primacy of experience. Immersive primacy subsumes both accessive and foundational primacy, making it a more comprehensive way of answering to the demand for objective purport.

According to the idea of 'immersion in lived experience', the deeper importance of experience does not lie in its granting access to things (accessive primacy) and also not in its founding epistemological role (foundational primacy). Rather, lived experience is not so much *grounding*, as it is *surrounding*. It is a cognitive (and practical) field, rather than (only) an epistemic ground or constraint *in* that field.

Proceeding from immersive primacy of lived experience, phenomenology comes out as a specifically transcendental project that proceeds by 'bracketing' the natural attitude, and the philosophical perspective it informs. The aim of this bracketing (called 'phenomenological epoché') is precisely to make experience, as the field in which subjects and object of intentionality are immersed, come into view. This is meant to enable that things (as intentional subjects and objects) can then be 'reduced' ('traced back') to this field, in which they are 'constituted' as *experienced* things.

In order to arrive at a generalizable account of the constitution of intentional objects, phenomenology aims at describing the intersubjectively and intersituationally invariant aspects of lived experience. These 'invariant structures' of experience are 'objective' in a functional sense, but not taken as 'objective' in the sense of having their origin in an

experience-transcendent thing.

The transcendental-phenomenological perspective motivates a non-representational, non-objectifying understanding of cognition. And this, in turn, speaks against the exclusive concentration on a detached, third-person approach in trying to understand the human mind, and thus, especially, objectivity as one of its accomplishments: first-person, lived experience is never 'merely subjective', since it is the medium in which objectivity is constituted in the first place. Objectivity is generated through a process within lived experience. And this, finally, also provides an adequate motivation to phenomenology that accessive and foundational primacy taken in isolation cannot provide.

The example of objectivity demonstrates that there is a certain methodological indispensability to phenomenology. The motivation for phenomenology based on the notion of immersive primacy is simply that we have to do phenomenology. More precisely, we have to do it in the sense that we just cannot help to do it, this happens – at least implicitly – anyway all the time. Thus, the question is not so much whether to do phenomenology, but rather, how to do it: as an implicit, unsystematic practice, or as an explicit, methodical one.

Chapter 2, 'Phenomenology as an Empirical, Second-Person Methodology', traces out the consequences of the motivation given for phenomenology in terms of immersive primacy. Namely, a phenomenological approach proceeding from the immersive primacy of experience is bound to take it into account on the level of epistemology of phenomenology itself. This has an important implication: The picture of the generation of intersubjective or objective knowledge as a process within lived experience of course also pertains to the generation of knowledge about lived experience. The phenomenological study of lived experience is itself a practice immersed in lived experience (just like other practices of generating intersubjective knowledge in scientific or lifeworldly contexts). So, a phenomenology motivated by immersive primacy has to give an account of the epistemology of phenomenological practice that can accommodate this situation.

As is going to be argued, the natural candidate for this role is a *constructivist* or *enactive* account of epistemology, paying heed to the self-referentiality of research on experience being itself immersed in experience. In developing this approach, I follow recent suggestions by Urban Kordeš. Building on the study of cognitive systems in 'second-order cybernetics', constructivism understands knowledge about experience as being constructed or 'enacted' in a process within lived experience.

The enactive understanding of phenomenological description and reflection is non-objectifying, non-representational, and non-observational. This entails a corresponding conception of the validity of description and reflection. Thus, the constructivist approach to phenomenology also moves us beyond a representationalist understanding of doing justice to the experience being described or reflected upon.

A constructivist or enactive approach to phenomenology can only be carried out as a phenomenology that is *empirical* in a specific sense of the term. This sense is opposed to 'armchair' approaches to phenomenology, which remain ultimately restricted to the 'first-person' level for producing and validating results. The paradigmatic armchair or *a priori* approach to phenomenology is exemplified in the way Edmund Husserl thought we may arrive at the invariant structures of experience. Namely, he proposed a procedure he called 'essential intuition' or 'eidetic intuition' ('Wesensschau') through 'imaginative variation' ('eidetische Variation'). But what is notoriously lacking in the phenomenological tradition is a clear description of procedures by which phenomenologists may actually arrive at intersubjective criteria for the validity or invalidity of putatively 'intuited' experiential structures.

To overcome these difficulties of the *a priori* approach to phenomenology of solitary armchair reflection, empirical phenomenology suggests to apply 'second-person' methods, which are thoroughly intersubjective, not only on the stage of comparing results, but already at the stage of bringing them about. The straightforward route to follow in this cause is the conduction of *interviews* on concrete instances of lived experience, with subsequent *analysis*. This implements intersubjectivity on the methodological level of phenomenological description (in the interview) as well as on the level of phenomenological reflection (in the analysis).

In taking a broadly empirical approach, empirical phenomenology bears certain parallels to 'experimental philosophy', as suggested currently as a new methodological approach in the analytical tradition. But because experimental philosophy remains firmly within the third-person paradigm, this parallel is only partly appropriate. Rather, as a second-person approach, empirical phenomenology may be understood as 'experimental philosophy with a qualitative bend'.

The currently most elaborate 'empirical-phenomenological' approach is *microphenomenology*, developed by Claire Petitmengin, Michel Bitbol, and others. Like phenomenology in the Husserlian tradition, microphenomenology aims at bracketing assumptions about the existence and nature of an objective world (and especially on experience understood as an occurrence in that world), and attempts to describe the invariant structures of experience found in that attitude. But as a 'second-person' method, microphenomenology takes a specific methodological approach that is only partly congruent with that of traditional phenomenology.

Namely, microphenomenology proceeds by the exploration of singular experiences with a specific location in space and time through conducting interviews in a carefully evoked phenomenological attitude in the interviewe. The descriptions gathered in the interviews are subjected to an analysis process, in which categories for the description of structures of experience are abstracted. Like the interview, the analysis is also meant to avoid preconceptions of experience as far as possible. Two kinds of diachronic and synchronic structure are abstracted from the first-person descriptions: firstly, the specific structure of one singular experience and, secondly, the generic structure of a certain type of experiences. The main goal of the microphenomenological analysis are the generic structures.

In discussing the example of a specific microphenomenological study, I aim to show how this method may open new ways for understanding cognitive (and other) processes – precisely by understanding them as *experiential* processes to be studied by first- and second-person methods.

In chapter 3, 'Empirical Phenomenology and Abduction', I indicate some 'blind spots' that are still extant in the methodology of microphenomenology. I make a suggestion how they may be filled by understanding microphenomenology, and empirical phenomenology more broadly, as following the inference pattern of *abduction*.

In spite of its potentials, microphenomenology is not a fully developed methodology, especially, there is the need for further clarification of the reasoning or inference processes operative in the analysis. Microphenomenology seems to involve inferences on the level of analysis, since it does not stop at the level of singular experiences, but tries to go to specific and generic structures from there. And this process of abstracting structural categories in the microphenomenological analysis can be understood as an inference, namely, an inference from the descriptions of singular experiences to the specific and generic structures (and, additionally, an inference from specific to generic structures).

But the inference processes in question are not yet well-described or well-understood. Especially, the enactive criteria for their validity (comprised under the notion of 'performative coherence') are, though suggestive, still somewhat elusive. This unclarity potentially invites a relapse into phenomenological 'armchair' notions of intuition into necessary or essential features of certain types of experiences. As is going to be discussed, suggestions in this line have already been made on the basis of pointing out the mentioned methodological 'blind spot' in microphenomenology. In contrast to such an 'armchair backlash', what I suggest is that the reasoning in microphenomenological analysis may be understood as consisting of abductive processes. Performative coherence may be interpreted, accordingly, in terms of abductive coherence. The adequate sense of abduction in this context is a 'broad' philosophical understanding (proposed by Timothy Williamson) going beyond 'inference to the best (causal) explanation' operative in empirical science.

As I aim to show in the discussion, the reasons to argue for abductive methodology in philosophy and for an empirical approach in phenomenology actually run parallel, speaking for a mutual affinity of the two programs. Namely, the main motivation for 'abductivism' in philosophy is to dissolve what Williamson calls the 'deadlocks' of deductive argumentation, generated by the overblown aspiration for necessary conclusions from obvious premises. In parallel, empirical phenomenology may be understood precisely as an attempt to dissolve the 'deadlocks' of armchair phenomenology, generated by the overblown aspiration for intuitive insight into necessary structures of experience. Accordingly, microphenomenology does not aspire to arrive at hypotheses (or 'conclusions') with some kind of (inference) procedure guaranteeing necessity. It tries to shun assumptions on the putatively basic and necessary features of experience and rather to elicit fallible hypotheses from descriptions and analyses that are as presuppositionless as possible. An interpretation of microphenomenological analysis as abductive makes room exactly for this, since abduction does not aspire for necessary conclusions either and comes out as a fallible mode of inference.

The suggestion to interpret microphenomenological reasoning as abductive is developed in three steps. Firstly, the 'Abductive Theory of Method' (developed by Brian Haig) and the notion of abductive theory appraisal in terms of the 'virtues of a good theory' are sketched. As the most comprehensive account of the theoretical virtues, I refer (like Haig) to the framework of 'explanatory coherence' (formulated by Paul Thagard). Secondly, Williamson's broad philosophical sense of abduction – which is neither necessarily causal nor even necessarily explanatory – is introduced. Thirdly, this wide sense of abduction is transferred to the framework of the Abductive Theory of Method, leading, especially, to an adjusted sense of abductive coherence (instead of explanatory coherence). The resulting 'broadened' understanding of abductive methodology is then applied to the case of microphenomenology.

Interpreting microphenomenology as an abductive process fits it continuously into an abductive understanding of reasoning in the sciences or the humanities going beyond the micro(phenomenological)-level. This makes it possible to see how the various microphenomenological descriptions and analyses may be integrated into a larger theoretical whole. More generally, it opens a perspective on how to situate empirical phenomenology as a research program in an overall abductive approach to philosophical and empirical inquiry. In this perspective, microphenomenological results may themselves serve as evidence among other kinds of evidence; either for abductive inquiry into experiential structures lying on a 'meso'- or 'macro'-level (with greater temporal expansion), or for abductive inquiry into entities lying beyond the phenomenological sphere (the 'normal' subject matter of the humanities and the sciences).

In chapter 4, 'Pure Experience as a Descriptive Framework for Empirical Phenomenology', I introduce 'pure experience' as a descriptive framework for empirical phenomenology. This marks a point of convergence of all lines of argumentation pursued in the previous

chapters: immersive primacy and the constitution of the subject-object duality in lived experience, empirical phenomenology and its implementation through microphenomenology, and the interpretation of this approach as abductive.

The idea of 'pure experience' has been developed by William James in the context of his mature philosophical approach he called 'radical empiricism'. In the pure-experiential framework, subject and object of experience are seen as relational configurations within a basic field of pure experience that is in itself independent of the subject-object duality.

This allows to move beyond the standard framework that has developed through the 'armchair' approach to experience (with striking parallels between the phenomenological tradition and analytic philosophy of mind).

Namely, in analytic philosophy of mind, it is common to distinguish three aspects of experience: intentionality, subjective character and qualitative character. With respect to each of these aspects and their mutual relationship, there are (as may be expected) great divergences on how this is to be understood in detail. But what is widely accepted are the three aspects of experience as basic categories which have to be accommodated in one way or another in the philosophy of mind (and be it by eliminating one in favor of another or reducing one to the other).

Since intentionality is also the central concern of the tradition of 'armchair' phenomenology emanating from Husserl, a parallel framework is suggested in this context: Husserl characterized intentionality as a correlation of what he called 'noesis' (a subjective 'act of consciousness') and 'noema' (the 'intentional object'), underlaid by a qualitative substratum for which he used the term 'hyle'.

As I am going to argue, the basic categorial framework subtending *both* the Husserlian and the analytic approach to lived experience is the dual structure of a subject of experience being intentionally directed towards an object of experience. These approaches presuppose this subject-object duality as a structure that is characteristic of *any* imaginable experiential field, and through which, in turn, any experience has to be categorized.

But if we proceed in this way, then we install the subject-object duality as a presuppositionless Given in experience. In other words, we succumb to the Myth of the Given in a specifically phenomenological form (falling into the ballpark of what has been called the 'categorial Myth of the Given' in the literature). Thus, the subject-object duality is no option for an empirically oriented phenomenology as a basic conceptual framework.

The problems of presupposing the subject-object duality may be circumvented in the context of so-called 'genetic phenomenology', which does not take the duality as statically given, but tries to describe it as dynamically arising and being sustained in a process within lived experience. Especially, microphenomenology can be understood as a genetic-phenomenological approach in this sense. But, it is argued that the genetic approach only points in a direction beyond the phenomenological Myth of the Given, it does not by itself lead there, since it also makes quite substantial assumptions on the nature of experience.

Now, to be sure, rejecting the subject-object duality as a categorial Given (as an ineluctable categorial framework for the description of lived experience) does not mean that it is rejected as such. But precisely because the duality cannot simply be apprehended through some kind of 'eidetic intuition', there are many different ways of understanding it that are, on the face of it, on an equal footing. The natural way to avoid any of these understandings being presupposed as a categorial Given is already nascent in the abductive approach of empirical phenomenology: we may simply take the various subject-object frameworks as abductive hypotheses.

But to make different understandings of the subject-object duality comparable as abductive hypotheses in the first place, a common 'neutral ground', a common conceptual

framework excluding none of them, is required. If we want to avoid mythical presuppositions, on the one hand, the question accrues what we *can* assume as a basic categorial framework. Some framework is needed, if we also want to avoid arbitrariness, on the other hand. In short, we need a descriptive framework that avoids the presupposition of a static subject-object duality as well as the illusion of an absolutely presuppositionless description and analysis of lived experience.

And, as I argue, William James' writings on 'pure experience' may be interpreted as containing a suggestion on such an alternative (minimal) categorial framework for phenomenology. The aim of this approach is not to reject the subject-object duality, but to remain *neutral* towards it (and towards the many ways it may be understood). In other words, the pure-experiential approach may open a way to describe experience that does not start from presuppositions about its basic structure that already predefine what is actually say- and thinkable in phenomenological discourse. This does not mean that the notion of a subject and an object of experience is to be denied in the name of empirical phenomenology, but rather, what is to be suggested is that we should search for possible ways to go beyond – or better: 'beneath' – this picture. Thus, pure experience is going to be introduced not as being able to *replace*, but to *encompass* the subject-object duality.

The context of the formulation of the pure-experiential approach by James is his broader program of 'radical empiricism'. This program with the notion of pure experience at its heart has been interpreted as giving rise to an ontological 'neutral monism', positing pure experience as a neutral 'stuff' to which materiality and mentality can be reduced. In contrast to this ontological reading, I take pure experience as a methodological approach, positing a basic descriptive instead of a basic ontological category.

In taking on the development of pure experience as a descriptive framework, I argue that the pure-experiential framework does not succumb to a kind of 'mysticism of the imminent' because of aiming for a description of experience independent of the subject-object duality (as some interpretations suggest). Nonetheless, the approach still faces another challenge in the same direction: the possibility of proceeding from the perspective of pure experience and its implementation in (empirical) phenomenology depends on whether this stance is actually feasible to us, who are accustomed to rely on a subject-object duality not only in a philosophical, but also in an everyday perspective. Thus, it has to be admitted that while experience may have immersive primacy, there is also a 'discursive primacy' of thing-talk in comparison to experience-talk. And this leads to an inevitable objectification of experience in phenomenological description and reflection. Lived experience is not left in some kind of 'pristine', non-conceptualized and non-objectified form, but described in terms we are also used to apply to things.

We may understand this as a 'disciplined use of metaphor', which transfers terms from manners of speaking about *things* to the domain of speaking about *experience*. This metaphorical way of presentation may be interpreted experience being modeled through analogy to things. In the setting of pure experience, this means that the categories of *relata* and *relations* in experience have to be modeled on relations between things (taken in the 'natural attitude').

Now, understanding the pure-experiential descriptive framework as a relation-relata 'model' entails two questions concerning the implementation of this model. Firstly, how can we conceive of relata and relations in experience *in general*? This question concerns what we might call the 'metaphysics' of experiential relations and relata (modeled on relations among things). Secondly, which *specific* relations can we assume and which descriptive tools can we apply? This question is again more on the methodological level of the pure-experiential approach. In the two ultimate chapters, respectively, tentative answers to

these two questions of implementation are discussed.

Chapter 5, 'Metaphysics of Pure Experience', deals with the possible answers we may give to the first of the two aforementioned questions. Each of these answers affords something like a most general 'metaphysical' background model for phenomenological descriptions. For an overview on the 'metaphysical' options, I sketch and compare the possible ways of construing experiential individuals and relations and their interplay.

Concerning the individual experiences within a given experiential present (the experiential relata), there are three conceivable options. Firstly, a 'unitist' picture with basically undifferentiated totality of experience with only *one* individual experience. Secondly, a 'finitist' picture with finitely many mutually differentiated individual experiences. And thirdly, an 'infinitist' picture with an infinitude of mutually differentiated individual experiences. Of these, the unitist option is going to be discarded as a non-starter, leaving us with the 'finitist' and the 'infinitist' options for a possible combination with an account of the the experiential relations.

Concerning the combination of relata and relations, there seem to be generally two options: A 'one-kind-world', in which the relations are individual experiences just as much as the relata; and a 'two-kind-world', in which the relations and individuals are experiences each of an own kind. As will turn out, these two options are closely connected to the finitism versus infinitism issue regarding individual experiences.

Thus, it is argued that there are basically two coherent ways of bringing together relations and relata in one 'world of pure experience': a finite two-kind-world and an infinite one-kind-world. But although there certainly has to be a decision at some point or another to get a complete picture of the 'world of pure experience', the applicability of it as a descriptive framework does not hinge on this. In both world-pictures, there are individuals, and there are relations, and this is all that is needed for the methodological approach of pure experience. Above that, the relevant question for the pure-experiential methodological program seems to be chiefly what difference each of the two 'packages' has within its specific applications. Thus, the decision is best to be made on these grounds and not on the preliminary stage of exploring possible pure-experiential world-pictures.

The characterization of the experiential present as comprising relations and relata leads to a follow-up question. Namely, how can we characterize the experiential present *itself*? Exploring models of temporal experience may help to clarify the perspective of pure experience, which is a perspective of the experienced present – thus, an account of what is meant with 'the present' surely helps in evaluating this approach.

Already James took the temporal (and possibly continuous) structure as a central feature of experience, and his account of time-experience seems to be vital to his account of pure experience. But he provided only a rough sketch on temporal continuity. And, of course, there are alternative accounts of the temporal structure of experience, some of them greatly at odds with the Jamesian picture. Thus, to get a clearer account of (pure) experience, an overview of the feasible accounts of the temporal structure of experience is provided. Four main types of models for the temporal structure of experience are discussed: the 'cinematic', the 'retentional', the 'extensional', and the 'point-extension model'.

All of these models provide different accounts on the way in which temporal processes (change and persistence) figure in experience and on the temporal structure of experience itself. The point-extension model makes the most sustained effort of 'saving the phenomena' of experienced temporality. For this, it pays the cost of making the most extreme break with common sense language of all the discussed models. At the opposite extreme of this approach lies the cinematic model. Conversely to the point-extension model, it characterizes temporal experience in a way that is akin to the way we normally talk about things,

but at the cost of rejecting any genuine experience of temporality and continuity. The retentional and the extensional model, respectively, strike a middle ground between these two extremes, but also face serious challenges in living up to the intuitive requirements they were developed to fulfill.

Being confronted with such a trade-off, it seems advisable to remain neutral on the temporal structure of experience on the general level of the pure-experiential framework. As shall be argued, the methodological approach of pure experience is actually not committed to any of these accounts. Thus, arguing for one specific model of temporal experience may not even be necessary, it may already be sufficient to have the relevant alternatives on the table. This opens the possibility to explore the consequences of adopting one account of temporality or another, when actually formulating experiential descriptions in the framework of pure experience.

Turning to the question which *specific* relations we can assume and which descriptive tools we can apply to characterize them, chapter 6, 'A Proposition for Relational Description of Pure Experience', contains an exploratory development of a pure-experiential framework of relations. This serves as a demonstration of the potentials of this approach, not a full-fledged application, which would go beyond the scope of this thesis.

As a descriptive tool, I propose Rudolf Carnap's idea of a formal 'relational description' for experience. This approach, relying on a formal characterization of relations, may be combined with the approach of pure experience and the Jamesian notion of relations in experiences.

Carnap proposed his approach of relational description in the *Aufbau*, but only as a first step towards 'structural description', which he envisioned as the ultimate method for his project. While I reject structural description as too idealized for an application in the context of empirical phenomenology, I opt for a combination of relational description with reference to concrete examples of lived experience. The decisive aspect of relational description is that it proceeds by way of assumptions on experience that do not simply state the logical interconnections of certain *one-placed* properties (which would render the description 'impure'); rather, it comprises assumptions with regards to certain *many-placed* relations in experience. What renders the relational description pure is the fact that any reference to concrete relata (and thus to subjects and objects of experience) is dropped and that the relations are only 'implicitly' characterized through formal attributes that they are assumed to exhibit. Thus, a combination of relational description with reference to 'impure' examples is a viable approach for a pure-experiential descriptive framework.

The formal expression of the assumptions on the experiential relations amount to something like an 'implicit definition' of these relations, but not in a complete form, since the step of giving examples is included in the process of defining the relation. The formal characterization is not a full definition of the relation in question. It is this characterization which is 'pure', but not the definition, of which the formal characterization is only part and which necessarily includes 'impure' examples. This means that we cannot define a self-standing domain of pure experience, we can only characterize already impurely defined experiences in a 'pure' way. Nonetheless, what we can do with the relations characterized in this way, is developing 'models' of lived experience. In this way, we gain pure-experiential categories for the 'neutral' description of experience on the hypothesis of certain relations being universally prevalent in the present field of lived experience.

With this on the background, I give an illustration of how the resulting 'pure-experiential relational description' may be applied (especially in the context of empirical phenomenology). In this context, I apply, like Carnap, a formal language (first-order logic and set theory). As a first result, I describe how relations can be described formally and how their

status as pertaining *universally* and *to a certain relative degree* to all 'portions of pure experience' in the experiential present can be characterized.

Making use of this general framework, I characterize five experiential relations: mutual differentiation, relative resemblance, relative directedness, relative cohesion, and relative salience. Differentiation is the most basic (and least interesting) relation to be assumed, which holds between all experiences (except, of course, for the case x=x for any experience x). The relation of resemblance between individual experiences is the most crucial relation for descriptive purposes. Namely, it enables us to form categories of experiences by way of classes of experiences having a higher resemblance mutually than to any other experiences. The relation of directedness of experiences towards one another is arguably present in many cognitive processes as they are lived through in the present. More generally, relations of inter-directedness among portions of pure experience (which are not intentional by themselves) may be involved in intentional experience, as a kind of 'micro-intentionality' which is, together with other pure-experiential relations, constitutive of intentionality proper. The relation of cohesion of experiences with one another allows us to give an account of how individual experiences are 'added together' to conglomerates. Finally, the relation of relative salience enables us to represent the attentional structure of the field of experience.

Motivating these relations with extensive reference to the phenomenological literature would go beyond the scope of this thesis. But this is not necessary for an illustration of the potential of the pure-experiential framework as suggested here. The system of relations affords a certain perspective on lived experience, the aspiration here can only be to demonstrate how such a perspective is feasible in principle.

And that it is not only feasible, but also needed, that is the conclusion to be argued for in the overall argumentation running from the primacy of lived experience via empirical phenomenology to the notion of pure experience.

1 The Methodological Significance of Phenomenology

The starting point for our discussion of phenomenology is the observation that it has an unsettled status in the methodological canon of modern science and philosophy. This seems to be mainly due to the fact that the guiding principle for both scientific and philosophical thought is *objective* or *intersubjective* validity. In this context, phenomenology has come under the suspicion of trying to conduct 'introspection' of what is 'merely subjective' – which leads to it being discarded or simply ignored.

In this opening chapter, a first account of phenomenology (section 1.1) is going to be developed, as well as of the notion of objectivity and the attitude of rejection and/or ignorance towards phenomenology resulting from it (section 1.2). To move beyond this antiphenomenological attitude, I distinguish and discuss three different, but not necessarily exclusive, understandings of a methodological 'primacy of lived experience': 'accessive' (section 1.3), 'foundational' (section 1.4) and 'immersive' (section 1.5) primacy. Of these, only the third sense can give adequate motivation to phenomenology.

1.1 The Phenomenological and the Natural Attitude

The basic understanding of phenomenology which I take as starting point, and which is a fairly broad one, is sketched in §1. Making sense of phenomenology also includes making some sense of its major theme, namely, 'lived experience', which is characterized in §2.

§1 Phenomenology

Phenomenology is to be understood here in a broad sense as a methodological approach, not restricted to the tradition emanating from Edmund Husserl. Phenomenologists in this wide sense are, as Steven Levine aptly put it, simply 'those who think that philosophy is concerned above all with the description of conscious lived experience' (Levine 2018: 2). In this general sense, 'phenomenology' as a philosophical approach may be characterized as comprising two aspects (see Woodruff Smith 2003).

The first aspect of phenomenology is a methodical description of lived experience at the background of dispensing or bracketing beliefs concerning reality taken to exist independently from experience (the so-called 'natural attitude', see also §2,§14 below). 'Lived experience' is equivalent to the German term 'Erlebnis'. This is also expressed by the terms 'conscious experience' or experience from a 'first-person perspective'. The qualifier 'lived' expresses that the word 'experience' is not employed in the sense of being gathered or built up over time as a store of skills, knowledge or memories. This would rather correspond to the German expression 'Erfahrung'. And neither is lived experience confined to 'observation' that is systematically acquired and aimed at operationalizing the phenomena. It is present, immediate experience in unrestricted fullness. 'To experience' is, like its cognates 'to be conscious' and 'to be aware', an umbrella term. It comprises many different varieties of experiencing: Perceiving, cognizing, thinking, imagining, remembering, feeling, and so on. Accordingly, lived experience encompasses not only sensory perception, but also any occurrent thought, imagination or feeling (compare Husserl 1900-1901/2001: V. Investigation, §1-§6, 1913/1976: §33,§67).

The second aspect of phenomenology is the underlying philosophical position stating

why such a description of lived experience is actually worthwhile. Phenomenologists insist that such a 'concrete description, as opposed to hypothesis or explanation' (Carman 2006: 99), is indispensable in human inquiry – first and foremost, in philosophy. This is what all phenomenologists agree upon, while the proper methodology of description remains disputed (Carman 2006: 101, and endnote 12, same page).

Both aspects of 'phenomenology' are present in Husserlian phenomenology with its many adherent and deviant sub-movements. But as already indicated, I am going to follow here a broader application of the term not necessarily restricted to the Husserlian tradition: thus, practices not being officially labeled 'phenomenology' (but rather 'introspection', for instance) may also fall into the understanding of 'methodical description of lived experience'. Phenomenology in this broad sense is not so much a closed philosophical system, but a work assignment to be tackled with methods that are constantly evolving. To be a phenomenologist in this sense, you do not necessarily have to call yourself this way. And neither do you have to have read or cited Edmund Husserl or figures from the 'phenomenological movement' he initiated, such as Martin Heidegger or Maurice Merleau-Ponty.

Phenomenology is often repudiated as a mere description of subjective experience that can never hope to reach a level of objectivity or intersubjective consent necessary for a viable research program (Gallagher and Zahavi 2012: 21; for such rejections, see, for example, Dennett 1991, 2001, Schwitzgebel 2011). In contrast to this misleading characterization, the basic motivation of phenomenology as a methodology in the sciences, humanities and philosophy is not a one-sided pre-occupation with 'subjective' lived experience. Rather, the idea is that to understand objectivity and intersubjectivity, we have to understand what may be denigrated as 'mere subjectivity', namely, lived experience (Gallagher and Zahavi 2012: 23-24,26). The main point is that lived experience cannot be 'merely subjective' since the very practice of working towards objectivity and differentiating it from subjectivity is an occurrence within lived experience. Paying heed to this dependency-relation is what motivates the specific methodological approach of phenomenology (see §16 below).

§2 Experience and Things

To get a clearer understanding of the motivation for phenomenology, it is helpful to further characterize what 'lived experience' is actually supposed to mean. At this point, it has to be admitted that in our lives – whether in practical activities or theoretical attitudes –, we normally do not think a lot about experience, nor act by thematizing it. Rather, we think and act with regards to what we have experiences of: namely, the things and their properties that we surmise to exist independently of the experiences we may have 'of' them (see Husserl 1913/1982: §1,§27-§30). 'Things and properties' is meant in a plainly commonsensical way here. This means, firstly, that 'things' is employed very broadly, including trees, houses, other people (and oneself), numbers, electrons, events, situations, concepts, sentences, attitudes and so on. Secondly, it means that the question of a proper distinction of things from their properties and of their mutual ontological relations is left open. The question what actually is justifiably regarded a 'really existing' thing and what not – especially, whether properties are 'really existent' things in their own right – concerns ontology and metaphysics, but not phenomenology (which 'brackets' such questions, see §14

^IApart from these two senses, in scientific and scientifically-minded parlance, the term 'phenomenology' has also acquired the role of denoting a loosely understood 'subjective appearance' or 'what it feels' of entities or occurrences being studied by some given discipline. This is also expressed by saying that some entity x 'has' (or has not) a certain phenomenology. For example, the debate on 'cognitive phenomenology' revolves around the question whether cognition (as studied by cognitive science and psychology) 'has' a non-sensual phenomenology. I am not going to employ 'phenomenology' in this loose sense, but to denote a specific philosophical and methodological approach.

below). What suffices for present purposes is the notion that things (and their properties) are plainly everything that is not itself experience, but experienced. For ease of expression, I will use in the following simply the term 'things' to denote 'things and properties of things', leaving aside the question how this distinction is actually to be drawn in a metaphysically adequate way.

Of greater importance to the present cause is a certain distinction between two specific kinds of things – or rather, two specific roles that things can play. Namely, we are used to distinguish, 'both in and out of philosophy' (Rettler and A. M. Bailey 2017: §1.3) between, on the one hand, *subjects*, having experiences and, on the other hand, *objects*, of which experiences are had of.

Example. Assume that you, the reader of these lines, and I, the author, are standing in front of a table with a bowl of grapes on it. Now, suppose one of us says 'I see a grape.' This sentence suggests not only the occurrence of an experience ('seeing'), but also of two entities that somehow seem to lie beyond the experience talked of: On the one hand, a *subject* ('I') that has (or receives, or is given, or elicits) the experience. On the other hand, an *object* ('grape') 'of' which the experience occurs ('for' the subject). \Box

On a first approximation, the distinction between subjects and objects may be understood as follows: 'To be a subject [...] is, roughly, to experience or to be conscious [...]; to be an object, then, is to neither experience nor be conscious' (Rettler and A. M. Bailey 2017: §1.3). But this way of putting the subject-object distinction has to be clarified further. It seems quite straightforward that figuring as a subject includes, as a minimal condition, the having of experiences. So this part of the distinction is hardly deniable (which further conditions may be necessary for being considered a subject is a question that can be put aside for the time being). However, being an object arguably is something different than just the negation of being a subject: 'to neither experience nor be conscious'. Rather, being an object may more cogently be understood as the functional role that is complementary to that of being a subject: a subject has experiences, an object is being experienced. In this taking, the subject-object opposition can be understood as two sides of the experiencerelation. The thing that stands on the 'experiencing'-side of the relation is a subject, the thing that stands on the 'being experienced'-side is an object. Consequently (and very much in tune with common sense), something may well be an object and a subject at the same time: namely, by simultaneously having experiences and being experienced (maybe even being self-experiencing).

Example. Standing at the table together, you and I presumably have experiences of one another: we see each others' bodies and gestures, we communicate and interact. Thus, we are not only the subjects of our own respective experiences, we also figure as objects of the experiences of the respective other. And very likely each of us also has experiences of oneself, thus figuring simultaneously as subject and object of specific experiences.

The formulation 'to neither experience nor be conscious' quoted above rather seems to point to another distinction that is orthogonal to the subject-object opposition, but nonetheless tightly connected to it: namely, the distinction between certain things that 'have a mind' versus others that do not. At least on the face of it, having a mind means, minimally, to be *capable* of experiencing, of figuring as a subject in a subject-object relation (Siewert 2016: §8). A thing without a mind is not capable of having experiences. Mindless things can only figure as objects in a subject-object relation, thus they are also simply called 'objects' for convenience. But of course, the fact that I am a minded being capable of having experiences does not exclude that I myself may figure as an object of experience as well, as argued above. Conversely, I may currently not have any experiences of objects, thus not figure as a subject (because of being temporarily unconscious, say), but nonetheless, I can still be justifiably ascribed to have a mind: I am still *capable* of having, under the

right conditions (for example, waking up from unconsciousness), experiences of objects.

In sum, what we are explicitly confronted with in our everyday life are not experiences, but things (in the wide sense expounded so far) – some of them endowed with the ability to figure as experiencing subjects, some of them not. The common sense worldview constituting the backdrop of any philosophical approach – especially, of phenomenology – does not have experience as its most prominent aspect. In the Husserlian tradition, this worldview is called the 'natural attitude' (Husserl 1913/1982: §1,§27-§30). And this 'natural attitude' is oriented towards things (and their properties), whether in a practical sense in the context of the lifeworld or in an elaborate sense in the context of theory and science. Due to the orientation of the natural attitude towards things, lived experience is actually best approached through a negative understanding, in opposition to the things which we are used to deal with.

Now, what does this negative opposition consist in? To begin with, we may say that what most basically signifies things as opposed to experience is that things go beyond the experiences we have 'of' them: every experience of a thing only gives a certain limited impression of that thing, but never discloses all there is to it.

For the case of visual perception of material things, this is quite straightforward, as Shaun Gallagher and Dan Zahavi illustrate:

'In any perception of a physical object, my perception is always incomplete in regard to the object – I never see a complete object all at once. [...] There is always something more to see that is implicitly there, even in the perception of the simplest object.' (Gallagher and Zahavi 2012: 9)

Example. When attentively looking at the grape and taking it as a material, spatially extended thing, I surmise it (explicitly or, more likely, implicitly) to have have a backside that I do not presently experience. This is, first of all, in the quite literal sense, the spatial backside of the grape, everything I do not presently see of it. I can 'only see one side at a time'. But the other sides are, according to common sense, 'there' as well, even when I don't look at them – and even when I don't look at the thing at all.

But this 'perspectival incompleteness' (Gallagher and Zahavi 2012: 9) is not only defining of things in a perceptual and spatial sense of 'perspective', but also in a more general sense. A thing does not only have (or rather: is experienced to have) a literal spatial backside, but also a more abstract one: all its aspects that are not currently experienced.

Example. Apart from the spatial backside, there is a multitude of properties of the grape that I do not presently experience (but of course, when 'coming to think of it', I do experience that I do not experience these properties): how it tastes, how many pips it contains, where it was one week ago, which individual grapevine it grew on, and so on. \Box

It is even possible that a thing is assumed to have not presently experienced aspects that contradict the present experience of it.

Example. We may take a material thing to be white 'in reality', even if it presently appears black when seen against a glaring light in the background. \Box

Things that are not material, but imaginative or abstract, are also experienced with 'perspectival incompleteness', but in this case of course only in an abstract sense of 'perspective' and 'backside'.

Example. Let's say I imagine a wooden planked boat. No matter how that imagination actually looks like ('what it is like'), it makes perfect sense that I can also ask myself how many planks that boat has – an aspect that I have not experienced in the original imagination of the boat. And accordingly for arbitrarily many other aspects of the boat.

Further, the perspectival incompleteness also holds for beings with a mind – things themselves being able to experience, to figure as subjects.

Example. Consider the two subjects in the example-situation again – you and myself. There are definitely aspects of you, and me as well, that I have presently no experience 'of' (and it would, admittedly, be quite a surprise, if you asserted that such a restriction doesn't hold for you).

So, what most generally defines things as opposed to lived experience is that they (are experienced to) extend beyond experience (Husserl 1913/1976: §42, pp.87-88). Thus, for any thing presently experienced, there is some aspect of it that is *not* currently experienced. Lived experience is defined by its perspectival incompleteness with regards to things. As the flip side of this coin, lived experience is often characterized as being 'immediate', while experienced things are not. Since, what signifies the things 'behind' experience is precisely their mediacy – there being something about them that is not directly 'here' in the presently experienced moment. Not so for experiences. They simply are everything we see, hear, think, feel, etc. – in short: everything that we experience 'of' them. There is nothing more to them. A thing, in contrast, is normally assumed to have at least some properties that are unentangled with how and whether the thing is presently experienced. That is, what things are like is at least partly independent of what they feel like – as opposed to experiences, which *are* exactly what they feel like.

The expressions just applied to characterize the difference between experiences and things need some comment. Namely, that we experience something 'of' an experience, or that an experience 'feels like' something, are potentially misleading manners of speaking. There may be an experience x of some thing τ , x then constitutes what τ feels like, but putting an experience at the place of τ in these sentences would be putting an experience in the place of a thing – and that this is not possible is what the whole differentiation of (lived) experience from things is about. There is no further experience 'of' an experience x, but only x itself; and x does not 'feel like' anything beyond x, but only like itself. So, we can speak of experience 'of' things, but not of 'experience of experiences' in the same way. If we ever want to use the expression of 'to experience an experience', then

'in an internal accusative sense, in which what one experiences is itself "an experience," not distinct from the experiencing of it (as e.g. a sensation felt is none other than the feeling of it). Being experienced in this sense is not the same as being innerly perceived [...]. Nor does the appearance I experience somehow itself "innerly" appear to me - experiences are not, strictly speaking, ever objects of appearance (and in that sense there is no "self-presentation" of experience).' (Siewert 2012: 397-398)

Analogously, any similar sense of experience being 'given', 'apprehended', 'accessed', 'known' (in a wide sense of 'knowing'), or of being 'acquainted with', 'aware or conscious of' experience is misleading, if taken as a non-internal accusative. Experience *itself* is 'givenness of', 'acquaintance with', 'apprehension of', 'access to', 'awarenes/consciousness of' things (more on this in §6,§8,§12 below) – but experience itself is not an object of acquaintance etc. in the same way. To say that experience itself is 'given', something to be 'acquainted with', 'apprehended', 'accessed', or to be 'aware/conscious of' can only be understood in the discussed internal accusative sense of 'experience of experience'.

1.2 The Quest for Objectivity and the Marginalization of Phenomenology

Now that we have a first sketch of phenomenology and its subject matter, lived experience, we can turn to an evaluation of its current status as a methodological approach. For this, based on the distinctions made so far, a notion of objectivity, as opposed to subjectivity, is developed in §3. Proceeding from this distinction, it is pointed out in §4 in which way the aspiration for an 'objective' account of things in the world – which includes, especially, the 'minds' that some of the things possess (see §2 above) – harbors an aspiration for a

^IIn an 'internal' or 'cognate' accusative, the predicate expresses exactly what the accusative object is standing for, as in 'to think a thought', 'to dream a dream', 'to live a life'. In this case, either of the two, the predicate or the object, can be dropped without loss of expressive content. Thus, instead of 'I dream a dream', I may also simply say 'I have a dream' or 'I dream'. Analogously, instead of saying 'I experience an experience' (if I care to use this expression), I may say simply say 'I have an experience' or 'I experience'.

reification of lived experience, effectively marginalizing the phenomenological perspective. As a first step beyond this marginalization, I will specify a requirement that every account of objectivity has to fulfill, the requirement of objective purport (§5). This requirement expresses the demand for the object to 'speak for itself' in our (experienced) interaction with it.^I

§3 Objectivity and Subjectivity

We may sum up what has been said so far with a simple sentence: We live our lives in a world of things. You smell a rose, which is a thing, I imagine a cube, which is a thing (though an imagined one), Rosa believes in justice, which is a thing (in the sense of 'thing' developed in §2 above: it is not an experience, but something we may have an experience of – and be it only vague), Julia loves Romeo, and Romeo is also a thing (no offense, Romeo, but you aren't an experience either, are you?). Experience comes into this picture as some kind of relation into which things may enter, II putting them in the roles of subjects and objects, respectively. Problematic, by the lights of phenomenology, is not to *start* with such an understanding of experience as a 'secondary aspect' (we frankly have no better understanding to start with), but to *stick* with it, to neglect the elaboration of a more positive account of experience.

Now, one aspect of this understanding of experience is of central importance for the role conceded to it: namely, due to its perspectival incompleteness, experience of things can 'go wrong'. More precisely, one perspectival experience x of a thing τ and another experience of τ , call it x', may contradict one another.

Example. I may be seeing the grapes, which I usually (under 'normal' circumstances) perceive as green, in certain situations as having a different color (because of lighting conditions or an impairment of my visual perceptual system, say). Likewise, it may happen that, simultaneously, you are seeing the grapes as green, while I see them in another color. In these cases, different perceptions of the same object contradict one another – which calls for a correction of one of the contradicting perceptual impressions. \Box

This gives rise to the 'is'/'seems' (or 'reality'/'appearance')-distinction: A thing seems or appears a certain way as object of experience, but it is not necessarily really this way (note that 'real' means literally nothing else than 'thingish'). Whether an experience is reliable in the sense that it most likely gives an impression of the thing as it is, is determined through its comparison with other experiences, filtering out the variant aspects in the multitude of experiences of one thing τ .

Example. In the case of deviating perceptual impressions of the grapes, we most probably tend to correct the 'odd one out' that contradicts the overwhelming majority of other perceptual impressions: Although the grapes seem to be yellow right now, this cannot be reliable, since it contradicts all the other impressions of the grapes as green, which accordingly are more credible in presenting the grape as it 'really' is (colored).

It may be noted at this point that the authors on whom I rely here to develop the notions of 'objective purport' and 'foundational primacy' (see §8,§10 below) – namely, James Levine, Carl Sachs, and Scott Aikin – are not a self-proclaimed phenomenologists. They rather work in the pragmatist and analytic tradition, although they make references to the phenomenological tradition at times. But from their specific backgrounds, these authors give clearly formulated reasons that may be applied to motivate phenomenological methodology, or so I hope to show. I take this to be a sign that 'phenomenology' is not restricted to a certain historical movement and that it makes sense to apply the term quite openly (as suggested in §1 above).

^{II}Or some state that some things, as subjects, may be in, if they are in fact not related to any thing on the 'being experienced'-end. This is the case of hallucination that is going to be discussed below in this paragraph.

Thus, the relation between subject and object, this is itself established in the course of experience, is susceptible to disturbances and errors (Husserl 1913/1976: §39, p.81): An experience may turn out to have presented an object which subsequently appears, in more reliable experiences, differently (this is a case of 'illusion') or not at all (this is a case of 'hallucination'). The general appearance-character of experience is also expressed by replacing the phrase 'experience x of thing τ ' with the more accurate 'experience x as of thing τ '.

Because of this possibility of error contained in the appearance-character of experience, it seems commendable to seek experiences that are reliable in the sense of most probably presenting their objects as they 'really are'. In other words, objectivity is an ideal in the natural attitude. In the setting of things and experience sketched in §2, an objective perspective on a particular thing τ may be understood as the invariant core of many different experiences subjects may have of that thing in many different situations. The invariant aspects in the different experiences are credited to the object of the experiences, the thing τ in question, thus they are called 'objective'. Features varying among the experiences (as) of τ , being present only in a limited number of experiences, are assumed to be dependent on the subjects experiencing τ , thus they are called 'subjective' – and are usually assumed to present no 'real' feature of the thing τ (in the case of illusion), or no thing at all (in the case of hallucination). In short, the variant and unreliable aspects of experiences (as) of things appear to be due to the subject of the experience, the invariant aspects are ascribed to the subject- or 'mind-independent' thing that figures as object of experience.

That a subject experiences things as they really are is – given that the subject also entertains the 'content' of these experiences in a belief – conducive (if not indispensable) to gaining knowledge about these things (or, at least, justified belief with regard to the things in question). But, as said above, the chances of an experience to present things 'truthfully' (as they really are) depend essentially on the 'objective perspective' of the experiencing subject. Thus, in the context of inquiry (the operation of acquiring knowledge about the world) objectivity is of utmost importance. Because the erroneous factors in experience (as) of things are ascribed to the subject, epistemic objectivity is commonly

'understood as aiming to avoid or overcome the intrusion of subjectivity into [...] inquiry. Any influence of the epistemic subject [h]as to be removed or minimized.' (Rouse 2015: 177)

Erroneous experiences are often associated with emotional valuations and, in the case of perceptual objects, adverse perceptual conditions. Thus, one tries to control these factors, which are usually unrestrained in everyday practice, through adequate 'subject-positioning' in the context of inquiry – especially, *scientific* inquiry:

"Objectivity" has been attributed to various aspects of inquiry supposedly conducive to knowledge: disinterestedness, emotional detachment, rule-governed procedures, quantitative methods, openness to criticism, responsiveness to evidence, or accountability to a mind-independent reality, among others. Their advocates have also accorded different epistemic roles to these marks of objective inquiry or objective knowledge, ranging from methodological advice on how best to conduct inquiry to standards proposed as criteria for knowledge.' (Rouse 2015: 175)

In the outcome of successfully applying these norms of subject-positioning, 'one only retains a sort of [...] residue of conscious experience that can be the object of a consensus' (Bitbol 2008: 55). So, the objective perspective on a certain thing is produced as a 'consensus' on the invariant features of various experiential perspectives, a 'residue' of eliminating the divergences (between the perspectives of different persons and/or one person in different situations). What is left out of consideration in the resulting objective perspective is of course not lived experience as such – this is simply impossible –, but (as far as possible) the trans-situationally and trans-subjectively variant features of experience. The variety of

experiences involved in the process of the generation of this objective 'residue' form its 'lived precondition' (Bitbol 2016: 231), as Michel Bitbol puts it (arguing from a phenomenological perspective).

Nonetheless, for those striving for objectivity (and this includes all of us already in our everyday lives, at least to some degree), lived experience in its full variety contains 'too much': not only the reliable objective perspectives on things, but also the 'merely subjective' (Husserl 1913/1982: 117), possibly erroneous, ones. Reference to lived experience in all its variety appears as something that is best avoided in an objective inquiry of things in the world. Thus, in this understanding, a phenomenological description of lived experience (including the 'merely subjective' aspects) appears as a dangerous intrusion of subjective distorting factors into inquiry.

§4 Lived Experience in the 'Dead Angle' of Objective Thought

Although experience figures as the 'lived precondition' (see §3 above) for the process of objectification, in the results of this process, reference to lived experience may be suppressed, as witnessed already in the everyday orientation towards things (see §2 above). That is in principle no problem, but it may lead to a certain forgetfulness with regards to first-person lived experience:

'The creators of objective knowledge become so impressed by its efficacy that they tend to forget or to minimize that conscious experience is its starting point and its permanent requirement. They tend to forget or to minimize the long historical process by which contents of experience have been carefully selected, differenciated [sic], and impoverished, so as to discard their personal or parochial components and to distillate their universal fraction' (Bitbol 2008: 56).

So, because of 'being no *thing*' (but only appearance), lived experience as the precondition for obtaining objective knowledge 'is all the more easy to forget' (Bitbol 2016: 231).

The objectivist perspective resulting from this forgetfulness is basically an elaborated version of the lifewordly picture of a thing-world sketched in the beginning of §3 above: There are things in the world that are 'objectively' describable, and some of these things are endowed with a mind, they are capable of being in 'mental states' or 'states of consciousness'. This perspective takes experience to be, at best, only an aspect of a 'mental state' (alternatively, of a mental event or process), a causally dependent occurrence in the world of otherwise non-experiential things – but nonetheless an occurrence of its own type, endowed with a qualitative 'feel' (a 'what it feels like', Nagel 1986) and somehow encapsulated in the experiencer's 'mind' or 'consciousness'. This is the common understanding of experience that springs from the natural attitude and that has been countenanced in the development of modern philosophy. Thus, the thing-experience dichotomy is reified in some form or other of 'metaphysical realism [...] with its treatment of consciousness as a mere object in the world' (Zahavi 2016: 290).

Now, the metaphysics of analytic philosophy, in following the ideal of objectivity, has become largely and avowedly *scientistic* and *naturalist*, and the same holds for the metaphysics of the mind. Thus, there is

'a metaphysical aim that has animated much analytic philosophy of mind: to say what mental states are in non-mentalistic, physical terms. Part of what inspires this goal is the thought that, if mind is real and efficacious, it must somehow be necessitated by the facts of nature that science reveals – a nature in itself fundamentally mindless.' (Siewert 2016: §5)

In the pursuit of this aim, different ways of understanding 'mind' or 'consciousness' have developed, most importantly: behaviorism and cognitivism. What these approaches share is the notion that 'mind' and 'consciousness' have to be 'objectively' ascribed from a third-person perspective instead of described from a first-person perspective (Gallagher

and Zahavi 2012: 15).

Thus, in *behaviorism*, 'mind' and 'consciousness' were defined by way of overt, intersubjectively observable bodily behavior. In this way, behaviorism was setting the stage for the marginalization of lived experience by discarding all reference to anything mental understood in a non-reductionist sense (Gallagher and Zahavi 2012: 3-4). At the heart of behaviorism there is, as Gary Hatfield puts it, 'a fear of the mental. In the heyday of behaviorism, the coherence and legitimacy of any talk of the mental was challenged' (Hatfield 2002: 224).

And, when *cognitivism* took the stage 'after the official demise of behaviourism' (Gallagher and Zahavi 2012: 16), the fear of the mental revealed at its core a 'fear of the phenomenal' (Hatfield 2002: 224). 'Mind' and 'consciousness' were now defined in terms of cognitive functions such as information processing or decision making. The notion of lived experience was dissolved in this 'cognitivist' understanding of mind and consciousness (comprising functionalist, representationalist, computation- and information-theoretic accounts). Thus,

'[w]hen talk of the mental became openly acceptable [again] in the 1970s and 1980s, the conception of the mental had been transformed. Informational content and intentional relation now became the paradigms for analyzing mental content generally (as in Dretske, 1981), and for (ostensibly) accounting for phenomenal content (as in Tye, 1995). These accounts adopted a propositional and hence language-based account of mental content.' (Hatfield 2002: 223)

As the motivation behind these 'deflationary attitudes' towards mind and consciousness, Charles Siewert makes out the overall aim to account for them as processes in a basically mind-independent reality. Namely,

'to avoid a metaphysically intolerable dualism, we must find some strategy for saying what our mental concepts are, or what the nature of each kind of mental state is, without the use of mental terms that report occurrences of consciousness. The belief that philosophy of mind's principal raison d'être lies in pursuing this sort of "restatement" project - at least some versions of which could be called "reductionist" - can be seen at work throughout its history. We find it in [Gilbert] Ryle's determination to diminish the stream of consciousness to a trickle of sensation, while construing all intelligent aspects of mind in terms of overt performances; we find it in the identity theories that followed in his wake - which tried to mop up the sensory residue Ryle left behind by reducing it to brain processes; we see it in various forms of functionalism, and in reductive representationalism.' (Siewert 2012: 394-395)

Adding to this, Dan Zahavi observes that even the 'recent analytical attempts to defend consciousness against the onslaught of reductionism^I [...still] all grant far too much to the other side' (Zahavi 2003: 66) in accepting the same basic methodological approach:

'If one thinks that cognition and intentionality is basically a matter of information processing and causal co-variation [...] then one is left with the impression that all that is really distinctive about consciousness is its qualitative or phenomenal aspect. But this seems to suggest that with the exception of some evanescent qualia everything about consciousness including intentionality can be explained in reductive (computational or neural) terms [...]. Many non-reductive materialists have uncritically adopted the very same strategy. They have marginalized subjectivity [i.e., lived experience] by identifying it with epiphenomenal qualia and have then claimed that it is this aspect which eludes reductionism.' (Zahavi 2003: 66)

What all of the mentioned approaches have in common is that the possible pathways to approach lived experience directly are being either systematically blocked or redesignated: Even the concepts 'mind' and 'consciousness', which might function as means to point to lived experience,

'have been redefined in terms of blind cognitive functions. Mind is understood as a system of information processing that allows problem solving and decision making. As for consciousness, it is torn between its

^INamely, those pointing to the inability of a reduction of (at least certain aspects of) experience to a thoroughly 'objective' description of the world, constituting an 'explanatory gap' or a 'hard problem of consciousness' (Chalmers 1996, compare also Nagel 1986, Jackson 1982).

original meaning which includes lived experience, and a more abstract meaning that only encompasses the functions of meta-cognition and synthesis of representations' (Bitbol 2016: 231-232).

Now, although this deflationary understanding of experience in 'objectivist' thought tends to obscure the lived precondition of objectivity, it also has an upside: Namely, it prevents us from searching for the lived-experiential precondition for the generation of objective knowledge in 'some occult entity or property that is formally similar to objective entities and properties, yet (mysteriously) inaccessible to [objective] methods' (Bitbol 2016: 233). Thus,

'science also has a more positive teaching in store about the issue of lived experience. Indeed, scientific advances progressively squeeze the domain of their own silent lived precondition, thereby avoiding incorrect characterizations. The background premise of perceiving, reasoning, and knowing is found to be no entelectly, no "élan vital", no ghost-like soul, and no spirit; for the task of those speculative entities has been carefully identified by scientific research and ascribed to objective "mechanisms".' (Bitbol 2016: 231)^I

But the objective redescription of anything linked to 'mind' or 'consciousness' has been so thorough that there are nearly no conceptual means left to address lived experience as the 'background premise of perceiving, reasoning, and knowing'. In this way, lived experience, as that which

'escapes scientific characterization becomes elusive, because any name which may be given to it, is confiscated and endowed with a [functional-]cognitive meaning. With no name and no method of handling, [...lived experience] remains in the dead angle of knowledge; and no move forward can *ever*, in *principle*, account for what has been left behind by this very push.' (Bitbol 2016: 232,231)

Due to this elusiveness of lived or first-person experience, its description and study has an unsettled status in the methodological canon of modern science and philosophy.

As an effect, phenomenology has been neglected in favor of other practices: In science, the focus lies on the generation of intersubjectively observable and reproducible data, in the humanities (especially analytic philosophy) on rational argumentation resting on (putatively) intersubjectively shared structures of reason, thought and language (plus, there is a strong leaning towards the practices and findings of 'hard' science). Up until now, the attitude towards first-person phenomenology is (if not hostile) ambiguous at best (Gallagher and Zahavi 2012: 2-3). So, in the quest for objectivity, 'the specific philosophical approach of phenomenology was pushed to the side and generally thought to be irrelevant' (Gallagher and Zahavi 2012: 4). And, all too often, even

'those who claim that first-person accounts should be involved [in our reasoning], [...] stop at the announcement, and propose nothing explicit one can work with. This is most commonly seen in the Anglo-American philosophy of mind, where the problem of consciousness is often assimilated with that of "qualia" for some particular features of mental states.' (Varela and Shear 1999: 12)

Overall, it is unclear how the phenomenological description of lived experience may be integrated into a coherent methodology of rational inquiry and discourse.

§5 The Requirement of Objective Purport

Now, the notion of objectivity, which has motivated the marginalization of phenomenology, is of course in need of explication itself. Namealy, accounts of objectivity are 'advanced as ways to let the object speak for itself without [subjective] intervention or imposition' (Rouse 2015: 177). The notion of letting 'the object speak for itself' of course poses a certain demand not only on subjects, but also on the idea of objectivity that is to guide their behavior in inquiry. This demand may be specified by formulating a requirement that

^IBut note the recent re-introduction of entities and properties 'formally similar to objective entities and properties, yet (mysteriously) inaccessible' in 'Russellian Monism', see Alter and Nagasawa 2012 and Höffken and Schrenk forthcoming for discussion.

any conception of objectivity has to fulfill, namely, the requirement of 'objective purport' (Sachs 2014: 8,14) or 'objective content' (Levine 2019: 5). A clear account of the demand for objective purport has recently been offered by Carl Sachs (2014) and Steven Levine (2019), who place it at the center of the discussion of objectivity. This requirement means that, in giving an account of objectivity, we have to answer

'the question [...] how potentially knowledge-bearing thoughts or judgments can have *objective content* - i.e., can be rationally constrained by and answerable to the mind-independent world.' (Levine 2019: 5)

The question of objective purport is more basic than and 'prerequisite' to that of objective *knowledge* (Rouse 2015: 174). When philosophers ask for objective purport, they address something more basic than knowledge:

'Instead of asking how knowledge could be objective, they ask how knowledge claims could even purport to be objective – that is, they ask what it is for our performances to be *about* objects and *accountable* to them at all. The issue then concerns objective conceptual content rather than objective knowledge. Epistemic conceptions of objectivity only come into play once some claim to knowledge has been formulated and recognized as a claim.' (Rouse 2015: 182)

So, objective purport is constitutive for knowledge claims, assertions or beliefs, and insofar is a prerequisite for knowledge.

1.3 Accessive Primacy of Experience

So far, we have established that any account of objectivity has to fulfill the requirement for objective purport – that our thought is constrained by the things in the world. But, as shall be argued in this section, to fulfill this requirement, we have to refer to experience. And this may put us on the road to phenomenology, since if the very concept of objectivity depends on reference to experience, then it may become harder to reject phenomenology on the grounds of objectivity.

The reason for the necessary recourse to experience in making sense of objective purport is that access to things somehow has to be experiential access. I will refer to this as the 'accessive primacy of experience' (§6). However, as shall turn out, this sense of primacy is not sufficient to motivate phenomenology as an indispensable methodology (§7).

§6 Accessibility of Things as Intentional Objects

Accessive primacy of experience concerns the access subjects have to things, and means that this access is *inevitably* experiential: The *only* access subjects have to worldly things is as *objects of experience* (in the wide sense of 'experience' expounded in §2). Things can only appear as things-experienced, or, as it is also called, as *intentional objects*. If The significance of intentionality is often described by the slogan that every conscious experience is a consciousness of some *thing*:

'Intentionality [...] means that all consciousness (all perceptions, memories, imaginings, judgements, etc.) is about or of something' (Gallagher and Zahavi 2012: 7).

But, apart from the fact that this thesis may be too strong (there may be states of consciousness that are really not 'of' anything at all – as in some meditative states), the import of intentionality for the present methodological considerations lies in the opposite

^IFor ease of expression, I only use the term 'objective purport' in the following.

^{II}The notion of intentionality has been dispersed into modern philosophy through Franz Brentano (1874/1975: vol.2, ch.1, esp. p.88) and Husserl (1900-1901/2001: V. Investigation) and from there found its way into analytic philosophy of mind, although being treated here with a wholly different methodology (compare Gallagher and Zahavi 2012: ch.6). But of course, the notion that our experience and thought is somehow 'directed' at the world is independent of the appellation 'intentionality'.

direction. Namely, if things are to figure as objective constraints to thought, they always have to do so as intentional objects of some experience or other. For a thing to 'speak for itself', it has to to speak through experience, as it were. Thus, 'intersubjectively accessible objects are intersubjectively accessible precisely insofar as they can be accessed from each first-person perspective' (Gallagher and Zahavi 2012: 46). As Husserl puts it:

'Whatever the things are, the things about which alone we can make statements, about whose being or non-being, being-thus or being-otherwise, we can disagree and make rational decisions, they are as experienced things.' (Husserl 1913/1976: §45, p.100, own translation following Husserl 1913/1982: 106, compare also Husserl 1913/1976: §50, p.106)^I

In short, the only possibility to stand in relation to a thing as a conscious subject is to stand in an *intentional* relation to it – to have some experience of it (perceptual, imaginative, volitional, or other).

Example. This holds also for things that are not directly perceivable, but only indirectly (distant stars, physical particles) or not at all (theoretical or abstract entities such as the set universe). \Box

No matter whether one may come to *criticize* this intentional experience and deny it as *erroneous* – as an illusion or a hallucination (see §2 above) –, the initial experience 'is precisely what makes such critical decisions at all possible and accordingly makes possible whatever has for me sense and validity as "true" being' (Husserl 1931/1982: §8, p.19). Phenomenologists point out that '[t]his universal inescapableness and fundamental importance of first-person access should be no surprise' (Bitbol and Petitmengin 2016: 52), but lament that it is, maybe exactly due to its obviousness, 'often underrated in current epistemology' (Bitbol and Petitmengin 2016: 52). The phenomenologists themselves, in turn, do not tend to underrate accessive primacy, since it plays a necessary role in justifying their methodological approach.

Namely, in applying accessive primacy to the demand for objective purport, it becomes clear that objective purport as an answerability to things can only be had by way of an answerability to experience:

'If empirical thinking is to be correct or incorrect depending on whether it answers to how things are in the world, and if our way of getting in touch with the world unavoidably involves experience, then our thinking - if it is to be in touch with the world - must in some way be answerable to experience. If thought is to be objective, of the way things genuinely are, it must be objective by way of a consideration of our experiential encounter with the world.' (Levine 2019: 11, emphasis added)^{II}

Thus, accessive primacy is the reason why phenomenologists can claim to be interested in objectivity *although* they try to take lived experience serious on its own terms – with all its subjective distortions. This may be formulated

'in a somewhat paradoxical way: phenomenologists are not interested in consciousness per se. They are interested in consciousness because they consider consciousness to be our only access to the world.' (Gallagher and Zahavi 2012: 28-29).

So, phenomenology does not necessarily go astray as an approach towards objectivity only because it concentrates on consciousness – in the sense of conscious, lived experience – and not on 'things' (and thus, does not take consciousness as an occurrence in a 'world of things' as in the perspective sketched in §4 above).

¹Original: 'Was die Dinge sind, die Dinge, von denen wir allein Aussagen machen, über deren Sein oder Nichtsein, Sosein oder Anderssein wir allein streiten und uns vernünftig entscheiden können, das sind sie als Dinge der Erfahrung.'

^{II}Note that, on the wide understanding of experience sketched in §2 above, this does not only hold for 'empirical thinking', but also for thinking about other objects than those things which can be accessed 'empirically'. Thus, for thought about, e.g., semantics, logic or mathematics to be 'objective' in their own sense, there has to *some* kind of experiential contact with the objects of semantics, logic or mathematics, whatever we may take these objects and the experiences of them (which are surely not perceptual) to be.

§7 Insufficient Motivation for Phenomenology through Accessive Primacy

Accessive primacy establishes that phenomenology is not totally unrelated to questions of objectivity because of studying putatively 'subjective' lived experience (as opposed to, say, 'mind-independent reality' or 'a priori conceptual truths'). But with this, we have only a minimal condition that phenomenology as a method may be necessary for understanding objectivity. Such a minimal condition does not constitute a compelling case to actually do phenomenology in accounting for objective purport. Thus, even if accessive primacy is accepted, phenomenology as a methodological approach may still be regarded as unneeded or even undesirable.

Of course, we cannot ignore that other ways of accounting for intentionality than phenomenological description of first-person experiences have been suggested. These approaches proceed on the 'objectivist' understanding of experiences sketched above (§4): as mental states that are susceptible to third-person description. Now, precisely this understanding has been applied especially and primarily to the intentionality of these 'mental states'.

Intentionality has been described in a third-person way either through 'a classical analytical manoeuvre', as Dermot Moran calls it, namely,

'shifting from examining consciousness and its objects directly to [...] analysing the grammar and logic of *sentences* involving intentions[,...] to analyse *talk* about intentional phenomena rather than looking directly at intentional phenomena themselves' (Moran 1996: 20).

Above that, in line with the cognitivist understanding of the mind (see §4 above), another (possibly complementary) third-person approach consists in describing intentionality 'in terms of causal relations, information, functional roles, or other "naturalistic" ingredients' (Bourget and Mendelovici 2017: §1). In the analytic tradition of philosophy, such third-person accounts even constitute the 'received view' (Bourget and Mendelovici 2017: §1) of intentionality. It is preferred precisely because of promising an 'objective' take on intentionality. A language-analytic, functional-causal, and/or information-theoretic understanding of intentionality abstracts away from the excess influences that lived experience confronts us with and thus *itself* complies to extant standards of objectivity (see §3 above).

Within this overall 'objectivist' approach, there are two general strategies of accounting for intentionality in purely third-person terms: the 'separatist' and the 'reductionist' strategy. The 'separatist' strategy consists in avoiding the problematic 'subjective' aspects of experience through 'squeezing' (see §4 above) it to the extent of

'sequestering it in a zone – consciousness – from which understanding, intelligence, meaning, intentionality have been safely evacuated' (Siewert 2016: §5).

Thus, this amounts to a deflationary understanding of experience in the strongest sense, effectively *separating* it from intentionality which is considered to be the actual 'mark of the mental' (Moran 1996: 19-20). The 'reductionist' strategy, in contrast, takes the aspiration for a fully 'objective' account of the mental more seriously:

'On such a reductive [...] perspective, [...t]he problem will be fully resolved, only if, instead of merely shrinking and isolating consciousness, we find a way of entirely subsuming it in a conception of mental representation that owes nothing to it.' (Siewert 2016: §5)

Accordingly, the proponents of this approach do not only want to 'squeeze' experience or consciousness, but outrightly *dissolve* it in the domain of mental intentionality, objectively construed. The projected route is as follows:

'Like the separatist, one starts from a general conception of intentionality (or mental representation) that does not assume consciousness, along with some idea about how such intentionality must arise in a world governed by the operation of certain non-intentional, natural-causal processes. Then, still without appeal to consciousness, one purports to identify a certain species of intentionality (in terms of its use,

its sources, its content), whose presence purportedly guarantees the occurrence of experience with a certain phenomenal character.' (Siewert 2016: §5)

In light of the existence of such 'third-person' (non-phenomenological) accounts of intentional, experiential access, it is clear that simply pointing to accessive primacy does not give sufficient reason to actually do phenomenology. One may take accessive primacy for granted, but still share the widely-held reservations towards the description of lived experience. And the notion of accessive primacy alone does not compel us to move beyond these reservations: True, experience may be our only access to things, but why bother with the medium of access? Why not simply stick with the accessed as we are used to from our dealings with things? After all, intentionality described in third-person, cognitive-functional terms may be precisely what is relevant to the question of objectivity.

Of course, one might try to refute the third-person approaches to intentionality directly on their own terms, but this leads back into precisely the objectified understanding of mind and consciousness (see §4 above), and thus rather away from a motivation for phenomenological methods (compare the discussions around the approach of 'phenomenal intentionality', Bourget and Mendelovici 2017). A more promising, indirect strategy – to be pursued in the following sections – consists in looking for more substantial reasons to do phenomenology that are more general than accessive primacy (which would then especially imply that we need a phenomenological account of intentionality).

In sum, to motivate phenomenology as a philosophical method, it seems advisable to go beyond accessive primacy of lived experience. For now, accessive primacy establishes that experience has to be taken into account, but does not compel us to do this in a specifically phenomenological way (as opposed to 'separatist' or 'reductionist' understandings, say).

1.4 Foundational Primacy of Experience

With accessive primacy, we have made a first (minimal but necessary) step towards phenomenology by establishing that answerability of thought to experience is relevant to meet the demand for objective purport. Now, I am going to characterize this answerability in more detail. That our thought about things is constrained by the experiences of these things is often expressed by the slogan that there is a 'given' aspect to experience (also called 'the Given', for short). This 'foundational primacy' of experience is going to be unpacked in §8. The notion of the Given, in turn, has given rise to the famous concern that it may succumb to a 'Myth of the Given', which is discussed in §9. It is argued here that this problem can be avoided by an adequate understanding of the epistemological role of the Given, in the form of an 'immediate support foundationalism' (§10). Nonetheless, foundational primacy by itself, just like accessive primacy, is not enough to give a positive motivation for phenomenology (§11).

§8 The Doctrine of the Given

As said above (§5), we can understand objective purport as requiring constraints on the justification of our thought about things in the world. Accessive primacy only establishes the importance of experience for this question, but it does not give us any positive clue on how things may 'speak for themselves' through experience.

For this, there have to be specific cases of experiential access which are (epistemically) independent of other intentional attitudes we may have towards things – from our desires and fancies of how things ought or might be, but also, and most importantly, from our beliefs and assertions of how things actually are. And, prima facie, there seem to be such experiential states – sensory perceptions are the paradigm example. Such epistemically

independent experiences are often designated as 'given' or as 'the Given' (both by proponents and critics). A careful recent characterization and defense of the idea or 'doctrine' of the Given is supplied by Scott Aikin (2010).^I

Aikin notes that the epistemic independence of the relevant experiences consists in the fact that they are relatively unchangeable in comparison to beliefs:

'Our beliefs [...] can be changed, and we can be held responsible for them. Moreover, they can serve as premises in reasoning. Experiences have no such meta-constraints, nor can they play those cognitive roles. There they are, and our beliefs, interpretations, and so forth cannot change them. [...] Their contents are not *derived* from others in the sense that they are the result of some occurrent inference or act of interpretation or deliberation. Instead, some contents present themselves to consciousness in ways that, though we may ignore or not notice them, when we attend to them, they are manifest.' (Aikin 2010: 117,119)

So, some of our nondoxastic (non-belief) experiential states seem to be independent in their content from our beliefs ('if we change our beliefs, they remain the same', Aikin 2010: 117).

Example. Aikin points to some 'cases [...] designed to show that our sensory states are in a sense forced on us' (Aikin 2010: 117):

'Mirage: You are driving on a desert highway. You see a shimmering in the road like water. You drive up to the point where the shimmering was, and there's nothing but dry asphalt. You, of course, are not *surprised* by this, because you know about mirages. But despite the fact that you know that those shimmerings aren't water, *they still look like it*.

Bent pencil: You look at a pencil in some water. It looks bent. You take the pencil out of the water and see that it is straight. You're not surprised by this, because you know about how water refracts light. But despite the fact that you know the pencil is straight, it still looks bent while it's in the water.' (Aikin 2010: 116)

This idea of epistemic independence is what motivates the designation 'the Given':

'In light of the relative autonomy of our experiential lives, a metaphor is born – there is a *Given element* to experience. Something is handed over to us, a gift. We receive it in consciousness.' (Aikin 2010: 114)

Now, this experiential Given is not only epistemically independent in the sketched way, it is also – due to this very independence – epistemically *efficacious*: although the relevant experiences 'are not *premises* for inference, in the classical sense, because they do not have truth values' (Aikin 2010: 118), they may concede or deny justificatory support to beliefs in a certain manner. Thus, specific beliefs have different degrees of justification depending on how (if at all) they are related to these experiences.

Example. In a 'flatfooted response to [...] challenges about the existence, efficacy, and intelligibility of the Given', Aikin illustrates its epistemic significance as follows:

'Close your eyes, and think the following: there's a book in front of you. Next, open your eyes, and look at the book in your hands (yes, the book you're reading right now). Now think there's a book in front of you. The two thoughts have different support, and the second had support from a visual experience. That's the Given.' (Aikin 2010: 115)

So, at core, the doctrine of the Given maintains that there is some kind of support by

^IAikin motivates the need for such a doctrine by considerations parallel to the demand for objective purport (see §5 above):

^{&#}x27;[J]ustification seems to require not just that our beliefs be arranged in the right formal pattern, but also that we be properly linked up with the world, or at least with data not dependent on our beliefs. Justification, if it's going to be justification for us to believe things about things outside of our circle of beliefs, needs to have places in the cognitive system where the world can "kick back." (Aikin 2010: 105)

nondoxastic experiences to justification of beliefs:^I

'Broadly, the doctrine of the Given is that there are beliefs supported by acts of awareness that themselves are not beliefs. Experiences are not beliefs, but they provide support for beliefs properly related to them.' (Aikin 2010: 114)^{II}

It has to be noted in this context that Aikin builds his account of the Given on the basis to the theories of immediate or direct 'awareness of' or 'acquaintance with' experience, as developed by Richard Fumerton (1995), Evan Fales (1996), and Laurence BonJour (1999), with reference to Bertrand Russell (1912)^{III} (see Aikin 2010: 126-133). But the talk of an acquaintance-relation suggests that a subject is acquainted with an object, and that 'given experiences' themselves somehow figure as objects of experience in the relevant occurrences of acquaintance. This notion of experiences as objects of awareness or acquaintance has been rejected as inadequate above (§2): Lived experience simply is awareness/acquaintance (with things), not something to be aware of or acquainted with, in turn (and if so, only in an 'internal accusative' sense).

Example. In the example of seeing a book given above, what figures as object of acquaintance is the book. Of course, you may say that you are acquainted with the experience (as) of the book, but this says nothing more than that you have an experience (as) of the book – or, in other words, that you are acquainted with or aware of *the book*. Likewise, in the examples 'Mirage' and 'Bent pencil', respectively, the object of acquaintance is a thing – albeit a thing that is hallucinated or presented in an illusory way (namely, the water on the street that is not 'really' there and the pencil that is not 'really' bent). \Box

Analogously, we may use the expression that something is given in experience, but not that experience itself is given.

The rejection of awareness/acquaintance-talk means, especially, that we do not have to talk of any 'immediate' or 'direct' awareness of or acquaintance with experience IV to

^IAikin only considers perceptual experience as support for justification, but this can easily be expanded to other experiential states such as, e.g., (intellectual) intuitions, memories, or introspective states (in keeping with the wide understanding of 'experience' suggested above in §1-§2). We can remain neutral on the question which of these states actually do play the role of justification-supporting experiential states (with perceptive experience being a natural candidate, nonetheless). All that is claimed in the present context is that there have to be *some* experiential states that play this role, if the demand for objective purport is to be accommodated.

^{II}Aikin expresses this also by saying that there are, for our beliefs, 'experiential reasons that are not beliefs but are just experiences' (Aikin 2010: 113), in other words, there are nondoxastic reasons to belief. The talk of 'nondoxastic reasons' may be rejected by some on the grounds that only something doxastic or propositional may serve as a reason. But what Aikin means with 'reason' is something weaker: support for justification. Thus, if one wishes to deploy the expression 'reason' only in the doxastic or propositional sense, one may alternatively speak of 'nondoxastic justificatory support'. Nothing is lost through such an adjustment of vocabulary.

^{III}As a historical note, it may be remarked that Russell appropriated the term 'acquaintance' from William James (1890/1981: 217), who in turn took it over from the British philosopher John Grote. James' account and usage of the term does not yet imply any special acquaintance-relation, but only points to the specific role that experiential episodes of acquaintance play in our epistemic exploits, which he desribes in a rich metaphorical language:

^{&#}x27;[T]hese mere matters-of-acquaintance, [...c]ontemned though they be by some thinkers, these sensations are the mother-earth, the anchorage, the stable rock, the first and last limits, the terminus a quo and the terminus ad quem of the mind. To find such sensational termini should be our aim with all our higher thought. They end discussion; they destroy the false conceit of knowledge; and without them we are all at sea with each other's meaning. [...] Beautiful is the flight of conceptual reason through the upper air of truth. No wonder philosophers are dazzled by it still, and no wonder they look with some disdain at the low earth of feeling from which the goddess launched herself aloft. But woe to her if she return not home to its acquaintance; Nirgends haften dann die unsicheren Sohlen – every crazy wind will take her, and, like a fire-balloon at night, she will go out among the stars.' (James 1909/1975: 31)

^{IV}Note that this is another sense of 'immediacy' than the 'immediacy of experience' (as such) developed in §2 above, in contrast to the 'perspectival incompleteness' of things. The latter, more general sense of immediacy does not rely on any 'relation of awareness' a subject may have to an experience.

make sense of what its epistemic significance is. This significance lies exactly in the role that experience plays in the way we know of and interact with things, not in having itself a status as an object of experience with some special immediate or direct access. Thus, this rejection does not touch the account of the relevance of experiential episodes of acquaintance (which is rightly pointed out by the acquaintance-theories) in the process of gaining knowledge (especially, objective knowledge). And this relevance is all that we are concerned with in the present context. For ease of expression, I will also apply in the following the widely-used talk of 'given experiences' or 'given aspects of experience', but only as a shorthand for the notion of a Given in experience developed here: a specific epistemic status or functional role of the experiential aspects in question, which 'provide support for beliefs properly related to them' (Aikin 2010: 114, see full quote above).

That justificatory support by the Given is available for some of our beliefs and lacking for others effectively places an experiential constraint on our thinking (which is the condition of objective purport formulated in §5 above). Support to the justification of specific beliefs may be either conceded or denied by the given aspects of experience. In this way, these experiences can serve, if not as premises in reasoning, then as experiential constraints on these premises, and, by extension, on our whole system of belief and assertion. In this way, the doctrine of the Given bears on the question of objective purport.

So, the idea is that something is (or rather, has to be, if the demand for objective purport can be fulfilled) given in experience, it constrains our thoughts and beliefs, without *itself* being thought or belief. This amounts to the

'definition of the given as that element in experience which is unalterable by thought. It guarantees [...] that our concepts are constrained by something external to and independent of them. In other words, the given functions as a "tribunal of experience." (Sachs 2014: 14-15)

Of course, there can be no guarantee that the Given successfully fulfills its function as 'tribunal of experience'. This tribunal may in certain cases be passed over (by the executive organ of thinking, if you will), if we fail to attend to some Given in the way required for it to exert its influence on our beliefs.

Example. Aikin gives an example of not being able to attend to 'the Given' adequately in forming one's beliefs:

'Sebastian's Foot: Sebastian has been going to Doctor Sox for pain in his foot. Dr. Sox puts Sebastian on a rehabilitation program, and at the end of the program, says Sebastian shouldn't have any more pain in his foot. Sebastian is very confident in Sox, so Sebastian heads out to play soccer. But he injures his foot, and it hurts. Sebastian, though, on the basis of what Sox said, believes his foot is fine and doesn't hurt. Despite Sebastian's good reason for believing his foot is fine (Sox is an excellent doctor), the throbbing in his foot undermines his justification for believing his foot is pain-free.

Sebastian, if he believes his foot is fine [and doesn't hurt], is overlooking something. [...] It is given that Sebastian's foot is hurt [and that it does hurt], and were he to attend to it, he presumably would (and certainly ought to) believe it. This, though, is a difference between having something given and recognizing it as such. The doctrine of the Given does not entail that subjects must have beliefs about or based on the Given, nor that they recognize the Given as given – only that when they do so with the proper interpretive attitudes and contextually appropriate doxastic caveats, they are justified and correct. Given that Sebastian does not respond to the pain in his foot by believing that his foot hurts, it is clear that givens do not guarantee beliefs. Subjects must direct their attention to what is given, and a subject's interests and other beliefs often mediate that attention's direction.' (Aikin 2010: 119)

Accordingly, the Given is not expected to supply *infallible* constraint and guidance to our epistemic enterprises. We may fail to form adequate beliefs on the basis of what is given. The notion of the Given, as characterized so far, I captures what may be called the 'foun-

^IThis characterization intentionally avoids some problematic ideas that have been linked to the notion of the Given, such as the Given as an infallible and incorrigible source of immediate justification – see §10 below for discussion.

dational primacy' of lived experience. Indeed, support to epistemic justification may be understood as kind of a epistemic foundation (though a more modest one than a foundation of full-blown justification, as we shall see in §10 below). Actually, this is only the flip side of the notion that experience imposes a constraint on belief: If there is a nondoxastic foundation to belief, this means that in any given situation, some possible judgments have a better foundation than others – they have stronger justificatory support. This comparative difference means that some judgments can be believed or asserted more justifiably than others. In other words: the comparative degree of justificatory support from experience constrains our doxastic and assertive conduct.

Before turning to a positive account of how there actually can be a Given element in experience constraining our beliefs, I present a main criticism to this line of thought: namely, the notorious idea that the doctrine of the Given is (or easily slides into) a self-refuting 'myth'. This idea served as a main argument against classical foundationalism about epistemic justification, but also poses a major challenge for the idea of a phenomenological methodology. Or, formulated positively, it offers an opportunity to sharpen our understanding of how such a methodology may work or may not work.

§9 The Myth of the Given

The foundational primacy of lived experience has been characterized here so far by the notion of 'the Given'. Now, as already noted, this notion has sustained extensive criticism, most influentially formulated by Wilfrid Sellars as 'his famous (though less-than-clear) critique' (Sachs 2014: 22) of what he called the 'Myth of the Given'.

Sellars detected the Myth of the Given in the prevalent sensualist empiricism of his time. However, the argument of a 'Myth of the Given' is not restricted to the empiricist version of it, as Sellars himself notes:

'Many things have been said to be "given": sense contents, material objects, universals, propositions, real connections, first principles, even givenness itself. And there is, indeed, a certain way of construing the situations which philosophers analyze in these terms which can be said to be the framework of givenness. This framework has been a common feature of most of the major systems of philosophy [...]. Often what is attacked under its name are only specific varieties of "given". Intuited first principles and synthetic necessary connections were the first to come under attack. And many who today attack "the whole idea of givenness" [...] are really only attacking sense data. For they transfer to other items, say physical objects or relations of appearing, the characteristic features of the "given". If, however, I begin my argument with an attack on sense-datum theories, it is only as a first step in a general critique of the entire framework of givenness.' (Sellars 2000: 205)

A reconstruction of Sellars' argument, with a generalization towards the envisioned 'general critique of the entire framework of givenness', can be found in the 'Master Argument' interpretation of Willem DeVries and Timm Triplett (2000). They proceed from '[t]he broadest characterization of the given' (deVries and Triplett 2000: xxv). According to this characterization, the Given 'is an element in experience that has positive epistemic status simply in virtue of the occurrence of that experience' (deVries and Triplett 2000: xxv). The 'key features' of the Given are (as already expounded above in §8)

'(1) that it is *epistemically independent*, that is, its positive epistemic status is not derived from some other epistemic state; and (2) that it is *epistemically efficacious* – that is, that it can provide positive epistemic support to other elements within a person's epistemic system or can enhance the epistemic status of such elements.' (deVries and Triplett 2000: xxvi)

What is left open in this characterization is, firstly, the exact nature of the Given (sensation, perception, intellectual intuition, or other – this is consistent with the wide understanding of experience expounded in §2 above), secondly, the nature of the 'positive epistemic status' of the Given (this has been typically taken to be knowledge or justification), and, thirdly,

how it can provide support to other epistemic elements. On this general basis, '[d]ifferent versions of givenism result from filling out this abstract framework' (deVries and Triplett 2000: xxvi).

The Myth of the Given, according to the 'Master Argument' interpretation, consists precisely in claiming that there is some aspect of experience which can be both epistemically efficacious and epistemically independent – with independence understood here in a certain, problematic way. The problematic 'mythical' understanding of the epistemic independence of the Given does not lie in the idea of it being immediate in the sense of noninferential (not being inferred from any belief or knowledge one happens to have). Already Sellars makes it clear that he does not take the problem to lie with the assumption that the 'positive epistemic status' is noninferential, but rather with the assumption that it is presuppositionless:

'One of the forms taken by the Myth of the Given is the idea that there is [...] a structure of particular matter of fact such that [...] each fact [of this structure] can not only be non-inferentially known to be the case, but presupposes no other knowledge either of particular matter of fact, or of general truths [...]. It is important to note that I characterized the knowledge of fact belonging to this stratum as not only noninferential, but as presupposing no knowledge of other matter of fact, whether particular or general. It might be thought that this is a redundancy, that knowledge [...] which logically presupposes knowledge of other facts must be inferential. This, however, as I hope to show, is itself an episode in the Myth.' (Sellars 2000: 243-244)

In other words, Sellars concedes that there is knowledge (or, more generally, 'positive epistemic status') which *presupposes* other knowledge, but is nonetheless *noninferiential*. Accordingly, Sachs points out:

'The Myth, then, is *not* the assumption that non-inferential awareness can play some epistemic role. Rather, we should be wary of the assumption that we need some fundamental stratum of *presuppositionless* knowledge in order for there to be any at all.' (Sachs 2020: 290, emphasis added)

This means that we succumb to the Myth of the Given, if we claim that the 'positive epistemic status' of given experiences (whatever we may take this status to be^{II}) is presupossitionless. Dionys Christias explains that knowledge (or, more broadly, positive epistemic status) being 'presupossitionless' means

'that it is "there" (in the world or in the mind) independently of its position (functional role) within a historically evolved categorial framework transmitted though [sic] language from generation to generation.' (Christias 2018: 515)

This understanding of the Given overstates epistemic independence by taking it to be independence from any presupposed interpretative and conceptual background. The 'Given' in this understanding constitutes a 'Myth', an impossibility, for the following reason: being epistemically independent (in the sense of presuppositionless) and epistemically efficacious at the same time is simply impossible, since

'any candidate for playing the role of an epistemic "prime mover" can be epistemically efficacious [...] only if the distinction between [...] correctness and incorrectness [...] can be applied to it. This [...] distinction must be operative even in the case of "immediate contents of consciousness," that is contents which appear in consciousness spontaneously, without being inferentially related to other contents.' (Christias 2018: 516).

In other words, to have the 'normative force' (Christias 2018: 516) implied in epistemic efficacy, the Given – or, more precisely, the apprehension of the Given – has to be subject to some kind of normative assessment. If we understood apprehension of the Given as

^ISee the quote from deVries and Triplett 2000 above. Sellars speaks of full-fledged *knowledge*, but the 'positive epistemic status' does not have to be so sophisticated – the discussion of 'the Given' in §8 above does not mention 'knowledge of the Given' as a condition for it to fulfill its epistemic role.

^{II}Following Sellars, Sachs in the previous quote and Christias in the context of the following one frame the 'positive epistemic status' as 'knowledge'.

always correct by default,

'the whole distinction on which objective knowledge of anything (or, indeed, objective purport) depends, namely that between right and wrong, [...] correctness and incorrectness, would collapse. In such a case, as Wittgenstein puts it, "whatever is going to seem right to me is right," but "that only means that here we can't talk about 'right'" at all [Wittgenstein 1953/1958: I,258].' (Christias 2018: 516)

Now, this seems indeed to be the case, if we understand apprehension of the Given *only* in the sense of *phenomenal* apprehension (that is, 'awareness of' experience in the 'internal accusative' sense discussed above in §2,§8). We cannot go wrong in phenomenally apprehending the experiences we are 'having'. This is trivially so, because phenomenally apprehending and having an experience simply come the same thing (A. R. Bailey 2004: 326-327,341). Now, this trivial sense of apprehension becomes problematic, 'mythical', if we take it to play an epistemically efficacious role. As the considerations of lacking 'normative force' show, clearly more is needed for epistemic efficacy.

Thus, the apprehension of the Given has to be understood as *conceptual* apprehension (which means, minimally, apprehending a given experience *as* falling under a certain kind of experience, Aikin 2010: 120,124). Such a conceptual apprehension constitutes an act of interpretation or judgment that can go right or can go wrong (A. R. Bailey 2004: 341-342).

In sum, for given experiences to be epistemically efficacious, there has to be some *conceptual* apprehension or 'interpretation' of the Given^{II} and for this, in turn, related beliefs (even justified beliefs) have to be *presupposed* as a background of interpretation (Christias 2018: 516).

This means: that the Given can be both epistemically efficacious and epistemically independent (in the sense of presuppositionless) is a myth. Epistemic efficacy and epistemic independence – at least in this form – cannot be had together. This has also been dubbed 'the Sellarsian dilemma' (see Aikin 2010: 139-141 for references to related argumentative uses of the dilemma). It poses the question how a relation of independent epistemic support between given experiences and beliefs is even possible. In short:

'The deep question about the Given is how an *experience*, when given, can provide independent support for a *belief*.' (Aikin 2010: 126)

Now, the question is what follows from this dilemma: Is there a myth *about* the Given (but it exists and the dilemma can be solved) or is the Given *itself* a myth (and it cannot exist and the dilemma does not have to be solved)? Sellars, and others who argue in the same direction, draw the latter conclusion. They reject the idea of the Given wholesale, because they hold that *any* interpretation of it amounts to an appeal to a 'presuppositionless Given' – thus, for them, the Given *as such* is a Myth.

But drawing this conclusion comes with a high cost. We have arrived at the doctrine of the Given (see §8 above) as the obvious option to accommodate the demand for objective purport at the background of accessive primacy (see §5 above). Thus, if the doctrine of the Given is rejected in the course of rejecting the myth of the Given, it becomes extremely hard, if not impossible, to accommodate the demand for objective purport. Trying to avoid the Myth of the Given may lead into an understanding of thought as a 'frictionless spinning in a void', as John McDowell famously put it (1994: 11). In this vein, Aikin notes that denying the Given due to the rejection of its mythical characterization leads into a dialectical impasse:

^IThis is yet another way of expressing the 'internal accusative' interpretation of talk of 'experience of experience' (see §2 above), now in the form of 'phenomenal apprehension of experience'.

^{II}This is already mentioned in passing – by Aikin as a *proponent* of the Given – in a quote above (§8) related to the example 'Sebastian's foot': subjects need to attend to the Given 'with the proper interpretive attitudes and contextually appropriate doxastic caveats' (Aikin 2010: 119) to be able to employ it in the justification of beliefs.

'One feature of the Sellarsian argument that is particularly vexing is that what was supposed to have been demolished, namely the thought [...] that experience is a tribunal, has not been explained. [...] Nothing about the plausibility or the psychological depth of the thought is touched. [...] Sellars's dilemma, even if it destroys the myth, doesn't touch [...the fact] that we do think, at least pre-theoretically, that our empirical knowledge, of how things are, is rationally constrained by our perceptual appearances, of how they stand. The dialectic is left incomplete, as what seems so right about the myth is passed over in silence. What's left is our tendency to think that thoughts like those are confused, and our tendency still to think those thoughts.' (Aikin 2010: 145)

Thus, instead of bluntly 'giving up on the Given', a more positive task to be drawn from the rejection of the myth is to find a characterization of the Given that can account for its epistemical efficacy without committing to a mythical understanding of its epistemical independence.

§10 Immediate Support Foundationalism

A way to retain, on the one hand, the intuition of the Given (or, as it has also been called above in §8, 'foundational primacy'), but to avoid, on the other hand, its problematic 'mythical' characterization lies in the 'immediate support foundationalism' formulated by Aikin (2010). An understanding of foundational primacy as *immediate epistemic support* moderates the condition of epistemic independence (and, consequently, the understanding of epistemic efficacy) such that the perplexing mythical picture can be averted. Nonetheless, the position is a form of *foundationalism* (more precisely, a *strong* foundationalism) insisting that immediate support is in a relevant way indispensable to the justification of our beliefs – thus answering to the demand for objective purport.

As said above (§8), 'the doctrine of the Given' is the idea that there is independent support to justification by 'given' nondoxastic experiences (a perceptual experience or an intellectual intuition, say). Immediate support foundationalism specifies this in stating that the support in question is *immediate* (or noninferiential) in the sense that it does not stem directly from other beliefs, but from a nondoxastic source. More precisely, the support stems only from 'contents that are not derived from others in the sense that they are the result of some occurrent inference or act of interpretation or deliberation' (Aikin 2010: 119, see full quote in §8 above). These contents are underived or noninferiential precisely because they are contents of experiences which are 'given', epistemically independent – not in the problematic sense discussed above in §9 ('independent' as 'presuppositionless'), but in the sense expounded in §8 ('independent' as 'unalterable by thought'). The underived status of the experiential content is just the flip side of this epistemic independence. Independent contents have to be underived; if they were derived from premises, their epistemic status would vary with a change in the status of their premises, and this would render them epistemically dependent. II Since independent experiences have to be underived, it follows that independent support (support from an independent source) has to be immediate support (support from an underived source).

In spelling out *how* immediate and independent support actually contributes to justification, immediate support foundationalism is contrasted to a more common form of foundationalism, namely, 'basic belief foundationalism' (Aikin 2010: 132). Basic justified

^IThis is yet another sense of 'immediacy' than the general 'immediacy of experience' in contrast to the mediacy of things (see §2 above) and the 'immediate awareness of experience', which has been rejected (see §8 above).

^{II}This then specifies the 'positive epistemic status' (see §9 above) of the Given for immediate support foundationalism: it is epistemically independent (unalterable) and immediate (underived). This form of foundationalism is not committed to the stronger understanding of 'positive epistemic status' as justification or knowledge.

beliefs are beliefs which only need immediate and independent support from a nondoxastic source to be fully justified. Basic beliefs typically figure in classical forms of foundationalism (which thus fall into the category 'basic belief foundationalism'). Immediate support foundationalism, in contrast, denies the existence of basic beliefs. It considers immediate support to be necessary, but not sufficient for justification:

'The thought behind being committed to basic beliefs is that if there is independent support, one has independent justification. This is an error. In fact, I think this is *the* error with foundationalism' (Aikin 2010: 133).

Thus, according to immediate support foundationalism, there is immediate support, but not immediate justification (and, by extension, there are no basic – i.e., immediately justified – beliefs). That certain nondoxastic experiences provide immediate support does not mean that they by themselves provide full-blown justification. As already pointed out above ($\S9$), epistemic efficacy (especially, justification) presupposes conceptual apprehension of experience.

So, for justification, additional support of another sort is necessary – namely, of an *inferential*, non-immediate sort: For a belief to be effectively *justified* through the support of a given experience,

'there must be some further justified reason that supports the [...] belief [...]. The reality is that there are given [...] experience[s], but for them to do the epistemic work of supporting beliefs, they must be (a) properly interpreted and (b) put to work in a rich series of reasons that justifiably frames the relevance of the experiences and their verity. [...] Immediate support contributes to justification only alongside inferential support' (Aikin 2010: 132).

For actual justification of beliefs through immediate support by given experiences, a background of (a) concepts involved in their interpretation and (b) justified beliefs speaking for 'the relevance of the experiences and their verity' is presupposed. In other words, immediate support is not understood as presuppositionless in the problematic, 'mythical' sense (see §9 above). Immediate support foundationalism draws the lesson from the Myth of the Given without giving up on the Given as the unchangeable constraint on belief. This amounts to an alternative kind of foundationalism that does not rely on basic beliefs. Thus, 'how things appear does not change given our beliefs, but our beliefs should and do change in light of how things appear and our other beliefs' (Aikin 2010: 118, emphasis added). ^{II}

The adjusted understanding of epistemic independence means not only that a given element in experience has to be properly attended and interpreted to support the justification of beliefs (see the example 'Sebastian's foot' in §8 above). Its support may also be overridden, if there is overwhelming inferential (non-immediate) support for a contradictory belief.

Example. That epistemic support by given experience is overridden is precisely the case with corrected illusions/hallucinations, such as in the examples 'Mirage' or 'Bent Pencil' above in $\S 8$.

So, given experiences can especially not be understood as immediately justifying basic beliefs in an *incorrigible* manner. There are no such beliefs and there is no such justification in the framework of immediate support foundationalism. Since a whole doxastic background plays a role in the experience's support to the belief in question, a lot can go wrong here, and the belief formed on experiential grounds is always open to subsequent correction.

In sum, immediate support foundationalism takes immediate (nondoxastic) and inferential (doxastic) support to be individually necessary, but only jointly sufficient for justifica-

^IThus, 'basic belief foundationalism' may also be called 'immediate *justification* foundationalism' as opposed to 'immediate *support* foundationalism'.

^{II}This adjunct condition is what stands behind the small but crucial phrase in the 'doctrine of the Given' cited above (§8) that experiences 'provide support for beliefs *properly related to them*' (Aikin 2010: 114, emphasis added).

tion. This means that it is an *impure* foundationalism (Aikin 2010: 73), since nondoxastic experience is not considered as the *only* source of (support to) justification; in contrast to a pure foundationalism, which allows only for *one* – necessary and sufficient – source of justification. Thus, this form of foundationalism is compatible with other accounts of epistemic justification (granted that they are also impure) – such as coherentism, the view that justification requires (some specific kind of) coherence of beliefs, ^I or infinitism, the view that justification includes an infinite sequence of justifying beliefs. ^{II}

The impure immediate support foundationalism characterized here is nonetheless a strong foundationalism (Aikin 2010: 74) insofar as it requires every justified belief to have at least one immediately supported belief in its justificatory ancestry. No matter which other sources of justificatory support there may be (coherence, infinite sequences of justifying beliefs,...) – and may indeed be necessary –, nondoxastic experience makes an indispensable contribution to justification. Experiences 'are a nondoxastic determining addition to the interpretive and inferential supporting inferences necessary for justification' (Aikin 2010: 117).

We may state this condition in a precise way with the help of 'justification trees'. A justification tree is a non-circular graph representing the justification relations between the beliefs of a subject (Aikin 2010: 74). Through justification trees ('J-trees'), we can make a clear distinction between *strong* as opposed to *weak* theories of epistemic justification. Of course, any theory of epistemic justification takes a certain property of beliefs to be relevant to the justification of beliefs (and *pure* theories allow only for one relevant property, whereas *impure* theories allow for more than one). Now, strong theories are distinguished from weak ones as follows:

'Strong epistemic theories run that all J-trees must have at least one branch end with the relevant epistemic type of belief. These beliefs are necessary for any J-tree. Weak epistemic theories hold that some J-trees have at least one branch end with the relevant type of belief.' (Aikin 2010: 74)^{III}

Thus, for example, weak basic belief foundationalism holds that there is some justified belief b whose J-tree has at least one branch with a terminating node b', a basic belief that is not justified by any other belief, but nonetheless capable of justifying other beliefs (in the trivial case of b = b', b itself is a basic belief). For strong basic belief foundationalism, at least one branch of every justified belief's J-tree has to have a terminating node.

In parallel, strong (or, alternatively, weak) coherentism holds that at least one branch of every (some) justified belief's J-tree has to end at a belief whose justification is supported through their coherence with other beliefs; strong (weak) infinitism holds that at least one branch of every (some) justified belief's J-tree 'ends' at an nth belief that is justified by an n+1th belief (and thus, practically, the respective branch of the J-tree does not end at all, but is infinitely extended).

And, eventually, strong (weak) immediate support foundationalism is the view that at

^IFor example, BonJour (1985: 141-144) proposed an impure coherentism that was designed to meet what he called 'the Observation Requirement', which is parallel to the demand for objective purport; and Susan Haack (1993) proposed a combination of impure foundationalism and impure coherentism she called 'foundherentism'.

^{III}In fact, Aikin combines immediate support foundationalism with an impure infinitism in Aikin 2010.
^{IIII}This yields the following possible combinations of the strong/weak distinction with the pure/impure distinction of epistemic theories (Aikin 2010: 75-76):

Strong impure theory: some branches of every J-tree end with the relevant epistemic type of belief. Weak impure theory: some branches of some J-trees end with the relevant epistemic type of belief. Strong pure theory: every branch of every J-tree ends with the relevant epistemic type of belief. Weak pure theory: collapses into the strong pure theory variant, since the 'some branches of some J-trees' from the definition of a weak theory is strengthened to 'every branch of every J-tree' in a pure theory.

least one branch of every (some) justified belief's J-tree ends with a belief whose justification is immediately supported by a nondoxastic experience. Of course, the adequate choice to meet the demand for objective purport is *strong* immediate support foundationalism. It expresses the notion of experience making an indispensable contribution to the formation of our beliefs, thus constraining our thought (see §5 above).

Moreover, strong *impure* immediate support foundationalism^I is compatible with other impure theories of epistemic justification (weak or strong). And, to express the rejection of basic beliefs, it actually *has* to be combined with either strong (impure) coherentism^{II} and/or strong (impure) infinitism^{III} (note that even *all three* positions are theoretically compatible). On this broader picture, the fact

'that we must be capable of deploying [...] background concepts and explain the judgments that yielded the commitments from the experiences is a correct requirement for justification [...], but this is not a point against the independent support provided by the experiences. [...I] is this integration of direct and inferential support that impure theories of justification are out to capture.' (Aikin 2010: 145)

In summing up 'strong impure immediate support foundationalism', we may formulate the foundational primacy of experience as follows: any belief, to be adequately justified, has to have in its justificatory ancestry a belief whose justification is immediately supported by a nondoxastic experience independently of other (inferential, doxastic) sources of justificatory support – but this immediate support is relative to a doxastic and inferential background. In this way, we can accommodate the demand for objective purport and find a way through the Sellarsian dilemma (see §9 above). Immediate support (from given, nondoxastic experiences) and inferential support (from a doxastic background of presuppositions) are individually necessary, but only jointly sufficient for justification.

§11 Insufficient Motivation for Phenomenology through Foundational Primacy

In characterizing the foundational primacy of lived experience, we have reached a twofold result on how the demand of objective purport (§5) may be fulfilled: Firstly, the notion of the Given (§8) provides a definition of independent epistemic support/constraint that avoids 'frictionless spinning'. And secondly, immediate support foundationalism (§10) provides a sketch of a structure of epistemic support staying clear from a 'mythical' understanding of this Given. The Sellarsian dilemma between 'epistemic independence' and 'epistemic efficacy' (§9) – and the dialectical dead-end it leads into – can be avoided, since 'independence' is not interpreted in the problematic sense of a 'presuppositionless Given'.

But all that we have established with these results is that the demand for objective purport *can* be answered through the notion of 'given' experience in a non-contradictory ('non-mythical') way. What is still left open in these results is how the mentioned definition ('the Given') and structure ('immediate support') *are* actually instantiated by concrete lived experiences.

In trying to answer this positive demand, we still face the Sellarsian dilemma in a modified (and moderated) form. Sachs formulates this generalized dilemma by pointing out that

'the Demand [of objective purport] can be satisfied only if some experienceable content is both sufficiently distinct from concepts to serve as a constraint [for conceptual thought...], and yet sufficiently proto- or quasi-normative in basic structure to be a constraint.' (Sachs 2014: 15, compare Levine 2019: 166)

^ISome branches of every J-tree end with a belief whose justification is immediately supported by a non-doxastic experience.

^{II}Some branches of every J-tree end with a belief whose justification is supported through their coherence with other beliefs.

 $^{^{\}rm III}{\rm Some}$ branches of every J-tree are infinitely extended.

So, the 'given' aspect of experience does not only have to be epistemically independent of, and for this, (in some relevant way) 'sufficiently distinct' from conceptual thought. The Given also has to exhibit some 'proto- or quasi-normative [...] structure' to make an impact on thought.

As said above, we do not yet have any positive account *which* 'experienceable content' may fulfill these requirements or *how* it may do so. And this question is not easy to answer, since 'it is hard to think these two desiderata together' (Levine 2019: 166). Thus, 'foundational primacy of experience' is still underdetermined; it specifies a role description, but we do not yet have a role occupant.

Now, this situation already looks like a perfect invitation for phenomenology: if we want to find out how experience (or rather, some 'given' aspect of experience) fulfills its role as constraint to thought, we have to describe experience on its own terms. Indeed, this is what will ultimately be argued here (see §16 below). But we do not yet have the means to make this case: neither can we argue compellingly that we have to do phenomenology nor can we lay out on this basis how we may do it.

All we have so far speaking in favor of phenomenology is precisely this: the idea of foundational primacy (that accessive primacy is too weak to motivate phenomenology has already been pointed out in §7 above). However, just like accessive primacy, foundational primacy is not a sufficient motivation for the *method* of phenomenology. Even with foundational primacy, it is still not clear why we should *do* phenomenology.

Although one may subscribe to foundational primacy of experience, one may also hold that an adequate characterization of this primacy cannot be gained through phenomenological description, but rather through a third-person account. The case of the lacking motivational force of foundational primacy is parallel to that of accessive primacy (see §7 above): In close connection to the third-person accounts of intentionality discussed above (§4), there are also thoroughly third-person, 'externalist' approaches to epistemic justification (see Pappas 2014 for an overview). Externalists about epistemic justification,

'of course, can also grant that [...] experiences [...] can matter to the justification of your beliefs. However, they deny that justification is essentially a matter of having suitable experiences. Rather, they say, those experiences matter to the justification of your beliefs not merely by virtue of being evidence in support of those beliefs, but more fundamentally, by virtue of being part of the reliable source of those beliefs.' (Steup 2018: §3.2)

Thus, one may hold that objective purport depends in a relevant way on experiential sources (through the necessity of immediate support to justification, say), but still deem a phenomenological account of these sources not to be necessary or maybe not even feasible. In this way, skeptics of phenomenology may argue that objective thought can take care of itself with third-person methods and that there is no need for phenomenology.

1.5 Immersive Primacy of Experience

So far, we have seen that accessive and foundational primacy show that experience is important, but not yet that *description* of experience is important. To motivate phenomenology, we need a more comprehensive understanding of why this may be so.

I am going to argue that the deeper importance of experience does not lie in its granting access to things (accessive primacy) and also not in its founding epistemological role (foundational primacy). Rather, the more comprehensive relevance of lived experience lies in what I am going to call its 'immersive primacy' (§12). Immersive primacy subsumes both accessive and foundational primacy, making it a more comprehensive way of answering the demand for objective purport. Taking immersive primacy as a starting point, phenomenol-

ogy comes out as a specifically transcendental project that proceeds by 'bracketing' the natural attitude, and the philosophical perspective it informs (§13). This is meant to enable that things (as intentional subjects and objects) can be 'reduced' ('traced back') to the immersive field of lived experience, in which they are 'constituted' as experienced things (§14). It is argued that immersive primacy provides sufficient motivation for doing phenomenology: since the generation of objectivity is itself immersed in lived experience (§15), doing phenomenology is indispensable for understanding it (§16).

§12 Immersion in Experience

Immersion in experience is maybe the most fundamental feature of our existence, our being-in-the-world – or rather, it *is* our being-in-the-world. Experience is just always 'there', there is no stepping out of it, no matter whether you are a gardener, a scientist, or a philosopher. In an apt metaphor cited by David Foster Wallace from a joke, experience is to us as to a fish is the water it lives in. While lived experience is not itself a thing,

'it is not nothing! For us, [it] might even be everything. It is not something that we have, but it identifies with what we are in the first place. It is not something that can be known or described by us in the third person as if we were separated from it; but it is what we dwell in and what we live through in the first person.' (Bitbol 2008: 54)

In short, as Taylor Carman puts it, experience is 'not just what we do, it's what we are' (Carman 2005: 87). And this statement of course already implicitly accepts the converse: experience is not just what we are, but also what we do (in a wide sense, subsuming both activity and receptivity). Not just 'we' as experiencing subjects are immersed in experience, but so are all our dealings and intentional relations with 'transcendent' things – and these very things as well, insofar as they figure as intentional objects (see §6 above).

So, whether we think about it explicitly or not, we quite practically 'dwell' in experience as the field or the medium *in* and *through* which the things that we take to be going 'beyond' or to be lying 'behind' it appear – from the most concrete to the most abstract (and including those peculiar things that we call our 'selves'). Subject and object of intentionality as well as their intentional relatedness (whether perceptual, cognitive or practical) are all *immersed in* this field of lived experience. In this sense, we may speak of its 'immersive primacy'.

Immersive primacy of experience goes beyond and subsumes both accessive and foundational primacy. Thus, according to immersive primacy, experience is not only the access of subjects to objects (accessive primacy) and not only the foundation of subjects' knowledge of objects (foundational primacy), but rather, the whole process of accessing and founding unfolds within lived experience.

Our immersion in experience, just like accessive and foundational primacy (properly understood), should not come as surprising, but rather as quite obvious. Pointing to immersive primacy may even seem like insisting on a triviality. But in fact, this triviality is, – in spite of or maybe precisely because of its obviousness – quite easy to be lost out of sight. Because we are immersed in experience all the time anyway, it is usually not explicitly thought or spoken about. This is why it seldomly comes into view in our usual dealings with things. Staying with the metaphor of vision, experience may be characterized as the medium in which anything is seen, if seen at all, but which cannot be seen

¹'There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?" (Wallace 2009: 1-2), adding a bit later: 'The point of the fish story is merely that the most obvious, important realities are often the ones that are hardest to see and talk about' (Wallace 2009: 6). This is a very precise statement of what immersive primacy comes down to.

itself. It is 'transparent', metaphorically speaking (see Hopp 2020: 5-6 and Siewert 2016: supplement, for discussion). Transparency of experience is just the flip side of immersion. And immersion is also the deeper reason why the notion of 'acquaintance with experience' (in a non-internal accusative sense) has been rejected above (§2,§8) as inadequate: the immersive medium of acquaintance with things cannot itself be understood as an object of acquaintance.

The obviousness or triviality of the immersive primacy of lived experience may also explain the tendency to ignore it in the quest for objectivity (see §4 above). In going against this tendency, 'it is precisely this domain of ignored obviousness that phenomenology seeks to investigate' (Gallagher and Zahavi 2012: 24). From the genuinely phenomenological perspective, experience is no longer understood as an occurrence, a relation, among wordly things (as sketched in §2 above). On the contrary, the wordly things – as intentional subjects of and intentional objects for experience – are understood as occurrences immersed in experience (they 'occur' precisely by appearing, by being experienced).

§13 Phenomenology as Transcendental

In characterizing the phenomenological perspective, Husserl makes it clear that in this perspective – 'in spite of all assuredly well-founded talk about the real being of the *human* Ego and its conscious experiences in the world and about everything in the way of "psychophysical" interconnections pertaining to them' (Husserl 1913/1976: §49, p.105, own translation following Husserl 1913/1982: 112)^I –, experience is no longer understood as an occurrence in a world of things, as a part of being in the sense of 'reality' (Husserl 1913/1976: §49, pp.105-106).

Such a reifying understanding of experience (as characterized in §2,§4 above) is not wrong or misguided, it has its justification as that which we take indeed as 'natural' in the lifewordly or scientific perspective. But as a 'a *philosophical* absolutizing of the world completely alien to the natural way of considering the world' (Husserl 1913/1982: 129), this misses the relevance of experience in its immersive primacy.

To reverse this omission, the phenomenological perspective abstains from the philosophical reification of the lifewordly opposition of thing and experience into that of 'reality' versus 'appearance'. Such a reification leads into the problematic attempt 'to construct an explanatory theory of how cognition works without first taking into consideration how the world actually appears to us' (Cobb-Stevens 1974: 247) – that is, how it appears to us in the immersive field of lived experience. In contrast, the phenomenological approach holds that we first of all have to redirect our attention to this field:

'In order to overcome this error, Husserl claims, it suffices to reformulate the epistemological question [...]. To ask the question properly is to ask it in a way that takes as its point of departure our experienced consciousness of objects. Cognition is not a thing apart from its object; it is the presentation of objects.' (Cobb-Stevens 1990: 167)

Thus, phenomenology does not try to 'look at our experiences sideways to see whether they match with reality' (Gallagher and Zahavi 2012: 27), it holds that the only way to reality is our experiences. The non-'sideways on' understanding of cognition is a direct consequence of the subject-intentionality-object structure being immersed in lived experience (see §12 above). If we take this immersion seriously, it follows that

'the reality of the object is not to be located behind its appearance, as if the appearance in some way or other hides the real object. Although the distinction between appearance and reality must

^IOriginal: 'trotz aller in ihrem Sinne sicherlich wohlbegründeten Rede von einem realen Sein des *menschlichen* Ich und seiner Bewußtseinserlebnisse *in* der Welt und von allem, was irgend dazu gehört in Hinsicht auf "psychophysische" Zusammenhänge'.

be maintained (since some appearances are misleading), phenomenologists do not understand this as a distinction between two separate realms [...], but as a distinction *internal to* the phenomenon' (Gallagher and Zahavi 2012: 24, emphasis added).

So, phenomenology tries to elucidate the process of the cognition of things (as intentional objects of experience) without absolutizing 'reality' and 'appearance'. This is attempted precisely, in line with immersive primacy, through understanding this process as an occurrence being immersed in lived experience (see §12 above). Accordingly, Husserl understood phenomenology as a transcendental approach, as falling into the family of 'philosophical methods that draw their inspiration from [Immanuel] Kant's method of inquiring into the conditions, within the sphere of the human subject, that are requisite for the appearances of empirical objects' (Cobb-Stevens 2014: 246).

But Husserl had a wider understanding of 'transcendental' than Kant: he 'broadened the range of his inquiry so as to include not only the conditions of scientific objectivity but also the conditions of prescientific and even prelinguistic modes of knowing' (Cobb-Stevens 2014: 246). Moreover, Husserl claimed that the transcendental conditions for things to appear and to be known do not have to be deduced (as Kant proceeded), but that there may be a non-deductive access to them (Cobb-Stevens 2014: 246 – the question in which way such an access may be possible is going to be discussed in §18 below). Thus, instead of attempting a deduction of the processes by which objects of experience are constituted in experience (as in Kant's transcendental philosophy), transcendental phenomenology aims at a description of such processes.

§14 Epoche, Phenomenological Reduction, and Constitution

Now, to get beyond a reifying understanding of experience, we have to get beyond the natural attitude in a certain way:

'Husserl claims that access to this phenomenological attitude requires a "bracketing" of the "natural attitude" of everyday life. In the natural attitude, we experience ourselves as having direct acquaintance of a world and of belonging to that world, but we do not ordinarily pay attention to the appearing of the world. [...] As a result, when we do consider questions about how it is that the world appears to us, we tend to consider modes of causality within the world or products of human ingenuity such as pictures or computing devices as models for understanding how the world appears to us.' (Cobb-Stevens 2014: 247)

Thus, if the natural attitude informs our philosophical perspective, this quite inevitably leads into the questions of how experiences as 'mental states' may actually represent or cognize the 'mind-independent reality' (see Crane and French 2017 for an overview). Accordingly, the phenomenological attitude avoids these questions by bracketing the natural attitude. Husserl labeled this kind of bracketing with the Greek expression 'epoché' (ἐποχή, 'cessation', Husserl 1913/1976: §31-§32). Husserl has described the epoché as follows:

'Instead of naively effecting the acts pertaining to our nature-constituting consciousness [...], we put all these positings out of action, we do not participate in them; [...since] we have "set out of play" the whole world with all its physical things, living beings, and humans, ourselves included. Strictly speaking, we have not lost anything but rather have gained the whole of absolute [experiential] being which, rightly understood, [...] "constitutes" within itself all worldly transcendencies.

Let us make this clear to ourselves in detail. In the natural attitude we simply effect all the acts by virtue of which the world is there for us. We live naively in perceiving and experiencing, in these acts of positing in which unities of things appear and not only appear but also are given with the characteristic of things "on hand," "actual." [...] In the phenomenological attitude in principle universality we prevent the effecting of all such cogitative positings, i.e., we "parenthize" the positings effected; for our new inquiries we do not "participate in these positings." (Husserl 1913/1976: §50, pp.106-107, own

translation following Husserl 1913/1982: 113-114)^I

So, the epoché is a methodological move developed in contrast to the natural attitude as it is operative in everyday life and/or in science. All positings of that attitude, be these explicitly stated and elaborate, or more mundane ones, which are usually taken for granted implicitly, are suspended. This means especially that they are not denied, but only not 'participated in'. The perspective of the epoché is not in competition to the natural attitude, but complementary to it: each perspective has its own justification in its own context. Concerning the natural attitude, this is obvious, since its context is our everyday live; concerning the phenomenological attitude, this is exactly what is to be argued here.

Accordingly, Husserl stresses that the epoché is not skeptical, in *doubting* our presuppositions held in the natural attitude, most prominently, the assumption that the world is more or less the way it appears to be (Husserl 1913/1976: §31, pp.62-64). And neither is it a positivist attitude, in rejecting 'unscientific', metaphysical presuppositions (Husserl 1913/1976: §32, p.66). None of the mentioned presuppositions is rejected, the epoché only means that judgment about them is suspended. Husserl expresses this also with the picture that the epoché may be understood like a change of index of the 'natural' presuppositions, without erasing them:

'Figuratively speaking, that which is parenthesized is not erased from the phenomenological blackboard but only parenthesized, and thereby provided with an index. With this, however, it is part of the major theme of inquiry.' (Husserl 1913/1976: §76, p.159, own translation following Husserl 1913/1982: 171)^{II}

The stance of epoché implies that phenomenology does not understand experiences in a 'psychological' way – in the way not only empirical psychology and cognitive science, but also current philosophy of mind understands them: as 'mental states', that is, as certain circumstances or properties in the world of things (Husserl 1931/1982: §11). Accordingly, Gallagher and Zahavi characterize the 'objectivist' take on experience in current philosophy of mind (see §4 above), and contrast the phenomenological perspective to it:

'Most introductory textbooks in philosophy of mind or in cognitive science start by or frame the entire discussion by describing various metaphysical positions: dualism, materialism, identity theory, functionalism, eliminativism... and so on [...]. Before we even know for sure what we are talking about, it seems that we have to commit ourselves metaphysically and declare our allegiance to one or the other of these positions. Phenomenology pushes these kinds of questions aside, brackets them, sets them out of play, and asks us instead to pay attention to the phenomenon under study. One of the underlying ideas of phenomenology is that the preoccupation with these metaphysical issues tends to degenerate into highly technical and abstract discussions that lose touch with the real subject matter: experience.' (Gallagher and Zahavi 2012: 6)

So, going beyond a 'metaphysical' understanding of experience, the epoché is meant to allow lived experience as an immersive medium (see §12 above) to become thematic in spite of its intangibility as an object of experience itself. Experience becomes thematic

^IOriginal: 'Anstatt die zum naturkonstituierenden Bewußtsein gehörigen Akte mit ihren transzendenten Thesen in naiver Weise zu *vollziehen* [...] – setzen wir all diese Thesen "außer Aktion", wir machen sie nicht mit; [...indem] wir die ganze Welt mit allen Dingen, Lebewesen; Menschen, uns selbst inbegriffen, "ausgeschaltet" haben. Wir haben eigentlich nichts verloren, aber das gesamte absolute Sein gewonnen, das, recht verstanden, alle weltlichen Transzendenzen [...] in sich "konstituiert".

Machen wir uns das im einzelnen klar. In der natürlichen Einstellung vollziehen wir schlechthin all die Akte, durch welche die Welt für uns da ist. Wir leben naiv im Wahrnehmen und Erfahren, in [...] Akten, in denen uns Dingeinheiten erscheinen, und nicht nur erscheinen, sondern im Charakter des "vorhanden", des "wirklich" gegeben sind. [...] In der phänomenologischen Einstellung unterbinden wir in prinzipieller Allgemeinheit den Vollzug aller solcher kogitativen Thesen, d.h. die vollzogenen "klammern wir ein", für die neuen Forschungen "machen wir diese Thesen nicht mit".

^{II}Original: 'Bildlich gesprochen: Das Eingeklammerte ist nicht von der phänomenologischen Tafel weggewischt, sondern eben nur eingeklammert und dadurch mit einem Index versehen. Mit diesem aber ist es im Hauptthema der Forschung.'

as the 'residuum' of the 'setting-the-world-out-of-play' (Husserl 1913/1976: §50, p.106), precisely as that which cannot be set out of play (qua being the immersive field in which the world appears, compare §12 above).

In aiming to make thematic the field of lived experience, in which 'things' as intentional subjects and objects of experience are immersed, the epoché is a move of 'phenomenological reduction', as Husserl called it (Husserl 1913/1976: §50, p.106). This 'reduction' may be interpreted most generally in the literal sense of *re-ducing* as 'leading' or 'tracing back': What is traced back is the appearance of things to modes of experiencing them (Luft 2012: 243). Taking up this sense of 'reduction', Gallagher and Zahavi point out that

'everyday things available to our perception are not doubted or considered as illusions when they are "phenomenologically reduced", but instead are envisaged and examined simply and precisely as perceived (and similarly for remembered things as remembered, imagined things as imagined, and so on). In other words, once we adopt the phenomenological attitude, we are no longer primarily interested in what things are - in their weight, size, chemical composition, etc. - but rather in how they appear' (Gallagher and Zahavi 2012: 27).

Phenomenology more generally may be characterized as a turn from 'what appears' to 'how it appears'. Note again that this does not aim at skeptical doubt concerning the what, but rather to the transcendental task of making the conditions of possibility of its appearance explicit – by describing the how of its appearance.

This 'how things appear' is also designated with the expression 'phenomenological constitution' by Husserl: it is the specific way in which the immersive field of lived experience "constitutes" within itself all worldly transcendencies' (Husserl 1913/1976: §50, p.107, see full quote above). More precisely, the expression stands for the (possibly unattended) features of experience that make up, or constitute, the way certain (types of) things appear (compare Gallagher and Zahavi 2012: 26).

Finally, it has to be pointed out that commentators after Husserl have made an important qualification of his account of the epoché and the reduction, namely, that these moves can never be considered as being accomplished completely. Precisely because we live our lives as immersed in a world of things, we can never make ourselves absolutely free from this perspective and see the things (or the world) only as phenomena (Cerbone 2012: 282-284, compare Merleau-Ponty 1945/1962: xiii-xiv). So, the methodological approach of transcendental phenomenology comprising epoché and reduction is an open-ended process, a task which 'one has to keep accomplishing' (Gallagher and Zahavi 2012: 25). Exactly how this process may be carried out as a methodical practice in the light of immersive primacy is going to be discussed in more detail in chapter 2 below.

§15 Generation of Objectivity as a Process within Lived Experience

The phenomenological approach sketched so far opens a new take on the question of objectivity and objective purport (see §5 above), which has advantages over a 'sideways on' (see §13 above) or 'metaphysical conception of knowers' relation to the world' (Rouse 2015: 181). Namely, it seems a reasonable requirement to ask of an account of objectivity

'to characterize the idea and ideal of objectivity in such a way that it is both strong enough to be valuable, and weak enough to be attainable and workable in practice' (Reiss and Sprenger 2017: §1).

But this practical attainability stands in question for 'metaphysical' accounts of objectivity. Joseph Rouse points out that such approaches

'implicitly seek to assess knowers' relation to the world from "sideways on" but inevitably fail to do so. Epistemic objectivity as an ideal presumes a gap between us as knowers and the world to be known. An objective method, stance, attitude, or disposition is put forward to bridge that gap. But any such proposal as a form of subject-positioning finds itself firmly placed on our side of the gap between us as knowers and the world as "beyond" our representations of it. The objection is that the gap between

knowers and the world is thereby conceived in advance in a way that renders it unbridgeable.' (Rouse 2015: 181)

Such a 'representational' view puts too high requirements on objectivity, making it practically an unattainable ideal. So, what is needed is 'a more adequate alternative understanding of our relation to the world as inquirers and agents that does not reproduce these problems' (Rouse 2015: 182). Rouse sees such an alternative understanding instantiated in a family of approaches that aim to

'understand the sciences and other forms of conceptual understanding as practices or discourses rather than as relations between knowing subjects and transcendent objects. [...] Such projects do not treat sciences and other forms of thought and understanding primarily as efforts to represent the world (or objects within it) within a language, theory, or research program. They instead understand scientific practitioners and other knowers as interactively caught up within and responsive to the world around them. "Practices" in this sense are not just the sayings and doings of practitioners (as analogues to the subject-positioning of knowers in relation to "external" objects); practices incorporate the things "practiced" on, with or amid' (Rouse 2015: 178).

The alternative non-representational understanding of objectivity locates it in *dynamic* processes of subject-object interaction rather than in *static* mind-world relations of representation. We may accordingly call it a *processual* understanding of objectivity. Moreover, as pointed out in the quoted passage, this processual understanding proceeds from a wide notion of 'process' or 'practice', including 'the things "practiced" on, with or amid'.

This wide, processual conception of practice comprises both the subject- and the object-pole. In this respect, it bears significant similarity with the picture of experiential immersion sketched above (§12). And indeed, the idea of immersion in lived experience is one way of making sense of the processual understanding of objectivity. Proceeding from the notion of immersive primacy, it is precisely lived experience that comes out as the medium in which subjects are 'interactively caught up within and responsive to the world around them' (Rouse 2015: 178, see full quote above). Thus, the generation of claims to objective knowledge is itself immersed in '[t]he temporal flow of experience, understood as the very field in which knowledge continuously evolves' (Koopman 2007: 709).

As already pointed out above (§3), an objective perspective is *produced* as one among various experiential perspectives of which some can claim to reveal more inter-situationally and inter-subjectively invariant, 'objective' aspects than others. Thus, objectivity 'arises, in history and on a day-to-day basis as well, as an invariant [...] focus for subjects endowed with conscious experience' (Bitbol 2008: 56). Thus, lived experience is the 'implicit departure point' (Bitbol 2008: 54) for the production of objectivity:

'[O]bjectivity rests on the observations and experiences of individuals; it is knowledge shared by a community of experiencing subjects and presupposes a triangulation of points of view or perspectives' (Gallagher and Zahavi 2012: 47).

But taking immersive primacy into account, lived experience comes out as being even more than the 'implicit departure point' for the process of generating of objectivity. It is a field that comprises *both* the departure and the destination point of this process. Accordingly, '[a]t the latest stages of the process of objectification, experience has been eliminated nowhere, even in the purest theoretical or experimental statements' (Bitbol 2008: 54).

These considerations lead to the conclusion that objectivity is not comprehensible apart from lived experience, since 'the content of the concept of objectivity is constituted in experience' (Levine 2019: 157). This means that the answer to the question of objective purport (see §5 above) does not only have to be processual and non-representational, but

also phenomenological and transcendental.^I In order to understand *what* objectivity is, we first of all need a description of *how* it comes about in the stream of experience. To understand objectivity, we have to answer the question: *What is it like* to be objective? Accordingly, Gallagher and Zahavi characterize the approach of phenomenology:

'Thus, and this pinpoints a main difference from at least a good part of recent analytic philosophy's preoccupation with consciousness, the phenomenological interest in the first-person perspective is not primarily motivated by the relatively trivial insight that we need to include the first-person perspective if we wish to understand mental phenomena. Rather, the phenomenologists' focus on the first-person perspective is as much motivated by an attempt to understand the nature of objectivity, as by an interest in the subjectivity of consciousness. Indeed, rather than taking the objective world as the point of departure, phenomenology asks how something like objectivity is possible in the first place. What are the primitive modes of understanding that precede our belief in objectivity? How is objectivity constituted?' (Gallagher and Zahavi 2012: 26)

As said above (§12), immersive primacy of lived experience goes beyond and comprises foundational primacy. Accordingly, an immersive, processual account of objective knowledge also implies a wider, more inclusive understanding of experience than an account motivated by foundational primacy. Foundational primacy accentuates specific nondoxastic aspects of experience (e.g., perceptions, intuitions,...) – the 'Given', the 'recalcitrant experience' (see §8 above). If we proceed from immersive primacy, in contrast, we arrive at a broader, more inclusive notion of experience (including thoughts, imaginations, volitions, evaluations,...) – comprising both the recalcitrant Given and that against which it is recalcitrant.

This amounts to a phenomenological implementation of what Colin Koopman calls 'the crucial nonfoundationalist strategy of replacing the search for epistemological grounding with an account of the epistemological field' (Koopman 2007: 709-710). Proceeding from the *immersive* epistemological field, we may 'understand successful inquiry as unfolding within experience and not [only] on the basis of experience' (Koopman 2007: 718, emphasis added). So, the immersive understanding of experience motivates the wide understanding of experience characteristic of the phenomenological approach to philosophy (see §1 above). And, taken to its conclusion, it also frees experience from the narrow role of the 'Given' functioning as epistemological foundation to knowledge (while not denying that there has to be a given aspect of experience).

§16 The Indispensability of Phenomenology and Implicit Phenomenology

The considerations so far suggest that there is a certain methodological 'inescapability' (Carman 2005) or 'indispensability' (Kriegel 2013) to phenomenology. II If it is rejected or ignored in the name of objectivity, this only leads back to the question what is actually meant with 'objectivity'. And an answer to this question cannot ignore the constitution of objectivity within lived experience, in other words, it has to apply phenomenology in some way or other. So, in consequence of its immersive primacy, lived experience 'is and remains methodologically primary' (Bitbol 2008: 56). The motivation for phenomenology based on the notion of immersive primacy is simply that we have to do phenomenology. And this 'we have to do it' is not to be interpreted as: 'we are not doing it so far and

^ILevine makes it clear that the question of objective purport is 'a kind of transcendental question' (Levine 2019: 17, note 24). Accordingly, Sachs frames the requirement for objective purport also as 'the demand for transcendental friction: that it must be possible, by reflecting on our most basic conceptual and perceptual capacities and incapacities, to guarantee that we are in cognitive contact with a world we discover and do not create' (Sachs 2014: 13).

^{II}Kriegel speaks of an 'epistemic indispensability of introspection' (Kriegel 2013: §1) – this may go in line with the argument pursued here, although he follows an observational or 'perceptual' understanding of introspection that is going to be rejected below as problematic (see §17,§22 below).

should better turn to it'. Rather, we 'have to' do phenomenology in the sense that we just cannot help to do it, this happens – at least implicitly – anyway all the time.

But this means that where phenomenology is not done explicitly and systematically, it has to be done or presupposed in an implicit and unsystematic manner. Implicit phenomenology is always in use, if we ask about human perception, cognition, emotion, volition, action and interaction. In short, it is in use if we ask about any process that involves a first-person perspective of lived experience. The utilization of lived experience as the 'implicit departure point' (Bitbol 2008: 54, see quote in §15 above) of scientific and philosophical inquiry, if it is not carried out in a methodical way, has to draw either upon the inquirer's 'own first-person experience [...], or upon pre-established (and seemingly objective) categories that ultimately derive [...] from some obscure, anonymous, and nonrigorous form of phenomenology' (Gallagher and Zahavi 2012: 20). In sum, the question is not so much whether to do phenomenology, but rather, how to do it: as an implicit, unsystematic practice, or as an explicit, methodical one. Such a methodical phenomenology 'seeks to be critical and non-dogmatic, shunning metaphysical and theoretical prejudices, as much as possible [...and] to be guided by what is actually experienced rather than by what we expect to find, given our theoretical commitments' (Gallagher and Zahavi 2012: 11).

The sketched indispensability of phenomenology may be the motivation behind the bold claim that

'if we wish to understand knowledge, truth, objectivity, meaning, and reference we will have to investigate the forms and structures of intentionality that are employed by cognizing and acting subjects[,...] to effect the reflective move of transcendental phenomenology.' (Gallagher and Zahavi 2012: 47)

Thus, phenomenology pursues a program of making (scientific and life-worldly) objectivity understandable as an occurrence within lived experience. In line with this program, phenomenology aims for more than 'a description of idiosyncratic experience – "here and now, this is just what I experience" – rather, it attempts to capture the invariant structures of experience [...] that are intersubjectively accessible' (Gallagher and Zahavi 2012: 28). Now, the expression 'invariant structures of experience' needs some commentary. Namely, the aim of phenomenology is not simply to find invariant structures in all individuals and situations, but also to find variances which only pertain to certain classes of some individuals and situations.

Example. A parallel to empirical sciences – biology, say – may be instructive: biology does not only try to find those attributes which characterize *all* lifeforms (this is actually a quite lofty goal), but also what systematically differentiates the lifeforms into different classes. Nonetheless, we can only describe variances with a background of shared invariances (differences in lifeforms can only be described at the background of them all sharing the common trait of being lifeforms). \Box

Nonetheless, it still makes sense to talk of 'invariant structures' of lived experience in a general sense, since the variances related to certain kinds or types of experiences constitute an invariance on a higher level, of the following form: 'All experiences of all individuals/situations invariantly fall either into type A, or type B, or type C,...'

Example. Certain individuals in certain situations may be synesthetic, while other individuals in other situations are not. This constitutes a higher level invariance (more on such 'factual variation' in \$18 below).

So, generally, by aiming at intersubjective invariances, we may say that the generation of phenomenological knowledge follows the same principles as the generation of objective knowledge (Gallagher and Zahavi 2012: 21). The difference is that phenomenology is not aiming *beyond* experience, but precisely *onto* it.

^IThus, especially, this thesis itself relies on implicit phenomenology from the start.

Of course, *how* the 'reflective move of transcendental phenomenology' and its program of explicating objectivity is to be implemented is still an open issue with all that has been argued here so far. But, if the case from immersive primacy has any validity, it is a methodological question that philosophy cannot avoid.

2 Phenomenology as an Empirical, Second-Person Methodology

All that has been argued so far is that we *need* to do phenomenology, not *how* we can do it. And in approaching this question, we have to take the main reason offered for phenomenological methodology into account, namely, immersive primacy of lived experience.

As is going to be argued in section 2.1, the natural candidate for this role is a constructivist or enactive account of epistemology, paying heed to the self-referentiality of research on experience being itself immersed in experience. A constructivist or enactive approach to phenomenology, in turn, can only be carried out as a phenomenology that is empirical in a specific sense of the term. Empirical phenomenology suggests to apply 'second-person' methods, which are thoroughly intersubjective, not only on the stage of comparing results, but already at the stage of bringing them about. The most elaborate of such 'second-person' approaches is microphenomenology, which is discussed in section 2.2.

2.1 Empirical Phenomenology and Constructivist Epistemology

The constructivist or enactive understanding of phenomenological research is developed in §17, the resulting program of empirical phenomenology in §18. In §19, it is pointed out why and how empirical phenomenology proceeds by specific 'performative' criteria of validity, namely, 'authenticity' of the acts of description and 'coherence' of the acts of analyzing these descriptions. Finally, in §20, parallels and differences in relation to the 'empirical' approach in current 'experimental philosophy' are delineated.

§17 Constructivist Epistemology for Phenomenology

A phenomenological approach proceeding from the notion of immersive primacy of experience is bound to take this sense of primacy into account on the methodological and epistemological level of phenomenology itself. This has an important implication: The picture of the generation of intersubjective/objective knowledge as a process within lived experience (see §15 above) of course also comprises the generation of knowledge about lived experience. The phenomenological study of lived experience is itself a practice immersed in lived experience (just like other practices of generating intersubjective knowledge in scientific or lifeworldly contexts). So, a phenomenological approach motivated by immersive primacy has to give an account of the epistemology of phenomenological practice that can accommodate this situation (compare already Husserl 1913/1976: §65).

The natural candidate for this role is a *constructivist* or *enactive* account of epistemology, as has been argued most vigorously by Urban Kordeš (2016). Constructivist epistemology originated in the context of the study of cognitive systems in cybernetics (which would later merge into cognitive science). At the center of constructivism (or 'second-order cybernetics') stands

'the seemingly simple realisation that it is impossible to reflect upon and research the characteristics of cognitive systems without being aware of and taking into account the fact that the researchers are part of the very system they are observing and that the characteristics they perceive apply to them as well' (Kordeš 2016: §8).

While this 'realisation of one's participation in the observed system does not carry equal weight within different fields of study' (Kordeš 2016: §36), it has most acute effects for the study of lived experience. Obviously, in this context, the self-referentiality of researching experience with experience is the most basic and undeniable starting point: 'Experience is simultaneously the framework of our observation, the observing eye, and the object of observation. [...] Knowledge about experience is itself a new experience' (Kordeš 2016: §36). This motivates the appellation 'constructivism': knowledge about experience (whether on

a specific or on a generalized level) is understood as being constructed (or 'enacted'^I) in a process within lived experience. Due to this self-referential immersion, 'observation' of lived experience cannot be conducted from a point of view detached from the observed 'object'. Thus, constructivism amounts to the insistence

'to give up the assumption of a solid researched substance, undisturbed by observation and the properties of the observer. A constructivist science [of lived experience] should find a way to take account of the researcher's active role, involvement in the observed phenomenon, and the constant dynamism resulting from such acts of observation.' (Kordeš 2016: §16)

Indeed, this leads to a very specific understanding of 'observation' or 'introspection' refraining from a literal interpretation of these words. In this understanding, reflection of lived experience cannot be 'ob-servation' of an object distinct and independent from the act of accessing it – thus, it can especially not be 'intro-spection' turning the object-oriented gaze inwards. So, as Claire Petitmengin and Michel Bitbol point out, what happens in phenomenology can neither be 'an observational process [nor] a process of reflection of pre-reflective experience by a second order consciousness that would reflect, mirror or copy the first one' (Petitmengin and Bitbol 2009: 379). This realization can be seen as one of the defining marks of the phenomenological approach. Already Husserl criticizes the contemporaneous 'atomizing and reifying psychology', in which experiences are 'regarded as a kind of small things' (Husserl 1913/1976: §112, p.252, own translation following Husserl 1913/1982: 262). This is perfectly in line with the more recent, constructivist account of phenomenological 'introspection':

'Introspecting (if this word is still appropriate in our alternative epistemological context) should not amount to departing [...] from the immediacy of experience and striving towards [...] a supposedly inner object[...], but rather relaxing any objectifying tension and undoing its conceptual outcomes' (Bitbol and Petitmengin 2011b: 4). ^{IV}

Thus,

'becoming aware of one's experience does not consist in distancing oneself from it in order to observe it, considering it as an object, but on the contrary in reducing the distance, in coming closer to it. It is not a matter of splitting into two in order to look at one's experience, but of coming into contact with it. [...] It is not about stopping or fixing the course of experience, in order to observe it while immobilizing it under the beam of garish light of consciousness. [...] It is not a matter of "looking at" one's experience but of [...] "dwelling in" it.' (Petitmengin and Bitbol 2009: 377)

The common anti-introspectionist criticism 'according to which certain processes are "disturbed" [...] by observation and/or verbalization' (Bitbol and Petitmengin 2016: 62)

In the constructivist concept of "enaction" was introduced into cognitive science with the development of the enactive approach, put forward in *The Embodied Mind* (Varela, Thompson & Rosch 1991). With the notion of enaction, the proponents of this approach stress the inseparability of action and perception and point toward the mutual specification of the subject and the world. The core idea of the enactive approach is the description of cognition as embodied action: "A living organism enacts the world it lives in; its effective, embodied action in the world actually constitutes its perception and thereby grounds its cognition" (Stewart, Gapenne & di Paolo 2010: vii). With its attempt to overcome the traditional rigid separation of perception and action in the study of mind, enactive cognitive science presents an alternative to realist representationalist research frameworks that have long dominated cognitive science. It has recently gained wide popularity and developed into different lines of thought and investigation in various domains of cognitive science (cf. Vörös, Froese & Riegler 2016). As its proponents explain, the enactive approach intends to "negotiate a middle path between the Scylla of cognition as the recovery of a pregiven outer world (realism) and the Charybdis of cognition as the projection of a pregiven inner world (idealism)" (Varela, Thompson & Rosch 1991: 172).' (Kordeš and Demšar 2018: §7-§8)

^{II}Original: 'atomisierende und verdinglichende Psychologie'.

^{III}Original: 'als eine Art Sächelchen angesehen'.

^{IV}The alternative understanding even 'might motivate the rejection of the term "intro-spection" and the use of alternative expressions instead (e.g. "expanded mindfulness"), but it is convenient to keep the old term in order not to minimize a certain amount of historical continuity' (Bitbol and Petitmengin 2016: 60).

does not apply to this altered sense of introspection:

'Recognizing that knowledge cannot transcend the domain of experience, radical constructivism refrains from making any ontological claims about the structure and existence of a mind-independent reality [...]. We suggest adopting an equally agnostic stance towards the ontological status of the supposedly preexisting original experience examined in [phenomenological] reflection [...]. We see little sense in evaluating reflection in terms of its capacity to represent the "pure," "unspoiled," or "pristine" original experience. Since it is impossible to reach a past experience in any other way than by means of reflection, there exists no external, third-person reference point against which such objective assessment could even in principle be made.' (Kordeš and Demšar 2018: §41, compare Petitmengin and Bitbol 2009: 379-380,388, 2016: 62, Husserl 1913/1976: §79)

Husserl makes a similar point in describing the phenomenological mode of reflecting lived experience as 'non-positional' as opposed to a 'positional' mode of introspection: Whereas a positional mode of description *posits* the descripans as a separate object of consciousness, the non-positional mode refrains from such an objectification (Husserl 1913/1976: $\S109,\S110,\S113$).

What has been said so far comes down to one central point: A valid phenomenological description in the modified, non-objectifying sense can only be understood as being constructed or enacted in an intersubjective process (Kordeš 2016: §51). The same holds for the generalizations drawn from these 'observations': the hypotheses on the intersubjectively and intersituationally stable structures of experience (see §16 above). Their justification cannot lie in a claim of capturing the invariant features of experience in a one-to-one representation of specific experiences. Rather, validated invariants of experience 'would [...] be the experiential modalities on which the majority of researchers would reach an intersubjective agreement' (Kordeš 2016: §39).

And while this process phenomenological description and reflection is inherently self-referential, it is not to be conceived as arbitrary. The different aspects of the process mutually determine and restrict each other (in constructivist parlance: they 'co-determine', 'co-constitute' or 'co-construct' each other, Kordeš and Demšar 2018: §37-§39,§44-§45). Thus, as Urban Kordeš and Ema Demšar point out, the label 'enactive' may actually be more appropriate for this perspective than the label 'constructive' (which is sometimes associated with the mentioned arbitrariness):

'To say that first-person knowledge is *enacted* [...] allows for a "middle path" in the dilemma of whether the results of such examination are homomorphically recovered from the pristine, independently existing experience, or arbitrarily invented by the person describing their experience.' (Kordeš and Demšar 2021: 10, footnote 17)

With this clarification in mind, in the following, the terms 'enactive' and 'constructive' are going to be applied interchangeably (and thus *not* pointing to a sense of 'constructing' as 'arbitrarily inventing').

Of course, formulating a hypothesis on an invariant of lived experience *posits* the surmised invariant as a kind of intersubjectively accessible object in the outcome of 'another objectifying procedure' (Bitbol and Petitmengin 2011b: 4). Thus, this level of phenomenological inquiry is no longer non-positional. Nonetheless, the posited 'object' can precisely be understood as a construct in the sense described so far. The challenge for a constructivist epistemology for phenomenology is, then, to 'renounce the classical requirement of [...] "representational accuracy" without losing the benefit of objectifying (in the weak sense of looking for intersubjectively reproducible structures)' (Bitbol and Petitmengin 2013: 270).

§18 Empirical Phenomenology

To see how constructivism may provide a viable epistemology for phenomenology, it is necessary to point out procedures by which the construction of intersubjectively valid results can be carried out in a non-arbitrary fashion. This holds true both for results concerning specific experiences (the level of phenomenological 'observation') as well as for results concerning experiential invariants (the level of phenomenological 'structures'). Thus, the crucial desideratum for a constructivist approach to phenomenology lies in making the retrieval of phenomenological descriptions and structures of experience explicit and comprehensible.

And, as shall turn out, in answering to this desideratum, the route pursued here so far actually leads away from the 'standard' methodological propositions made in the phenomenological tradition. These propositions remain – if not in intention, then in execution – within the framework of philosophy as a theoretical, armchair undertaking. In contrast, the model for constructivism-inspired phenomenology is not so much to be found in philosophical theory, but rather in the practice of empirical research. Accordingly, Kordeš argues that a phenomenological practice informed by constructivism has to be a decidedly empirical phenomenology.

Now, it is initially not clear how 'empirical' and 'phenomenological' can go together in terms of methodology. 'Empirical research' is commonly assumed to be directed towards the representation of a world of things and thus in an opposite direction as phenomenology (precisely towards an 'objectivist' perspective, see §3-§4 above):

'The notion of research is normally connected to the process of discovering the world "as it really is," i.e., discovering the properties of the objective world. [...But] constructivism - as well as phenomenology - brackets the certainty about the existence of any such thing' (Kordeš 2016: §44).

Nonetheless, phenomenology can become 'empirical' in appropriating the methodological standards of empirical research. A crucial aim of empirical research lies in gathering and analyzing data in a systematic and intersubjectively reproducible way. These procedures are explicitly recorded, and no empirical result can be measured independently of its mode of production.

It is precisely this sense of 'empirical' (stripped of the representational aspirations it usually carries with it) that motivates the expression 'empirical phenomenology'. On this understanding, 'having "empirical" and "phenomenology" in the same phrase is not an oxymoron', since 'bracketing the natural attitude can still allow for the systematic gathering of empirical data' (Kordeš 2016: §30). More specifically, the expression 'empirical phenomenology' serves 'to designate specially dedicated techniques of gathering phenomenal data, thus distinct from [...] "armchair introspection" (Kordeš 2016: §30).

Such 'armchair' methods in phenomenology are 'first-person' methods in a problematic sense: They involve only *one* person. The phenomenological description of particular experiences and their (presumably) invariant structures is 'subjective' in the sense of being enacted by only one subject, without the contribution of others. Only the level of comparing the descriptions is intersubjective in the sense of involving the judgment of other subjects.

The paradigmatic armchair or a priori approach to phenomenology is exemplified in the way Husserl thought we may arrive at the invariant structures of experience, namely, what he called 'essential intuition' or 'eidetic intuition' ('Wesensschau') through 'imaginative variation' ('eidetische Variation'). The idea is here that by varying the aspects of an experience of a certain type (a perception, say) in imagination, we can come to an insight into the essence, the eidos, of this type of experience (Husserl 1913/1976: §1-§7,§70-§71).

Example. Gallagher and Zahavi give the following straightforward analogy for eidetic variation: 'In developing his phenomenological method, Husserl proposed a way that would draw out the essential

and invariant characteristics of the things that we experience. Quite simply, it involves using our imagination to strip away the unessential properties of things. If the object that I am examining happens to be a book, what features of it can I imaginatively vary without destroying the fact that it is a book. I can change the colour and design of the cover; I can imaginatively subtract from the number of pages, or add to them; I can change the size and weight of the book; I can vary the binding. In all of this, I can use my previous experience of books, and I can imagine further variations. The result is that the core set of properties that resist change - those properties that belong to the book per se and which, if changed, would make the object cease being a book - constitute the essence, the 'what makes a book a book'. [...And] we can also do the same kind of eidetic analysis of the act of cognition through which I experience the book. For example, if I am remembering the book, what can I change about the process of remembering and still have memory; what is it that I cannot change and that remains essential to the cognitive activity of remembering? The phenomenologist can do the same with perception, face recognition, decision-making, social perception, and so on.' (Gallagher and Zahavi 2012: 29-30)

The process of eidetic variation as an *imaginative* process is of course restricted to *one* subject. Only after the fact, the results of these solitary armchair efforts may be compared and evaluated intersubjectively. In contemporary academic phenomenology, this solitary conception of phenomenological reflection is still predominant. For example, Gallagher and Zahavi conceive of epoché, description, eidetic variation and reduction as an armchair business of a single person, who only *afterwards* partakes in a process of 'intersubjective corroboration' (Gallagher and Zahavi 2012: 29-31).

The hope behind this idea of after-the-fact 'intersubjective corroboration' is that the results of eidetic variation carried out by several phenomenologists will eventually start to converge towards a consensus:

'If the right attitude has been won, and made secure by practice, above all, however, if one has acquired the courage to obey what is clearly eidetically given with all radical lack of prejudice so as to be unencumbered by all current and learned theories, then firm results are forthcoming straight away, and the same occurs for everyone having the same attitude; there accrue firm possibilities of communicating to others what one has oneself seen, of testing descriptions, of making salient the unnoticed intrusions of empty verbal meanings, of making known and weeding out errors by measuring them against intuition – errors which are also possible here just as in any sphere of validity.' (Husserl 1913/1976: §87, p.201, own translation following Husserl 1913/1982: 212)^I

Husserl voices these optimistic expectations with remarkable confidence and the adherents of armchair phenomenology still seem to cherish these hopes even after more than a hundred years of quite considerable divergences of the results produced by armchair reflection on lived experience. But the nonappearance of significant convergence casts doubt on the hopes set on the approach of imaginative variation.

And indeed, from a constructivist perspective on phenomenology, serious limitations of this solitary type of phenomenological reflection become apparent, disqualifying it as the guiding methodology for empirical phenomenology.

In spite of its apparent and undeniable flexibility, imagination is restricted in two important ways: firstly, by the limits of attention and, secondly, by the limits of power of imagination of the individual person carrying out the variation.

The first challenge for imaginative variation (and for any kind of introspection or phenomenology more generally) consists in the fact (which has been highlighted in the phenomenological tradition and beyond) that

^IOriginal: 'Hat man die rechte Einstellung gewonnen und durch Übung befestigt, vor allem aber, hat man den Mut gewonnen, in radikaler Vorurteilslosigkeit, um alle umlaufenden und angelernten Theorien unbekümmert, den klaren Wesensgegebenheiten Folge zu leisten, so ergeben sich alsbald feste Resultate, und bei allen gleich Eingestellten die gleichen; es ergeben sich feste Möglichkeiten, das selbst Gesehene anderen zu vermitteln, ihre Deskriptionen nachzuprüfen, die unbemerkten Einmengungen von leeren Wortmeinungen zur Abhebung zu bringen, Irrtümer, die auch hier, wie in jeder Geltungssphäre möglich sind, durch Nachmessung an der Intuition kenntlich zu machen und auszumerzen.'

'a substantial proportion of our subjective experience unfolds below the threshold of [attentional] consciousness. How many of us would be able to precisely describe the rapid succession of mental operations he carries out to memorise a list of names or the content of an article, for example? We do not know how we go about memorising, or for that matter observing, imagining, writing a text, resolving a problem, relating to other people... or even carrying out some very practical action such as making a cup of tea. Generally speaking, we know how to carry out these actions, but we have only a very partial consciousness of how we go about doing them. Our most immediate and most intimate experience, that which we live here and now, is also that most foreign to us and the most difficult to access.' (Petitmengin 2006: 230)^I

That our attention is rarely stabilized on specific experiential processes seems to result directly from our lifeworldy orientation towards things in the natural attitude (see §2 above) which all too often makes it

'impossible for us to direct our attention at one and the same time onto the "what" and the "how", onto the object of the [experiential] process and the way in which we carry it out.' (Petitmengin 2006: 238)

If we fail to stabilize attention on specific aspects of lived experience, it is either fluctuating to associations of imagined or remembered objects or it is absorbed in presently intended objects and objectives (Petitmengin 2006: 233-234). The first kind of distraction, through dispersed attention, is also labeled 'mind wandering', the second kind of distraction, through concentrated attention (on the intentional object), may be called 'intentional absorption'. Both kinds of distraction lead to the result that large parts of lived experience, though actually lived through, remain 'cognitively unconscious' (Bitbol and Petitmengin 2016: 59-60), or, in traditional phenomenological parlance, 'pre-reflective', and are 'not immediately accessible to reflective consciousness and verbal description' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §1). Now, the effect this attentional deficit has is that imagination, which is a reflective activity taking place only above a certain threshold of attention, systematically ignores all aspects of lived experience lying below this threshold.

The second challenge for imaginative variation is pointed out by Shaun Gallagher in remarking that 'one's own imaginative faculties are limited by various biases or lack of knowledge' (Gallagher 2012: 308). Thus, a certain individual person – who may happen to be a phenomenologist practicing imaginative variation – may not be able to go beyond the limits of what she *individually* is able to experience. But there may *in fact* be people experiencing differently than this individual phenomenologist. In that case, she is easily biased by declaring – in accordance to her imaginative variation – some aspect of experience as trans-individually and -situationally invariant that in fact *is* different for the respective population of experiencers of which she is not part.

Example. Gallagher cites the case of synesthesia as an example pertaining to Husserl himself: 'Husserl, for example, claims that colors and sounds cannot change into each other [Husserl 1925/1977: 75]. At least he could not imagine how that could be so. However, that does not necessarily mean that it is *actually* impossible. Indeed, empirical research on synesthesia demonstrates that the [...] boundary between colors and sounds can be more permeable than might be ordinarily expected' (Gallagher 2012: 308)

Note that we actually cannot tell whether this is an instance of the first (linked to limits of attention) or the second (linked to individual idiosyncrasies) type of restriction on imaginative variation. That Husserl was not able to imagine synesthesia may be due to the fact that he simply did not experience it (while other people do), or due to the fact that he did indeed experience it on a fine-grained level, but was not able to bring it to attention in his imagination (while other people maybe do experience synesthesia in a more apparent way or have higher skills in attending to fine-grained synesthetic experiences). But this only means that, a fortiriori, this example shows that we should be cautious towards both kinds of

^IAnd 'in general we are not even aware of this difficulty. It requires specific circumstances, or appropriate training, so that we can become conscious of the extremely fluctuating nature of our attention' (Petitmengin 2006: 233).

To avoid such biases, phenomenology 'may require a supplement to the use of imaginative variation, namely, "factual" variation[,...] to see variations that may not be so easy to imagine' (Gallagher 2012: 308, other possible instances of factual variation beyond synesthesia that Gallagher cites are psychopathology and perceptual illusions). Taking 'factual variation' on board is already a step away from armchair and towards empirical phenomenology. However, with simply stating that we need factual variation, it is still left unspecified *how* it is actually to be accomplished in a phenomenologically viable manner. Before approaching this question, we have to consider the last and major challenge for imaginative variation resulting from the solitary character of armchair reflection.

This challenge consists in the fact that we can hardly formulate operationalizable intersubjective criterion for the (relative) success or failure of phenomenological reflection as a purely first-person undertaking. To be sure, as evidenced in the quote above, Husserl concedes the possibility of failure of this reflection. But he does not specify an intersubjective method for distinguishing 'better' from 'worse' realizations of phenomenological reflection. Thus, Husserl rejects those

'who believe that with phenomenological concepts, acquired from rough analyses of a couple of examples as allegedly sound, they can easily proceed in a non-intuitive scientific thinking and thereby advance phenomenology' (Husserl 1913/1976: §84, p.191, own translation following Husserl 1913/1976: 202). ^I

But an exclusively first-person, armchair phenomenology (as is Husserl's) cannot supply explicit *intersubjective* criteria for distinguishing mere 'rough analyses of a couple of examples' from actual 'eidetic variation' – which is, according to Husserl, necessary for 'essential intuition'. In the end, every armchair phenomenologist is alone with his or her assertion that something is true intuition of general structures (and not simply a superficial impression won by 'rough analyses of a couple of examples'). Polemically, one might say that a phenomenologist in the Husserlian style simply declares *ad hominem* those reflections as successful that come from the people in the 'right attitude' – namely, Husserl himself and his adherents.

To overcome these difficulties of the *a priori* approach to phenomenology of solitary armchair reflection, empirical phenomenology changes the methodological orientation fundamentally. It aims at a process of inquiry that is thoroughly intersubjective, not only on the stage of comparing results, but already at the stage of bringing them about.

The first step in this direction is implementing factual variation – as variation among factual subjects and situations, in short: intersubjective variation – not only, as Gallagher suggests, as a supplement to imaginative variation, but as the main method of ascertaining phenomenological validity. Thus, the division of labor between the two types of variation is actually reversed in comparison to Gallagher's proposal: in empirical phenomenology, imaginative variation serves as a supplement to factual variation. Imaginative variation plays only an auxiliary (though plausibly indispensable) role as a heuristic tool, while factual variation is the last evidential instance of appeal.

Now, the question to answer in the next step is: how can factual variation as intersubjective variation actually be implemented in a way that avoids the limitations of imaginative reflection on lived experience? To begin with, it is clear that factual variation has to start from descriptions of *factual* lived experiences, that means concrete singular experiences, not imagined generic ones. Thus,

'in every case, referring to singular situated experiences [...] is the proper ground of any intersubjective

^IOriginal: 'die glauben, mit phänomenologischen Begriffen, welche an ein paar rohen Beispielsanalysen als angeblich feste gewonnen sind, in einem unanschaulich-wissenschaftlichen Denken frei schalten und dadurch die Phänomenologie fördern zu können'.

agreement on the *structure* of experience. Far from hindering access to experiential invariants, direct reference to a singular experience is our only reliable route towards them.' (Bitbol and Petitmengin 2011c: 35)

Further, taking our common attentional limitations into account, the descriptions of the singular experiences have to go beyond the limits of attention we are bound to in the natural attitude, in order to grasp normally unattended aspects of experience. Thus, what we need is

'a singular and fine-tuned description which, compared to Husserl's approach, shifts the descriptive focus in two ways: 1. The lived experience is singular, content-laden, not generic and structural; 2. The granularity level of the description is reinforced' (Depraz 2020: 510).

And finally, the descriptions have to be compiled in a way that ensures the application of intersubjective standards of validity from the start on (the same holds of course also for the process of phenomenological reflection carried out on the basis of these descriptions).

To fulfill these demands, simultaneous description of the experience as it unfolds cannot be sufficient. Firstly, since our scope of attention is restricted, as already argued, only very limited aspects of experiential processes can actually be attained to a degree of becoming describable. But, secondly, even those that can be attained cannot be described in 'real time', simultaneously to their unfolding, since too much is happening in too short a time for verbal description (Petitmengin 2006: 237-238). And thirdly, simultaneous description is of course also part of the present field of experience, possibly altering the experiential process under description (Petitmengin 2006: 254).

Accordingly, experiential processes can only be described retrospectively, and not only that, the retrospection most likely has to be repeated and refined to produce adequate results:

'In order to become conscious of the [...unfolding] of the process, I must re-enact it, play it out again in an inner way. And I must in fact re-enact it *several times*: for the first time, I can only identify the main phases of the process. I must re-enact each of its phases in turn in order to describe them, in the form of a set of operations, which I must in turn re-enact to access a level of greater detail, and so on until I reach the level of detail required.' (Petitmengin 2006: 238)

This process of reiterated retrospection predictably makes very high demands on a subject trying to carry it out 'all by herself' in purely first-person reflection. And from the perspective of empirical phenomenology, this is not even desirable, since it would once more render the process of introspection an opaque, exclusively first-person procedure.

Thus, the methodological procedure standing to reason in the empirical-phenomenological setting rather has to be some kind of 'assisted introspection' (Bitbol and Petitmengin 2013: 273) going beyond the purely first-person orientation of armchair introspection and imaginative variation. Typically, this will take the form of an interview on the specific lived experience conducted in the phenomenological attitude, in which the interviewer supports the interviewee in stabilizing attention towards the aspects of the recalled experience (only in very specific cases, it may be possible to inquire certain aspects on lived experience with a simultaneous interview, as mentioned in Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2). Methodologies following this path facilitate for the introspecting subject

'the effective exploration of her lived experiences [...] through the "second person" mediation of an interviewer who accompanies [...] the implicit, unacknowledged, pre-conscious dimensions of the lived experience.' (Depraz 2020: 511)

Accordingly, these methodologies have been labeled 'second-person' approaches (Varela and Shear 1999: 8-11) to phenomenology. 'Second-person' methodologies include the intersubjective interaction between an introspecting subject or 'co-researcher' (the interviewee, Kordeš 2016: §53,§61) and a phenomenological investigator (the interviewer) guiding,

facilitating and evaluating the process of introspection and description. Indeed, factual variation can only be carried out in a 'second-person' mode, since it involves taking into account the factual lived experiences of another person, a 'you'. If, in contrast, we start only from first-person descriptions of lived experience (even if they are factual and not imaginative^I), we remain in the armchair setting of isolated 'I's bringing their fabrications into an intersubjective (second-person) discourse, in which these isolated subjective (first-person) descriptions cannot be sufficiently validated.

In sum, second-person approaches open possibilities to overcome the limitations of purely first-person reflection and to introduce explicit intersubjective standards of validity into the process of introspection or phenomenological description (and the intersubjective interaction extends also beyond this context of description, as we shall see below in §23 when discussing the implementation of the second-person approach in microphenomenology).

§19 Constructivist Validity in Empirical Phenomenology

As has been pointed out so far, for an alternative second-person approach to phenomenological description and reflection, we need explicit intersubjective criteria of validity. And it already follows from the notion of immersion in lived experience that these standards have to be constructivist or enactive ones (see §17 above). As Tom Froese, Cassandra Gould, and Adam Barrett point out:

'[I]n line with the constructivist approach in the philosophy of science [,...] the manner of assessing the validity of data always stays within the domain of experiencing, since we can never step outside of our lived situation' (Froese, Gould, and Barrett 2011: 263).

If we understand the research process as being immersed in lived experience, it becomes clear that

'each process of validation is in fact a fresh inquiry into experience. The process of checking (i.e., experiencing) the results reported by [...] researchers will have to include embarking on the same path as that taken by the original researcher. [...] In the constructivist science envisioned here, reporting about the process, the technique, and the general path of research is therefore an essential feature.' (Kordeš 2016: §58)

So, the constructivist or enactive approach shifts the focus of attention to the phenomenological research *process*. This entails a processual or performative conception of the validity of both phenomenological description and phenomenological reflection (in parallel to the experiential interpretation of the 'processual' understanding of objective or intersubjective validity, see §15 above).

Firstly, this shift of focus implies that any phenomenological *description* of a specific experience cannot be validated in terms of representation or correspondence. In fact, and in defiance of representationalist aspirations,

'there is no way of comparing directly an experience an sich and its alleged report; neither for experimenters nor for interviewers, nor for the subjects themselves. This is obvious for experimenters [third-person or second-person observers], but it is also clear for subjects themselves insofar as their own act of "comparison" is a new experience in which the former experience to be reported is [...] recast.' (Petitmengin and Bitbol 2015: 309)

Accordingly, in the constructivist setting,

'the question of knowing if a verbal report corresponds to experience exactly, reflects it precisely, loses its meaning. The validity of a description cannot be assessed according to its ability to reproduce the described *content*, but according to the quality of its own production *process*. The validity of a description

^INote that the attentional limitations described above hold for the description of factual experiences as well. Thus, it requires actually a very highly developed skill of introspection (i.e., stabilization of attention) to produce descriptions of factual experiences of a sufficient degree of detail.

is not evaluated by comparing it with its hypothetical "object", but according to the authenticity of the process that generated it.' (Petitmengin and Bitbol 2009: 389-390)

A concrete suggestion of how to make sense of this notion of 'authenticity' is considered below (§24).

Secondly, the performative notion of validity also has to pertain to the validation of the structures elicited from the descriptions through phenomenological reflection. On this structural level also, constructivist, empirical phenomenology has to rely on a performative instead of a representationalist understanding of adequacy to lived experience. More specifically, proponents of empirical phenomenology propose a notion of 'performative coherence' (Petitmengin and Bitbol 2009: 391) for constructivist validation of phenomenological structures. This 'performative' kind of coherence is meant to hold not just among knowledge-claims (as in a conventional 'coherence theory of truth'), but among the acts that contributed to producing these knowledge-claims (a methodological implementation of 'performative coherence' is also going to be discussed §24 below).

Implementing the sketched non-representationalist understanding of validity, on the level of description as well as reflection, opens the road to

'by pass the fruitless search for their *correspondence* to putative "private objects" and instead try to establish criteria of self-validation.' (Petitmengin and Bitbol 2015: 310)

This 'self-validation' means precisely validation through an intersubjective, enactive process within lived experience. All in all, the rejection of the representationalist understanding of validity amounts to the contention that '[i]n introspective studies, the usual "correspondence theory of truth" must be replaced to a certain extent with other, more immanent and more flexible criteria of validity, such as the criterion of "performative coherence" (Bitbol and Petitmengin 2013: 270).

Nonetheless, the idea and ideal of correspondence is not rejected outright within empirical phenomenology:

'This retreat from the correspondence theory of truth to an extended version of the coherence theory of truth, however, should not be overrated. [...I]t does not exclude the use of the word "correspondence" as a convenient summary of the [...] acts that contribute to maximizing performative coherence. The elusive quest for "correspondence" can even be considered as a good motivation, or "regulative ideal," for reaching an optimal form of coherence, and thereby a piece of reliable knowledge. In other words, the concept of correspondence can be considered as part and parcel of the quest for coherence.' (Bitbol and Petitmengin 2013: 271)

In fact, the empirical phenomenologists can of course not ignore that, precisely from the immersive perspective of *doing* research, it is typically experienced

'as the endeavour to see/understand the observed object such as it is. [...] Trying to see/understand how things are appears to be *the experience* of (every) act of observation.' (Kordeš 2016: §45, emphasis added)

So, operating with the notion of correspondence is still possible (and maybe even unavoidable) within enactive, empirical phenomenology, as long as one does not take it as fundamental (see §32 below for further discussion).

§20 Empirical Phenomenology and Experimental Philosophy

In taking a broadly empirical approach and working with 'factual variation' among various persons (be they philosophers or non-philosophers, phenomenologists or non-phenomenologists) through interviewing them, empirical phenomenology bears certain parallels to the approach of *experimental philosophy* which also challenges the reliance on 'armchair methods' (compare, for example, Knobe and Nichols 2017, Sytsma and Buckwalter 2016). But current experimental philosophy takes an exclusively third-person approach parallel

to third-person methods in experimental psychology and cognitive science (Knobe and Nichols 2017). No explicit phenomenological perspective is involved.

Experimental philosophy has developed as a deviant current of the analytical tradition, which originally understood philosophy to be concerned primarily with concepts (the concept of knowledge, for example). Experimental philosophy takes the same starting point, it just refuses the approach of *conceptual analysis* proceeding from *intuitions* on the correct application of these concepts in particular cases (Knobe 2016: 40-46).

Experimental philosophy eschews this approach as unreliable (Knobe and Nichols 2017: §1), for 'objectivist' reasons parallel to the ones for discarding introspection or phenomenological description (see §4 above). For more reliable methods, experimental philosophers turn to empirical observation in controlled experiments and replace conceptual analysis with empirical analysis and explanation of observed concept use. In this context, they apply the notion of *cognitive processes* as the causal explanation for the observed patterns in concept application (Knobe 2016: 47-50).

But still, what experimental philosophy takes as explananda are (the applications of) concepts and (thereby revealed) intuitions about those concepts. It does not consider the actual experience of applying concepts, of having intuitions, or of being in a situation that the concept in question refers to. Accordingly, participants in experimental-philosophical studies are typically only asked about their application of certain concepts to certain cases (as the ascription of 'knowledge' to certain everyday situations, see for example Turri 2016).

Phenomenology, in contrast (and especially empirical phenomenology), is not concerned primarily with concepts, but with *experience* (which includes the experience of applying concepts). Accordingly, the second-person approach of empirical phenomenology aspires to make precisely this viewpoint of lived experience intersubjectively attainable. In this approach, although third-person evidence may be taken into account, it has to be *combined* with second-person evidence and subjected to an overall constructivist notion of validity.

Pointing in a similar direction, Joshua Knobe and Shaun Nichols observe that experimental philosophers are increasingly trying to go beyond

'looking at people's thoughts and feelings about some topic as a way of making progress on questions about that topic; they are instead trying to make progress on questions that are *directly about people's thoughts and feelings themselves*.' (Knobe and Nichols 2017: §1)

But for this, from the standpoint of phenomenology (especially, empirical phenomenology), a purely third-person approach does not suffice, we also need to take into consideration 'people's thoughts and feelings themselves' through second-person methods. Thus, instead of just 'giving participants vignettes and asking for their intuitions' (Knobe and Nichols 2017: §2.5), as experimental philosophers do,^I an empirical-phenomenological approach would include asking the participants about relevant instances of lived experience in a methodologically controlled way. For example, instead of just asking people about their 'intuitions' about how they would ascribe knowledge in cases in which they are not involved, empirical phenomenology would opt for asking them about cases in which they actually take themselves to have or have acquired knowledge (or else, to create an experimental situation in which they can be ascribed to have acquired knowledge and interview them about this situation).

So, in the context of applying empirical phenomenology to philosophical questions (for example, the question how objectivity is sought for an brought about, see §15 above), it may be understood as 'experimental philosophy with a qualitative bend'.

¹Above that, Knobe and Nichols only mention the use of reaction times, neuroimaging, and web-based statistical analysis of word-usage in experimental philosophy (Knobe and Nichols 2017: §2.5), all of which are decidedly third-person methods.

2.2 Microphenomenology

The basic assumptions and ideas of microphenomenology are presented in §21, the specific interview method in §22, and the analysis method in §23. In §24, it is discussed how this implements the enactive understanding of validity through performative coherence. The method and the potential for applications is illustrated by a microphenomenological case study in §25.

§21 Microphenomenology: Background and General Approach

To date, there seems to be only one approach of empirical phenomenology that is amenable to be applied to such basic philosophical questions as the constitution of objectivity and subjectivity (compare §15 above), namely, the approach of *microphenomenology* (see Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019, Petitmengin and Bitbol 2009, Valenzuela-Moguillansky and Vásquez-Rosati 2019a, for an overview of the formation of the microphenomenological approach, see Depraz 2020: 508-510).

Microphenomenology implements an empirical 'second-person' approach through the conduction of interviews on particular experiences in a carefully evoked phenomenological attitude that is meant to guarantee a phenomenological epoché (see §14 above) in the interviewee. In this way, it is set apart from other approaches in qualitative research which are also characterized as 'phenomenological' in some way or other, but which only request the epoché to be instantiated by the researcher, not by the subject or co-researcher (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.1).

A microphenomenological interview is lead either on an experience that is lived by the interviewed person right before the interview on invitation of the researcher – the completion of a cognitive task, say (for an example, see §25 below) –, or on an experience that has been lived by the interviewee in the past in situ (Petitmengin 2006: 243). The first case is called a 'provoked', the second case an 'invoked' experience (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2). Of course, some experiences falling into the focus of microphenomenological interest cannot be provoked, for example the onset of an epileptic seizure or the intuitive arising of an idea (Petitmengin 2006: 243).

On the basis of the interviews, structures of experience are to be elicited by subsequent analysis of the descriptions made by the interviewees. Like phenomenology in general, microphenomenology aims at the elicitation of intersubjectively and intersituationally invariant structures of experience (compare §16 above). Both the interview technique and the analysis procedure are geared towards this end. This stands in contrast to common interview methods in qualitative research, which focus more on the singular content of the experience than its structural features. This focus on particular content motivates Gallagher's critique on corresponding attempts of integrating qualitative research with phenomenology:

'In regard to qualitative research [...] it has often been the case that practitioners with only a passing knowledge of phenomenology were able to talk about "getting to" the lived experiences of their clients and patients, but in some important sense they were unable to deliver. Much of their work depended on interviewing subjects about the particularities of their ongoing experiences. If questions were not framed well, however, investigators would frequently get an opinion or an explanation of why subjects were feeling a certain way rather than a description of the subjects' lived experiences. Another difficulty appeared at the point of interpretation by the investigators. Various methods for organizing the data or for developing categories that generalize the individuals' reports were brought over from psychology or the social sciences but were not necessarily phenomenological or well integrated with phenomenology. The result was that the same phenomenological data could be construed in a number of ways and could end up far removed from the lived experiences of the subjects.' (Gallagher 2012: 306)

Microphenomenology, in contrast, which Gallagher sees as 'a more viable approach' (Gallagher 2012: 306, footnote 3), 'do[es] not focus on the content of the experience but on its structural elements, [...thus,] the part of interpretation by the researcher in the analysis is significantly reduced' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.1). Moreover, through concentrating on the *structure*, instead of the *content* of the studied (type of) experience, the analysis is to be conducted in a manner that enables reproduction, making it liable to intersubjective validation (see §24 below).

Microphenomenology can be situated within the larger program of transcendental phenomenology (in the wide sense of the term, compare §13 above): it is the explicit intention of its proponents to 'discover [...] at the core of singular experiences [...] the shared intimate structures through which the world appears to us' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §1, compare Depraz 2020).

But microphenomenology proceeds from a sense of epoché as suspension of judgment and preconceptions that is enhanced in comparison to traditional phenomenology: namely, microphenomenology aims to bracket not only the natural attitude, but *also* phenomenological categories in the interviews^I and, to a certain extent, in the analysis (Bitbol and Petitmengin 2011c: 33). Thus, microphenomenology

'relies on a fine-grained description of experience which is as far as possible devoid of preconceptions and theorizations, in order to extract progressively abstract categories. Therefore we do not start, either in the interview or in the analysis, from a set of predefined categories supposed to characterize any experience[...]. We consider that these too familiar distinctions might be preconceptions characterizing a superficial level of awareness of experience, and hindering the awareness of its deeply pre-reflective structures. For example, establishing straightaway a distinction between bodily and cognitive processes may generate needless efforts to understand the bodily anchoring of thought and to bridge the gap between these two dimensions that are not separated in experience. Instead of starting from such predefined structures considered as given, we consider micro-phenomenological research as the investigation of the genesis of these distinctions and of the possible micro-processes through which they are constituted.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.2)

Accordingly, in microphenomenology, 'the bottom-up identification [of phenomenological categories] is normally favored [...]: from the utterances to the categories, in a progressive manner from lower to higher levels of abstraction' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §70).

The validity or reliability of the first-person descriptions or 'reports' gathered in the interviews is evaluated through intersubjectively observable clues of *authenticity* of the descriptions (analogous to the criteria we apply in everyday cases of evaluating the authenticity of memory reports). By being overtly observable, these clues are meant to constitute intersubjectively applicable criteria of validity. But these criteria are not meant to be applied from a detached third-person position, but in an engaged second-person mode, giving rise to an understanding of validity that the proponents of microphenomenology call *performative coherence*. In this spirit, also the validity of the analysis of the interview data is meant to be evaluable intersubjectively and enactively through performative coherence (see §24 below for discussion).

Concrete domains to which microphenomenology has been applied already comprise sensory experience (for example Petitmengin, Bitbol, Pachoud, et al. 2009), experience of illusion (Valenzuela-Moguillansky, O'Regan, and Petitmengin 2013), experience of thinking (for example Petitmengin 2007, Anderson 2018), the experience of the onset of epileptic

¹An exception is the 'front-loading' (Gallagher 2003) of phenomenological categories into empirical studies, in which the subjects or co-researchers are instructed or prompted with the explicit use of a phenomenological concept (Petitmengin 2017b: §9). But these front-loaded phenomenological categories are considered 'only [as] heuristic keys' (Petitmengin 2017a: §9) in microphenomenology, in need of validation through the actual empirical-phenomenological findings.

seizure (Petitmengin, Navarro, and Le Van Quyen 2007), experience of pain (Valenzuela-Moguillansky and Vásquez-Rosati 2013) and meditative experience (for example Petitmengin, Bitbol, Beek, et al. 2017, Przyrembel and Singer 2018, Kordeš and Demšar 2021).

Above that, there is also the possibility of applying microphenomenology to the methodological issues of microphenomenology itself in a second-order way (see Bitbol and Petitmengin 2013 and Petitmengin, Remillieux, Cahour, et al. 2013, which is discussed in §25 below).

§22 Interview and Evocation

As pointed out above (§17), the constructivist epistemology for phenomenology gives rise to a non-representational notion of introspection. This notion is expressed as 'becoming aware of' or 'coming into contact with' lived experience, which 'is not a matter of "looking at" one's experience but of [...] "dwelling in" it' (Petitmengin and Bitbol 2009: 377, see full quote in §18 above). The microphenomenological interview is designed as implementing this immersive sense of introspection or phenomenological description.

Namely, in the microphenomenological interview, the interviewee is supported by the interviewer through "content-empty" or "structure-driven" questioning' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §2) and regular reformulation of her utterances in stabilizing her attention on the lived experience under study (Petitmengin 2006: 239-241).

Example. Natalie Depraz gives the following description of 'content-empty' or 'structure-driven' questioning:

'Through the technique of the microphenomenological [...] interview, one enables the subject to gain a more fine-tuned access to singular lived experiences, which are often covered over by generic representations. Typically, if I ask how you woke up this morning, and you answer me that in general, the alarm clock wakes you up, you are describing the usual structure of your wake-up reality, or your own spontaneous representation of this morning's waking-up. [...Y]ou would be describing a "class of lived experiences," but not your lived and unique experience of that particular morning: in other words, the formulation of this morning's experience is in fact the implicit and sedimented result of a multiplicity of experiences. [...] On the contrary[...], I suggest that you return to the precise moment when you woke up this morning and describe the microprocess of emerging into consciousness which was your awakening. By inviting you to go back precisely to that moment, I will get a fine-tuned description of your experience of that moment.' (Depraz 2020: 509)

The first aim of this interview technique is to guide the interviewee into a state of 'evocation' of the singular experience. A subject is considered to be in a state of evocation of a singular moment 'when she recalls it to the point that the past situation becomes more vivid for her than the present situation is' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §2, compare Depraz 2020: 511-512).

Basically, evocation is nothing but a kind of episodic or 'concrete' memory (as opposed to semantic or 'intellectual' memory, Petitmengin 2006: 244). Indeed, 'evocation' is meant quite literally in the sense of 'recall' (Bitbol and Petitmengin 2011a: 96). Episodic memory in the sense applied in the methodological context of microphenomenology is opposed to semantic memory, which may be called memory of what was ('the grape was lying on the table'). Episodic, in contrast, is memory of what it was like ('seeing the grape on the table felt thus-and-so'). Thus, episodic memory in this sense is an immersive experience in which 'we experience an immediate coincidence with the past, we relive the past as if it was present' (Petitmengin 2006: 244). Now, an evocation is an episodic memory of a very specific kind. What sets it apart from common cases of episodic memory is simply a heightened immersion in the recalled situation and of attention to its phenomenal characteristics.

Of course, microphenomenologists admit that the attentional limitations pointed out above (§18) do not only pertain to imagined or presently experienced situations, but also to recalled ones (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §1). Episodic memory usually comes intertwined with semantic memory, and often, the semantic aspects receive more attention than the genuinely 'episodic' or phenomenal-immersive ones. Typically, we are confronted with this limitation, when not being able to remember certain aspects that we must have experienced.

Example. 'I remember *that* I have put my keys somewhere here, but I just can't conjure up the *actual experience* of putting them down any more...'

The limitation shows itself even more strikingly in the contrary (and rarer) case, when we are actually able to overcome it: when we manage to remember certain aspects that seemed irretrievable at first. Such a process of remembering aspects of a recalled experience that received only little attention in the original situation possibly takes some time and effort.

Example. John Lachs gives a nice example of such a 'first I can't remember, but then I can' case: 'Take a case in which the objective constituent [i.e., intentional object] of a perceptual situation is one of great complexity, such as a stained-glass church window. In the bewildering variety of shapes and colors it is easily overlooked that St. Peter rests his right hand on a little boy's head. When back home a friend says admiringly, "And did you see St. Peter's hand on that beautiful boy's head?" I have to confess that I haven't seen that at all. But then, at his request, I recall the picture and examine it in detail. It is now the objective constituent of an introspective situation. Then I suddenly say, "You were right. There it is... the old man's hand resting gently on the boy's head." Consider what has happened. I remember that I didn't see [attentively] the saint's hand on the boy's head when the stained-glass window was the objective constituent of my perceptual situation. Now if I am not abnormally suggestible, the obvious conclusion is that in some sense the hand was there in the image right from the first. In the perceptual situation I overlooked it, but as soon as this was pointed out to me I could correct the oversight.' (Lachs 1965: 12)

In keeping with the second case ('first I can't remember, but then I can'), microphenomenologists also hold that, under the right circumstances, this limitation of memory can be overcome to a degree that is sufficient for doing phenomenology on evoked experiences. As the previous example illustrates, we are well able to retrieve memory traces of aspects of experience that appear initially undetectable. Thus, our frequent

'difficulty of access does not mean that our lived experience is out of reach. It means that accessing it requires a particular expertise, which must be acquired. This expertise consists in carrying out specific acts [...]. The micro-phenomenological interview method aims at triggering these acts, through specific prompts and questions, in order to help interviewed subjects become aware of the unrecognized part of their experience and describe it precisely.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §1)

The constant re-awakening of the evocation is meant 'to help the subject loosen the focus of her attention on the "what" of the evoked experience, in order to let the "how" unfold' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §2). This is what makes out the character of evocation as a specific kind of episodic memory in which the awareness of the phenomenal aspect, the 'how', is enhanced in comparison to everyday cases of episodic memory through 'a process of immersion in experience, [a] broadening of the field of attention' (Bitbol and Petitmengin 2011c: 32). Through shifting the awareness, away from general preconceptions, and towards pre-reflective aspects of the experience under study, evocation is the practical implementation of enhanced epoché (on the natural attitude and on phenomenological preconceptions, see §21 above).

Accordingly, the questions and reformulations employed in the interview aim at guiding the interviewee away from so-called 'satellite dimensions', namely 'commentaries, beliefs, judgments, explanations and theoretical preconceptions *about* the experience' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.1).

Example. 'One of the devices consists, whenever the interviewee uses an abstract term likely to convey an implicit preconception, in reformulating it in the interrogative form by inviting her to describe the concrete action that underlies this term. For example, if she says "I experienced a resistance", the interviewer replies: "Take your time to return to the moment when you experienced a resistance... at that moment, how do you resist?" or "...how do you know that you are resisting?"' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §2)

The questions and reformulations are meant not to induce any preconception in the interviewee, thus, the interviewer only uses what has already been previously described by the interviewee, and the interviewee is frequently asked to correct the reformulations.

Building on a stabilized state of evocation, the questions in the interview aim at the experience's diachronic structure (the unfolding of the experience in time) and the synchronic structure (aspects at a given moment in time), independent of the content (the 'what') of the experience and as far as possible devoid of preconceptions on the experience on behalf of the interviewer and the interviewee.

Example. 'To collect the diachronic description of the experience, the interview method consists in asking questions that guide the subject's attention towards the various moments of its unfolding without suggesting any content, such as "How did you start?", "What happened then?". These questions enable the collection of a large mesh description of the experience as a succession of phases. The same type of questioning is then reiterated to deepen the description of a phase: "Can you look at this step again? When you did this, what did you do? How did you start?" so as to obtain the description of a succession of sub-phases. And so on, for each sub-phase, until the level of detail that is required for the research purposes is reached, or until it seems impossible to fragment the description further. [...]
To collect a synchronic description, the researcher helps subjects reorient their attention from the content of the experience towards its structural characteristics at a given instant. For example, if it is a matter

of the experience towards its structural characteristics at a given instant. 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' attention towards the size, distance, direction and persistence of the image... or any other generic or structural feature that gradually emerges^I from the analysis work.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §2)

Optimally, the whole interview is recorded in audio and video, not only for transcription of the verbatim utterances, but also for documentation of the behavior of interviewee and interviewer, which is important for validation of the interview (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.1,§3.3.2, see §24 below for further discussion). The transcription of the interviews forms the basis for the subsequent analysis process.

§23 Analysis and Iteration

As already stated above (§21), the aim of microphenomenology is not only the gathering of detailed first-person descriptions of singular lived experiences, but also the elicitation of invariant structures of experience, defined as 'a network of descriptive categories, independent of the experiential content' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3 after Delattre 1971). To extract invariant structures of experience, the data gathered in the interviews are subjected to a specific analysis process (the expression 'analysis' used in parallel to 'data analysis' in empirical qualitative research, not some kind of philosophical method).

This analysis procedure may be understood precisely as an attempt to overcome the methodological shortcomings of imaginative variation that originate from the limitation to 'first-person' isolation. That means that on the level of microphenomenological analysis, we have an implementation of 'factual variation' in a thoroughly 'second-person' mode (see §18 above). Like the interview, the analysis is also meant to avoid preconceptions of experience as far as possible, since these may be 'characterizing a superficial level of awareness of

^IOn the iterative abstraction of generic categories from the interviews, see the subsequent §23 below.

experience, and hindering the awareness of its [...] pre-reflective structures' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.2). The process of analysis and the progressive development of structural categories in its course are documented in order to make it transparent or even testable with regards to reproducibility.

The first step of the analysis consists in breaking the descriptions gathered in the interviews into minimal utterances and erasing all utterances that express general statements going beyond the singular experience under study.

Example. General statements 'are characterized by the use of abstract terms, the pronoun "we", generic (always, usually, ordinary), or frequency (occasionally, frequently) adverbs [...] associated with the imperfect or a generic present ("usually I always feel") [...]. Only the statements describing a singular lived experience, characterized by a concrete and detailed vocabulary, the use of the pronoun "I", and the reference to specific moments and places are kept.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.1)

Likewise, all utterances that express 'satellite' statements (see §22 above) about the singular experience are also bracketed (such statements describe the context and can only be used for orientation, not for actual analysis, Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.1). Moreover, utterances that are evaluated as unreliable by considering the verbal or non-verbal behavior of the interviewer and/or interviewee are also eliminated (see §24 below for the criteria of validity applied in this process).

From the remaining non-judgmental descriptions of experience, categories for the conceptualizing structures of experience are abstracted. For this, these descriptions are mustered in a second step for potential 'structural statements', descriptions that are possibly indicative of what phenomenology is out to capture: invariant structures of experience, aspects that are present not only in the specific experience that is described, but in all experiences of the same type (in one way or other). The structural statements are contrasted to 'content statements', which only describe specific contents of the experience (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3).

Example. An example for a pure 'content statement' is the following:

'For example, if I suggest that the reader imagines an elephant and describes this experience, statements such as "I see a Maharaja on an elephant in an old movie" and "I imagine Babar in New York" describe [...] the content of the image.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3) A 'structural statement', in contrast, would be

'a statement such as "I see a blue elephant', [which,] while describing the content of the image [...], also [...] indicates a characteristic likely to be found in any inner image, a potential structural element of the experience of imagining: the color of the image. [...] In the same way, the statement "I see Babar as if I was sitting on its back", while describing the content of the image, includes a descriptive element which indicates a potential structural element of the experience of imagining: the perceptual position of the subject in the imagined scene (which is in this case a "first person" perceptual position [...])' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3).

Of course, since all microphenomenological interviews are conducted on specific experiences,

'by definition, all descriptive statements describe singular experiences, precisely situated in space and time, whose content is unique. Structural statements, as content statements, thus vary indefinitely: "a light blue elephant", "a dark blue elephant", "a turquoise elephant", "a sky-blue elephant", "an elephant with a slightly lighter blue than the previous one"... However in spite of the infinite diversity of the described experiential contents, all these statements indicate a common structural characteristic.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3)

It has been pointed out above (§18) that imaginative variation may play a role as a heuristic tool in empirical phenomenology. In the context of designating structural statements as part of the microphenomenological analysis process, it shows that this role is indeed indispensable (though only auxiliary). Namely, in identifying structural statements, the analyst conducts a kind of imaginative variation:

'For example in the description of an inner discourse, it is rather easy to differentiate immediately the statements describing the content of the discourse (such as "I tell to myself that Tom should be more modest") from structural statements indicating potential generic characteristics such as the volume, tone and location of the voice uttering the discourse. In such cases, to identify a statement such as "I talk to myself with a loud voice" as a potential structural statement indicating a generic characteristic "volume", the analyst can rely on an inner operation consisting in varying the content of the discourse while verifying in her own experience the concomitant variation of the volume.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3)

This procedure does in fact seem to amount to an 'intuitive' access to 'eidetic' components of a certain (type of) experience (through an act of imaginative variation) – in the example case, the experience of inner speech. Nonetheless, this application of imaginative variation comes with an important qualification:

'This inner operation – of which a careful micro-phenomenological description remains to be done – only leads to a hypothesis, which the remainder of the analysis will enable the researcher to confirm or falsify.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3)

This amounts to a provisional application of imaginative variation, limited to what may be called the microphenomenological 'context of discovery'. The ultimate 'context of justification' includes criteria of validity that go beyond mere imaginative variation, as we shall see below (§24).

Moreover, the detection of structural statements cannot be only a preliminary step to be accomplished once and for all in the first reading of the verbatim. Since the idea of what may be invariant in the different experiences on which interviews have been conducted is likely to develop only during the analysis process, it is recommended to revisit the verbatim later in the analysis process again to see whether further aspects that initially seemed to be 'content statements' may be forthcoming as 'structural statements'. In other words, certain structural statements are

'only [...] gradually identified in the analysis. In such cases the distinction between content statements and structural statements is not possible before an advanced stage of research.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.3)

Once structural statements are identified, they are broken down into 'minimal units of meaning', also called 'descriptemes' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.4).

The third step of the analysis process then consists in

'abstracting – in the etymological sense of the term: 'pull-out' (ab-strahere) – from these minimal structural statements, more and more generic descriptive categories, on the synchronic and on the diachronic levels, through a number of abstraction operations' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.4).

Two kinds of diachronic and synchronic structure are abstracted from the descriptemes: firstly, the *specific* structure of *one* singular experience and, secondly, the *generic* structure of a certain *type* of experiences. The ultimate goal of the microphenomenological analysis are the generic structures.

The diachronic structure comprises different phases of the experience under study, indicating (where possible) their relative order and overlaps between phases, breaking them down into sub-phases, sub-sub-phases, and so on, and marking certain 'transitional events' between them (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.2.2).

Example. Figure 1 shows an example of a specific diachronic structure from a microphenomenological study on the heartbeat detection task (HBDT), an experimental paradigm which is used to measure interoception by comparing first-person reports (counted heartbeats without manual detection by feeling one's pulse) and third-person measurements (heartbeats recorded by an electrocardiogram), with microphenomenology adding a second-person level (asking what people actually *do* when they are asked to count their heartbeat, Valenzuela-Moguillansky and Vásquez-Rosati 2019a). The diachronic structure

ture is represented in the form of a timeline. Each column represents a phase, subsuming sub-phases, if detected. The dotted lines indicate transitional between the phases. \Box

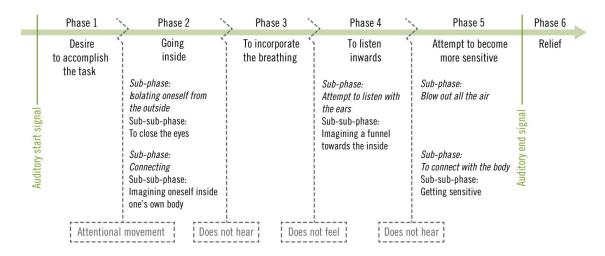


Figure 1: Example of a specific diachronic structure (Figure 2 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 131)

Example. An example of a generic diachronic structure is given in figure 2. Note that the generic categories defined to describe the phases are far more abstract than the ones defined in the specific structure.

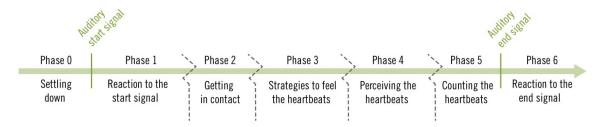


Figure 2: Example of a generic diachronic structure (Figure 6 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 137)

The microphenomenologists suggest the definition of synchronic structures to follow a number of abstraction operations (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.2) which analysts normally 'implicitly perform' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: Box 1, p.135). The relations among descriptemes and categories defined through these operations can be visualized in the form of semantic networks.

As the most basic abstraction operation, the analysis process starts with an initial grouping of the descriptemes into provisional extensional categories or clusters. This means that
the descriptemes are clustered together extensionally by similarity, without having a predefined intensional criterion of ordering in mind. The clusters are provisionally named
by a keyword present in the utterances. In the course of the analysis process, the groups
of descriptemes are then characterized by making explicit the property shared by the instances of a group, in other words, a category-in-intension (a class) is defined (ValenzuelaMoguillansky and Vásquez-Rosati 2019a: §49-§51). Accordingly, assigning a descripteme
to a category already defined in intension is called a classification, instead of merely a
grouping, of the descripteme (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: Box 1,
p.135). The categories defined in this way are considered as hypothetical and descriptemes

can always be regrouped and reclassified during the analysis process (see more on this 'iterative' nature of the analysis process below in this paragraph).

The actual structure is defined through two types of abstraction operations that consist in hypothesizing specific class-inclusion relations between the categories defined through grouping/classification and other categories, which are newly defined through the respective abstraction operation (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.2.1). Each type comprises two inverse operations, one going bottom-up, the other going top-down. A definition of a category (through applying the respective abstraction operation) being bottom-up or being top-down depends on whether the newly defined category is more or whether it is less abstract than the other category or categories involved. If the newly defined category is more abstract, the application is bottom-up; conversely, if the newly defined category (categories) is (are) less abstract, the application top-down. The abstraction operations can be rendered in set- or class-theoretic terms (Claire Petitmengin, personal communication), which will be done in the following.

The first type of abstraction operations comprises generalization (bottom-up) and the inverse operation of specialization (top-down). In generalization/specialization, certain categories (the generalized ones) are characterized as being extensionally included in another category (the specialized one) as subclasses. Thus, in generalization, already defined categories $B_1, ..., B_n$ $(n \ge 1)$ are signified as subclasses of another category A (which is newly defined in this way):

$$B_1 \cup ... \cup B_n \subseteq A$$

A is considered the more abstract category, since the extensions of $B_1, ..., B_n$ are part of the extension of A: Every descripteme that instantiates categories $B_1, ..., B_n$ also instantiates category A. It is also said that A 'generalizes' $B_1, ..., B_n$. The inverse top-down operation to generalization, specialization, starts with A and defines $B_1, ..., B_n$ as subclasses of A, which means that $B_1, ..., B_n$ 'specialize' A. Examples of the representation of generalization/specialization in semantic networks are given in figures 3 and 4.

Example. An example of generalization/specialization including normal 'things' would be:

 $\{x|x \text{ is a comedy}\} \cup \{x|x \text{ is a drama}\} \cup \{x|x \text{ is a thriller}\} \subset \{x|x \text{ is a movie}\}$

Thus, the category 'Movie' generalizes the categories 'Comedy', 'Drama', and 'Thriller', while these categories, conversely, specialize the category 'Movie'. \Box

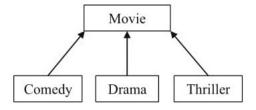


Figure 3: Generalization/specialization of categories of things (taken from figure 1 in Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019)

Example. For a microphenomenological example of generalization/specialization, consider the category of the 'focus of attention' in a specific type of action described in the interviews with participants of the study on the heartbeat detection task (HBDT) (the action in question thus constitutes a category by itself, see figure 7 below). The descriptemes falling into the category 'Focus of attention' typically described the actual foci, such as the felt inner bodily space, certain body parts, or 'inner' images experienced by the interviewees. Thus, the category 'Focus of attention' generalizes the categories 'Inner space', 'Body part', and 'Inner image', these categories, in turn, specialize the category 'Focus of attention'.



Figure 4: Generalization/specialization of categories of experiences (taken from Figure 11 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 142)

The second type of abstraction operations comprises aggregation (bottom-up) and fragmentation (top-down). In aggregation/fragmentation, certain categories (the aggregated ones) are characterized as fragmenting the intension of another category (the fragmented one). In aggregation, already defined categories $B_1, ..., B_n$ ($n \ge 1$) are signified as subclasses of another category A (which is newly defined in this way):

$$A \subseteq B_1 \cap ... \cap B_n$$

So, A does in fact fall into the intersection of $B_1 \cap ... \cap B_n$, it is a subclass of each of these classes. Every descripteme that instantiates A categories also instantiates $B_1, ...,$ and B_n . Nonetheless, A is considered the more abstract category, since the intension of A can be understood as being 'composed' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: Box 1, p.135) of the intensions of $B_1, ..., B_n$. This is expressed by saying that A 'aggregates' $B_1, ..., B_n$ (or rather, their intensions). The inverse top-down operation, fragmentation, starts with A and defines the intensions of $B_1, ..., B_n$ as comprising the intension of A in the specified way. This is also expressed by saying that $B_1, ..., B_n$ 'fragment' A. Figures 5 and 6 depict the representation of aggregation/fragmentation in semantic networks.

Example. An example of aggregation/fragmentation including movies, again, is the following: $\{x|x \text{ is a movie}\} \subseteq \{x|x \text{ has a title}\} \cup \{x|x \text{ has a director}\} \cup \{x|x \text{ has a date (of production)}\} \cup \{x|x \text{ has a length}\} \cup \{x|x \text{ has a genre}\}$

Every movie has a title, a director, a date (of production), a certain length, and a genre it falls into (at least one). Thus, the category 'Movie' aggregates the categories 'Title', 'Director', 'Date', 'Length', and 'Genre', while these categories, in turn, fragment the category 'Movie'.

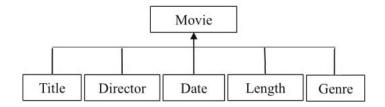


Figure 5: Aggregation/fragmentation of categories of things (taken and adjusted from figure 1 in Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019)

Example. A microphenomenological example of aggregation/fragmentation is the following: In the HBDT study, the diachronic phase 'Getting in contact (with the heartbeat)' has been identified (see figure 2 above). This 'getting in contact' comprises certain actions, a sense of agentivity, and certain effects of the actions. This means that the category 'Getting in contact' aggregates the categories 'Actions', 'Agentivity', 'Date', 'Length', and 'Effect', and these categories, fragment the category 'Getting in contact'.



Figure 6: Aggregation/fragmentation of categories of experiences (taken from Figure 11 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 142

The semantic networks make it possible to represent the complex (generic or specific) structure of a diachronic phase of an experience or even of the whole experience.

Example. Figure 7 is an example of a fully developed synchronic generic structure of a certain phase identified in the diachronic generic structure of an experience under study, namely the structure of the phase 'Getting into contact' of the experience of counting heartbeats in the HBDT study.

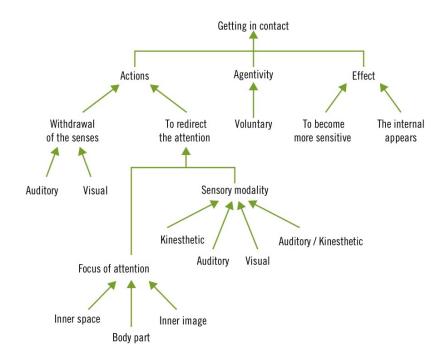


Figure 7: Example of a synchronic generic structure (Figure 11 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 142)

Nonetheless, the organization of the findings in semantic networks is not obligatory, since 'other forms of representation can also be conceived that are more appropriate to the objectives of the research or more coherent with the results obtained' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §88).

Sometimes, not only one generic structure of the studied experience is defined, but different 'types' of (diachronic and synchronic) structure, relating to alternative paths of the unfolding of the experience (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §81). This may be considered an example of the 'variances in the invariance' of lived experience (compare §16 above).

Example. An example of different types of generic diachronic structure of the experience of accomplishing (or failing to accomplish) the HBDT, based on the transcripts of 55 interviews, is given in figure 8, with type 1 being the most and type 4 the least frequent one. \Box

But the several steps of collection of descriptions and analysis typically do not come one after another in microphenomenology. Rather, it is an *iterative* or *recursive* process. The

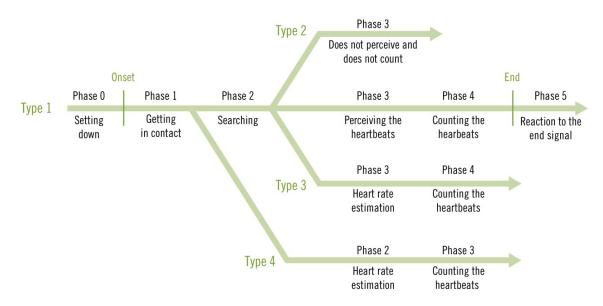


Figure 8: Example of different types of generic diachronic structure (Figure 8 in Valenzuela-Moguillansky and Vásquez-Rosati 2019a: 138)

iteration and recursion happens on two levels in the research process: Within the analysis process and in the overall research process comprising analysis and interviews.

Firstly, the extensional categories clustered together through the initial grouping of the descriptemes are subjected to so-called 'iterative interrogation' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §34-§37,§53-§61,§75-§77) to make the criterion of grouping explicit. The iteration of this 'interrogation' makes it possible to modify the grouping further to form more abstract, intensional categories out of the discovered grouping criterion – or to correct previous categorization. Above that, the analysis proceeds by constant revision of the already established categories and the previous steps of analysis in light of new categorizations (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §90). Thus,

'the analysis process is recursive. Constantly, as new analyses redefine the categories, we review the previous steps of our analysis: hence the importance of recording the criteria that define our categories and that underlie the changes we make in their definition.' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §90)

Secondly, the overall research process comprising analysis and interviews as a whole is iterative. Rather than having a phase of interviews and then a subsequent phase of analysis, there is alternation between the two, with the findings and questions generated from the analysis of the first interviews (possibly in a pilot study) motivating certain directions of questioning in subsequent interviews (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2). The descriptions gained from the interviews contribute to a growing 'awareness' or 'understanding' of the (type of) experience under study. This remains initially implicit, but may be explicated in the definition of new structural categories. And the richer structural information may in turn inform the structure-driven questioning (see §22 above) in subsequent interviews. If new 'hypothetical categories' emerge in the analysis, the research protocol and interview questions may be adjusted to probe these hypotheses further (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2).

Optimally, this recursive process leads to a point where the 'categories are stabilized' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §77), a point of 'categorical saturation (when new interviews do not produce new categories)' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2).

§24 Validation

In line with the idea of validity in empirical phenomenology sketched above (§19), microphenomenology follows a specific "performative" view of reliability' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2) in terms of pragmatic intersubjective evaluation. This is realized both on the level of the interviews as well as on the level of the analysis (Petitmengin and Bitbol 2009: 393).

Thus, on the level of the interviews, the gathered descriptions are evaluated in terms of how reliably they express an actual evocation of an experience, its immersive 're-enactment and unfolding' (Bitbol and Petitmengin 2013: 272). The proponents of microphenomenology express the 'performative' understanding of reliability of the evocation as follows:

"But how can we be sure that the evoked experience is true to the initial experience, and is not a rebuilt experience?" – are we often asked. [...] We would answer that nobody can live an experience "in the past", there is no other experience than the present. It is therefore impossible to "re-live" a past experience, or to access it "retrospectively", through a problematic splitting into two that would enable subjects to observe themselves. In the evocation state, the subject lives a new experience. Therefore the question of knowing in abstracto, from a "cosmic exile" standpoint, if the experience of evocation coincides with the initial experience, or is a true copy of it, is epistemologically irrelevant. It is only from within current experience that the existence of any alleged match between experiences can be investigated. [...] "being true to" does not hold between two experiences, but as an internal mark of one experience.' (Petitmengin and Bitbol 2009: 383, compare Petitmengin 2006: 258, Bitbol and Petitmengin 2011a: 92-95)

This means that, as already pointed out above (§19), 'the validity of a description [...] cannot be measured in static terms of correspondence to experience, but in dynamic terms of authenticity of the process of becoming aware and describing' (Petitmengin and Bitbol 2009: 389). And this authenticity is nothing that can be evaluated from a detached third-person perspective ('from a "cosmic exile" standpoint'), but only enactively, 'as an internal mark of [...] experience'.

To get clarity on what this might mean, it is worthwhile to keep in mind that, since evocation is a (very specific) kind of recollection (see §22 above), the epistemology of experiential reports in the mode of evocation is basically epistemology of recollection. So, the process of retrieving previously non-attended aspects of an evoked experience is perfectly analogous to similar everyday cases of episodic memory performed in the natural attitude. In this 'natural' mode of remembering, attention is primarily focused on things, the intentional objects of the memory-experience, and only secondarily and indirectly on the way these things (seem to) have been originally experienced. Evocation, in turn, as a special way of recollection shifts the focus from the 'what' (the recollected thing) to the 'how' (the way that thing is remembered to have been experienced).

Accordingly, the epistemology of evocation is similar to the epistemology of normal episodic memory, only in a more refined way. In the 'normal' case, we usually evaluate the reliability of a recollection through the ability to adequately describe, distinguish or identify specific things that have been experienced in the remembered situation.

Example. Suppose you show me pictures of two persons, A and B, and ask me to choose the one I find more attractive. I choose A, you conceal the pictures, and shortly afterwards, showing the picture of B (!), ask: 'Why did you choose this picture?' If I then begin to tell you about how and why I chose picture A, you have all reason to suspect that I remember correctly the (experience of) my choosing (more on this case in §25 below).

Now, taking accessive and immersive primacy of lived experience (see §6,§12 above) into consideration, it is clear that even in such 'normal' cases of evaluating the reliability of memory, what is at stake are not only things, but also the experience of these things. Explicitly, we refer to things, the 'objective content' of the memory, but what we implicitly evaluate with this is the ability to 'recall' the experience of these things (and this 'to recall'

has to be understood as an enaction, not a representation).

Accordingly, we quite commonly make an extrapolation from the reliability of thingmemory to the reliability of experience-memory: If a person is able to describe, distinguish and identify things previously experienced, we also tend to ascribe to her the ability to recall (or 're-enact') the experience of these things (to some degree, at least).

Example. If, in the example of the switched pictures, I am able to detect the manipulation and exclaim: 'That's not the picture I've chosen!', you have some initial reason to judge my descriptions of the experience of choosing (especially, since I was able to see through manipulation, which is presumably possible through having a quite vivid memory of my choosing, including the experiential features of the picture I chose).

But the ability to reproduce objective contents constitutes not more than the basic layer for the performative understanding of the reliability of retrospective experiential reports and is only of provisional character.

The more elaborate (and more substantial) layer of performative reliability may be motivated as follows: Cases of correct memory (again, this is not understood as 'correct' in a 'sideways on', representational manner, but as being ascertained through an enactive process of validation) are typically accompanied by certain observable behavior of the remembering person (the interviewee in the case of microphenomenology) as well as by a person possibly assisting that process (the interviewer in the case of microphenomenology). And such behavior can serve as a performative and intersubjectively observable marker for a reliable evocation and description.

In line with this understanding, reliability is evaluated in microphenomenology in terms of observable indicators of authenticity in the interview (this makes the compilation of audio- and video-recordings of the interviews especially important, compare §22 above). The indicators of authenticity include verbal, non-verbal, and para-verbal clues in the behavior of the interviewer and the interviewee (Petitmengin 2006: 245,256-257, Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2).

On the side the interviewer, the verbal clues include questions and reformulations which are as far as possible devoid of formulations that might induce certain answers (compare §22 above).

Example. 'For example, if the interviewer reacts to the statement "I feel sad" by the question "How does this feeling of sadness appear in your mind?", the answer to this question will be considered suspect (especially if the subject follows the interviewer's invitation to describe her sadness as a process unfolding in her mind!). However on the contrary, a rectification in response to an inaccurate induction Discovering the structures of lived experience or reformulation of the interviewer brings a presumption of authenticity to the corresponding description.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2)

On another level, the behavior and interventions of the interviewer going beyond the merely verbal are evaluated (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2): Does she use suggestive gestures or does she only 'paraphrase' the indicative gestures of the interviewee? Is her bodily posture and tone of voice such that the risk of an inductive influence on the interviewee is to be expected or not?

On the side of the interviewee, the verbal clues for a reliable description include short and simple sentences (and generally, not too long and verbose statements by the interviewee), the use of action verbs, of present or past simple tense ('at that moment, I felt/I did...'), and the creation of spontaneous formulations, such as

'the use of strange words or syntactic formulations [...or] of metaphors that the interviewee is inventing in order to try and describe something she is discovering, which she has never described and might have never been described.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2)

Above that, a description is evaluated as being more reliable if it reaches, through the iterative questioning in the interview, a high degree of detail. A fine-grained description

is taken as a 'guarantee that [...it] does not correspond to an implicit theory, because no theory describes [... lived experience] at such a level of detail' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2). Finally, if the interviewee is able to give a consistent and coherent description of the overall experience, despite the iterative structure of the interview (going back and forth between different phases of the experience), this is taken as a sign of reliability, because of the

'difficulty, if not the impossibility, of inventing a coherent detailed narrative without the guiding thread of a lived experience [...which] is increased in the context of a micro-phenomenological interview, characterized on the one hand by a constant circulation between various levels of detail and various moments of the described experience, and on the other hand by the amount and fine granularity of the evoked details.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2)

The para-verbal clues concern the way the interviewee is speaking. In this respect, hesitations and silences or a general slowing of the flow of speech are taken as signs of quality for the description. And finally, the non-verbal clues include a shifting and unfocusing of the gaze, bodily gestures replacing verbalization (possibly unconsciously) and more generally an 'embodied' utterance position. The para- and non-verbal markers are taken to indicate that the interviewee is actually in a state of evocation, that she 'is not rehearing received knowledge but is *discovering* pre-reflective processes' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §3.3.2).

Through the criteria of microphenomenological validation, it becomes clear that evocation, (micro)phenomenological description and their validation form an intersubjective, constructive process. But although it is constructive, it is not arbitrary. While evocation, as an especially elaborate case of immersive episodic memory, 'arises in fact as a new experience[...], this new experience is no arbitrary mental production' (Bitbol and Petitmengin 2013: 272, emphasis added). Other than eldetic variation (as imagination), evocation (as recollection) has clear intersubjective and observable validity criteria (which are carefully elaborated proceeding from and going beyond the basis of practical validation of recollection we employ in 'natural', non-phenomenological contexts).

However, in line with the constructivist approach to phenomenology, these observable clues do not amount to *objective*, but 'only' to *intersubjective* criteria for validity. Thus,

'one must keep in mind that such [overt, bodily] signs are taken as good ground for reliability only because they are connected with first-person access of the interviewers to the experiential correlates of similar signs within their own bodies. This confirms that faithfulness of first-person reports can be ascertained only by intersubjective criteria; there is no external "absolute" evidence.' (Petitmengin and Bitbol 2015: 309)

In fact, we do not have 'absolute' objective evidence for 'normal' memory just as little as we have it for evocation. Nonetheless, we rely on recollection constantly in the natural attitude (especially, when determining what is the case 'objectively'). Thus, while any of the performative criteria of validity may be doubted on its own concerning its continuity with the background practice of 'normal' validation of memory, doubting the possibility of evocation *in principle* due to its constructive validation just leads into a fruitless skepticism of memory in general.

But also on the level of microphenomenological analysis, the validity of the produced structures is understood as performative or enactive. The analysis is an iterative procedure (see §23 above), proceeding step-by-step (or rather: back-and-forth). In this process, in which every newly introduced category or structure is constantly examined as to whether it fits coherently into the set of already defined categories – or whether either the old or the new have to be adjusted.

This gives rise to the notion that the overall analysis *process* exhibits a certain performative coherence, that not only the generic *structures* (or the sentences expressing these

structures) produced by this process are coherent, but also the process itself: Was the overall process carried out in a coherent fashion? Or did ad hoc moves occur, such as the imposition of categories to accommodate a specific set of descriptemes or certain demands introduced from theoretical background assumptions? Thus, the microphenomenologists hold that

'[t]he iterative approach we adopt is in itself a confirmation / invalidation of the detected structures. When a structure is detected, it becomes a hypothesis that the gathering and analysis of subsequent interviews will either confirm and refine or invalidate. When the detection of a hypothetical or candidate structure makes it possible, through the development of an appropriate "structure-driven" questioning, to guide efficiently the next interviewed subjects towards the awareness and description of their experience, these descriptions provide a strong presumption of validity to the structure that allows this guidance.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.4)

This means, in accordance with the enactive approach, that

'in order to validate the results of our analysis, we cannot appeal to a correspondence with some "true structure" but should rather appeal to the coherence of the operations that led to proposing that structure' (Valenzuela-Moguillansky and Vásquez-Rosati 2019b: §10).

The idea of performative coherence of the analysis process is still in need of further development, as the proponents of microphenomenology admit themselves (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.3, Valenzuela-Moguillansky and Vásquez-Rosati 2019b: §106), the issue is going to be taken up again in §26 below.

Nonetheless, above the internal coherence of the analysis process, the 'kingpin of [...] validation' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5) in microphenomenology is the reproducibility of its procedures and results: The interviews and analysis follow a research protocol, thus are reproducible and open to intersubjective evaluation. Accordingly, and in accordance with the idea that 'reporting about the process, the technique, and the general path of research is [...] an essential feature' (Kordeš 2016: §58, see full quote in §19 above) of empirical phenomenology, the analysis process is carefully tracked in every microphenomenological research project:

'To make this reproducibility possible, it is highly important that the structures are accompanied by a description of their process of detection. [...] This description consists on the one hand in keeping track of the successive versions of the specific structure [...] and of the concomitant unfolding of the generic structure [...], and on the other hand in describing the very process of detection of each category' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5).

The proponents of microphenomenology point out that

'[d]espite the fact that the content of an experience is singular and non-reproducible, [...] the analysis of a corpus of descriptions of the same type of experience enables the researcher to identify regularities of structure. Once detected by a research team, such a structure constitutes a hypothesis, likely to be supported or not supported by analyzing experiences of the same type.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.1.1)

Thus, the results of any microphenomenological study are explicitly falsifiable in further investigations – such criticism, in turn, of course has to follow the performative criteria of validity. Microphenomenology is a fallible method that does not aspire for necessary assertions on the nature of conscious experience.

§25 A Case Study: Evaluating and Improving the Reliability of Introspection through Microphenomenology

The methodological approach of microphenomenology and possible applications may be illustrated with the example of a concrete study that has been conducted on the reliability of retrospective introspection: a microphenomenological adaption of a study on so-called 'choice-blindness'.

This study in experimental psychology, conducted by a team of Swedish researchers (Johansson et al. 2005), capitalizes on and demonstrates the limitations of our attention on experiential processes in normal situations in which we act from the 'natural attitude' (see §18 above). It falls into a class of psychological studies on cognitive processes that manage to elicit from subjects confabulatory 'introspective' reports on putative experiences that cannot have taken place as described (because their content obviously contradicts intersubjectively observable facts). From evidence of such kind, Richard Nisbett and Timothy Wilson have drawn, in a now-classic review study, the general conclusion that in introspective reports we are usually 'telling more than we can know' (Nisbett and Wilson 1977). This conclusion, in turn, has contributed decisively to the skepticism towards introspection (let alone phenomenology) in scientifically minded circles oriented towards objectivity (compare §4 above).

The study by Johannson and colleagues is based on the setup already described in the examples in §24 above. The procedure is depicted in figure 9: The participant of the

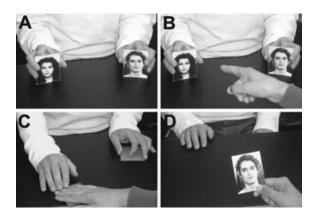


Figure 9: A choice trial manipulated in order to demonstrate 'choice blindness' (Figure 1 in Johansson et al. 2005: 117)

study is shown pictures of two different persons and asked to choose the one she finds more attractive (A). The participant indicates the choice (B). The experimenter flips down the pictures and slides the hidden picture over to the participant. In some trials, however, the experimenter manipulates the process (by covering the previously chosen picture with the arm and sliding a hidden duplicate to the participant), such that a duplicate of the picture the participant has *not* chosen now seems to be in the position of the chosen picture (C). The participant takes up the picture and is immediately asked by the experimenter to explain the choice of the picture – which was actually *not* chosen (D). Thus, by playing a double-card trick on the participants in some of the trials, covertly exchanging the actually chosen picture for the other, they are brought into the position of having to explain a choice they did in fact *not* make.

The findings of the study show that the participants are only in few cases able to detect the manipulation of the picture they have chosen just some seconds before. Johannson and colleagues conducted trials with 120 participants, each participant completed a sequence of fifteen choice tasks between picture pairs, with three of them manipulated in the described way. Detection rates for the manipulated pictures were measured concurrently, during the experimental task, and retrospectively, through an interview after the experiment. All detections which occurred after an initial manipulation was already detected in the experiment were discarded from the data set to exclude a 'cascading effect' of the participants becoming more suspicious and heightening their attention in subsequent choice tasks, thus

being more likely to detect the manipulation again. Controlling for prior detections in this way, the manipulation was detected only in 8.2% of the cases directly in the experiment and in 12.2% of the cases retrospectively. In the remaining 79.6% of cases, the manipulation was not detected and the participants provided explanations for the choice they did not make (Johansson et al. 2005).

The microphenomenological adaption of the choice blindness study (Petitmengin, Remillieux, Cahour, et al. 2013) consists in a close reproduction of the original choice blindness study, but with the alteration of conducting a microphenomenological interview directly after the manipulated choice, centering on the question what the participants do when making the choice (Petitmengin, Remillieux, Cahour, et al. 2013: 658). The detection is then measured as occurring either immediately after the microphenomenological interview or after or during a post-interview that is conducted subsequent to the whole experiment process (as in the original study).

The findings from this adjusted replication study show that the conduction of microphenomenological interviews changed the detection rate considerably. While the results in a control group without microphenomenological interviews reproduced the findings of the original study, in the group of 24 trials with microphenomenological interviews, ratios were actually reversed in comparison to the original results: the detection rate went up to 80% (with 32% immediate detection after the microphenomenological interview and 48% retrospective detection in the post-interview, see Petitmengin, Remillieux, Cahour, et al. 2013: 658-660), even after an interview which lasted between seventeen and forty-five minutes, and in an experimental setting (reproduced from the original study) which is 'especially designed so as not to trigger a specific effort of memorization at the moment of the choice, through particular instructions' (Petitmengin, Remillieux, Cahour, et al. 2013: 665, compare Johansson et al. 2005: supporting online material, pp.4,10, Nisbett and Wilson 1977: 251).

As said above (§24), third-person observational clues such as the correct detection of the manipulation may be taken into consideration in the overall evaluation of reliability in accordance with 'performative coherence'. Accordingly, the higher detection rate in the microphenomenological study is also evaluated by the authors:

'The recall instructions still enabled the participants to detect the manipulation after 40 min of interview in 80% of cases (this much longer gap between the two presentations of the pictures might have led to a much poorer detection rate). This shows that the act of recall was still efficient after that time gap. We can therefore conclude [...] that the descriptions of the choice processes given in the course of the interview relied on reliable memories of the moment of the choice, which strongly bears out the validity of these descriptions.' (Petitmengin, Remillieux, Cahour, et al. 2013: 666)

However, it is important to note that this validation through third-person observations has only auxiliary character in the framework of 'performative coherence' (compare §24 above). Thus, certain descriptions not associated with a detection were actually *not* discarded as unreliable, if they were evaluated as coherent by the other performative or enactive criteria (Petitmengin, Remillieux, Cahour, et al. 2013: 667).

Weighing second- and third-person criteria in such a way is of course not possible if the reliability of experiential reports is evaluated *solely* from the third-person perspective. This perspective, in contrast to the second-person approach, has no systematic access to the *intersubjective* dimension of validity and in this way biases against first-person introspective reports. This bias shows, for example, when Johannson and colleagues claim that with their manipulation set-up, they have succeeded in developing 'a method for studying the relationship between choice and introspection' (Johansson et al. 2005: 118). In declaring their setup a full-fledged *method* for the study of introspection, they follow the rationale of the examples developed above (§24): If you are able to detect the manipulation,

your introspection is reliable, if not, it's not. And since the overwhelming majority of participants is not able to detect the manipulation, one may conclude that introspection is not reliable.

But it is not clear that we can draw such far-reaching conclusions for the overall reliability of introspection from a study-setup consisting of a whole array of features detrimental to the possibility of introspection or phenomenological description. Thus, the participants are not only manipulated through a card trick, they are also manipulated through prompting them to turn their attention away from the actual experience and towards the intentional object – or worse: towards the 'satellite dimensions' (see §22 above) – by asking them why they have chosen the picture, and by capitalizing on the participants' trust in the researchers authority and the latent social pressure to 'do right on the task', in order to elicit rationalizations of their choice rather than descriptions of the actual (experience of) the choice (compare Petitmengin, Remillieux, Cahour, et al. 2013: 666). With this on the background, we might say that all Johannson and colleagues achieve to show is that introspection is not trivial or easy (which is exactly the starting point of microphenomenology, compare §18 above) – especially, and not surprisingly, under detrimental circumstances. But they do not show that introspection is unreliable in general.

However, another finding of the microphenomenological study is even more important from the perspective of second-person research. Namely, the analysis of the interview data also made it possible to detect different types of first-person choice strategies as generic structures of experience. Of particular interest among the categories defined by the authors through the analysis are three contrasted types of choice strategies they have labeled the 'features-focused', 'feeling-focused', 'mixed' strategy, respectively.

The 'features-focused' (22.7% of the trials) strategy 'consists in exploring and comparing the features of the faces, the way we play the "spot the seven differences game" (a metaphor that appeared in four interviews)' (Petitmengin, Remillieux, Cahour, et al. 2013: 663). In this context, the analysis showed that the comparison of the features was carried out in two different ways by the participants: either by rapid back and forth movements between the two pictures, or by "superimposing" the two faces (so, in terms of the abstraction operations, the category 'features-focused strategy' was specialized by the categories 'back and forth movements between the pictures' and 'superimposing the pictures', compare §23 above). Moreover, it was found that 'superimposing' requires a 'visual retention', a 'pre-reflective and involuntary creation of a more or less complete mental image of at least one of the two faces, which is superimposed on the picture being observed' (Petitmengin, Remillieux, Cahour, et al. 2013: 663, in other words, the category 'superimposing the pictures' is fragmented by the category 'visual retention').

Example. A descripteme of an instance of 'visual retention' is:

'I keep it [the face] in memory. It remains in my head. I have her in my mind but it is a little fuzzy compared to the picture I am watching. It is fuzzy compared to the picture I have in front of my eyes.' (Petitmengin, Remillieux, Cahour, et al. 2013: 663)

The 'feeling-focused' strategy (22.7% of the trials), in contrast, 'consists in evaluating successively not the features of the faces but the feeling or emotion aroused by each, and then comparing them' (Petitmengin, Remillieux, Cahour, et al. 2013: 663). In this comparison of feelings, a 'retention' of one of the faces may also occur while looking at the other, but in this case it is a 'felt retention', that is, 'not a visual retention but a retention of the feeling which is aroused' (Petitmengin, Remillieux, Cahour, et al. 2013: 665).

Example. A descripteme of an instance of 'felt retention' is:

'It comes back with the overall impression I might have of the person before. I already have an a priori about the person I looked at. Basically it's as if I could still hear a little voice in my head telling me, 'yes, but with the other you got a different impression', it comes to confirm what I might have felt

before. It's not a voice, it's more a kind of feeling, an intuition. Not even in my head actually. That would be there... in my heart.' (Petitmengin, Remillieux, Cahour, et al. 2013: 665)

Finally, in the 'mixed' strategy (50% of the trials), a features-focused and a feeling-focused strategy are combined, in this case, either type of retention may occur (Petitmengin, Remillieux, Cahour, et al. 2013: 665). Note that these results contrasting different mutually exclusive types of generic structures is another example of 'variances in invariance' (compare §16 above): all participants followed some choice strategy describable from the first-person perspective, but different groups of participants used different strategies.

Now, these phenomenologically elicited choice strategies show a striking correlation to success in detecting the manipulation. In all cases of non-detection (4 out of 4), a "feeling-focused" strategy was followed, whereas in 87.5% (7 out of 8) of the immediate and in 81.8% (9 out of 11) of the retrospective detections, a "features-focused" or mixed strategy was followed. Above that, all participants who immediately detected the manipulation (8 out of 8), and 75% of the those who detected it retrospectively, used retention at the moment of the choice. In 87.5% (9 out of 12) of immediate detections, and in all the cases of retrospective detection, this was visual retention. In contrast, among the four participants who did not detect the manipulation, only one used retention, and this was felt retention (Petitmengin, Remillieux, Cahour, et al. 2013: 667). From these strong correlations, the authors draw the following conclusion:

'The use of visual retention at the moment of the choice, which characterizes a features-focused or mixed strategy, therefore seems crucial in detecting the [manipulation]. Its absence in the "feeling-focused" strategies might therefore explain why 3 trials out of 4 result in a non-detection.' (Petitmengin, Remillieux, Cahour, et al. 2013: 667)

In this way, the microphenomenological study design made it possible to 'explain' (in a wide sense of the term, compare §32 below) the occurrence of detection or non-detection (observable from a third-person perspective by the experimenters), not through linking them to intricate causal mechanisms of behavioral or neural nature, but to types of structures in the lived experience of the participants (described by the subjects from the first-person perspective and abstracted from the interview data by the researchers).

In sum, the study on choice processes demonstrates how the microphenomenological approach makes it possible to detect and describe structures that remain hidden for the third-person approach, namely, structures of first-person experience (which is simply a 'black box' in the third-person perspective). Microphenomenology takes the obvious way of "whitening" the black box' (Kordeš 2016: §44) of experience which the third-person approach has blocked for itself through exaggerated skepticism towards first-person reports: just ask people about how they actually experience the processes in question – in a methodologically careful and controlled fashion, of course. In this way, microphenomenology reopens the road to a detailed inquiry of what seems obvious from a common sense perspective, but is pushed into a 'dead angle' by the 'objectivist' third-person paradigm (compare §4 above): how people experience certain situations stands in systematic relationships with how they overtly behave in these situations.

Above that, the discussed study also exemplifies how inquiry into the methodological basics of microphenomenology (e.g., the notions of evocation and performative coherence) is possible through applying that very method *itself* (including an integration of third-person criteria for the reliability of first-person reports). Thus, coming back once more to the observed correlation between detection rates and experiential processes, we can note that the discrepancy between detection rates in trials with and in trials without microphenomenological interviews of course makes it clear that the use of visual retention is not by itself sufficient for detection of the manipulation (on the plausible assumption that visual retention has been used in the trials 'without' microphenomenology approximately

in the same proportion as in the trials 'with' microphenomenology). Since the conditions of choice and possible memorization were the same in *all* trials, the higher detection rate in the trials 'with' microphenomenology

'cannot be accounted for by a difference in the *memorization* of the faces at the moment of the choice, [and] would only seem to be explained by a specific and efficient act of *remembering* at the time of the report.' (Petitmengin, Remillieux, Cahour, et al. 2013: 665)

Accordingly, the authors of the microphenomenological study formulate the

'hypothesis [...] that the process of evocation reactivates during the interview the retentions which were used at the time of the choice, and that this reactivation is necessary to retrieve the initial experience and thus to detect the substitution' (Petitmengin, Remillieux, Cahour, et al. 2013: 667).

So, the study allows us to draw conclusions about the process of evocation itself, which may be further investigated microphenomenologically. In this way, the discussed investigation of the process of introspection and its reliability through microphenomenology constitutes a 'second-order' self-application of microphenomenology 'such that it becomes a *second-order* second-person method' (Froese, Gould, and Seth 2011: 56).

Above that, in turning a purely third-person study on cognitive processes into secondperson research, the study by Petitmengin and colleagues on the first-person processes related to the third-person phenomenon of 'choice blindness' may serve as a blueprint for applying microphenomenology in the context of experimental philosophy on cognitive processes (compare §20 above).

3 Empirical Phenomenology and Abduction

Building on the methodological approach developed so far, it is argued in this chapter that empirical phenomenology in general and microphenomenology in specific can be understood as approaches relying on *abduction* as their primary mode of reasoning.

In section 3.1, the relevant understanding of abduction is introduced, and in section 3.2, an application of this sense of abduction in the context of empirical phenomenology is suggested.

3.1 Phenomenological and Abductive Reasoning

In §26, it is stated why and where there is a need for further clarification of the reasoning processes in microphenomenology. To lay the ground for a possible abductive framework for microphenomenological methodology, the notion of abductive inference is described (§27) and, building on this, the 'Abductive Theory of Method' (developed by Brian Haig) and the notion of abductive theory appraisal in terms of 'explanatory coherence' (proposed by Paul Thagard) are sketched (§28,§29). Before making the transfer to microphenomenology, a generalized sense of abduction is introduced (as proposed by Timothy Williamson), which is meant especially for philosophical application (§30).

§26 Open Questions in Microphenomenology

As already pointed out above (§24), the procedure of microphenomenological analysis and abstraction is still in need for further clarification, as the proponents of microphenomenology themselves concede.

Especially, the idea of 'performative coherence' as an enactive criterion for the validity of an analysis is, though suggestive, still somewhat elusive in the way it is proposed by the microphenomenologists. They describe the process of detecting a 'coherent' structure such that

'a structure emerges [...] in the form of a sensation of emergent coherence, in other words in the form of a feeling that undergoes a [...] transformation into an abstract formalized structure.' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.3)

The microphenomenologists hold that '[t]his process is not exceptional', since it is quite usual that 'an idea, even an abstract one, seems to be felt before it is named' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.3). This may well be correct and such a pre-reflective dimension should not be underrated, but, arguably, to be intersubjectively evaluable, there has to be more to an emergent structure than just a feeling. Merely a 'sensation of coherence' of the researcher(s) conducting microphenomenological analysis is certainly not enough as a criterion. That the status of performative coherence is still open for clarification leaves room for questions on several stages of the analysis process.

One question concerns the grouping of the utterances at the *start* of the analysis process: how is it actually accomplished? Currently, there are no explicit criteria of coherence or instructions for the grouping (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §106).

Another question concerns the *results* of the analysis process: namely, the 'invariance' of the 'invariant' features of an experience that make up its generic structure. Thus, Camila Valenzuela-Moguillansky and Alejandra Vásquez-Rosati ask: 'When defining the generic structure [...] the following question arises: How "invariant" does a diachronic or synchronic unit have to be to keep it in the generic structure?' (2019a: §83) And they give the following answer:

'[O]ur criterion for solving that question is whether the element in question is "essential" for understanding the experience we are studying. By essential we mean an element without which we cannot understand the experience under study, in other words that we cannot do without.' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83)

But this of course raises the question what an 'understanding of the experience under study' consists in, and how a certain unit may be 'essential' to this understanding. According to the microphenomenologists, an 'understanding' of the (type of) experience in question is meant to arise through the recursive analysis process. But they do not give a systematic account of this process. Rather, what they offer is a collection of examples, general indications, hints to individual strategies for analysts and metaphors (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83,§92,§102,§105). For example, it is indicated that the analysis process

'involves not only being imbued in the description of the experience but also recursively approaching and moving away from it. This makes way for a process of contrast and adjustment in which, at a certain moment, something settles, and the description of the experience, the understanding we have gained from it and the identified structures come together.' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §102, emphasis added)

But with such metaphorical descriptions, and the proponents of microphenomenology are well aware of this, the question still stands: 'what involves such *coming together* and how, precisely, does it occur?' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §106)

Now, what the microphenomenologists propose with respect to the questions raised above is to approach them by microphenomenology *itself*, through 'second-order' self-application (see §25 above). In other words, the proposal is to

'address these questions by means of microphenomenological exploration, for instance, by designing self-explicitation [...] protocols that focus on each of the questions' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §106).

But as a way to *justify* and to *explicate* the analysis procedure, such 'self-explicitation' is hardly sufficient.

Firstly, it may be too ambitious to investigate the *whole* analysis process with microphenomenology. It is developed for investigating processes of a limited temporal duration with a very high level of granularity. This may actually be *too* focused and *too* fine-grained to make sense of what is going on throughout the analysis process, which extends over days and weeks.

Secondly, microphenomenological self-examination of the analysis process seems to be dangerously circular. Although it may be useful or even indispensable, the attempt to explicate the microphenomenological method *solely* by microphenomenology itself looks like a method immunizing itself from outward influences or critique. Voicing this concern, Tom Froese, Cassandra Gould and Anil Seth point out that the justification of microphenomenology by microphenomenological self-description

'will just beg the question for someone who is not already convinced by the general approach: if we cannot trust what the method finds in the first place, why should we believe what it claims to find out about itself?' (Froese, Gould, and Seth 2011: 56)

Accordingly, Froese and colleagues see 'the need for a more impartial assessment of the methodological situation' (Froese, Gould, and Seth 2011: 56).

To avoid a circular self-explication, it may be helpful to admit that microphenomenology actually has to be 'theory-laden' to some extent: Although microphenomenology tries to do with as few presuppositions as possible, it cannot do entirely without them. Still, what we can try to do is make the presuppositions explicit and understandable (and hopefully not overly demanding).

In this vein, Christian Tewes observes in a commentary on the microphenomenological

analysis method with regard to the first question concerning the criteria for the grouping of descriptemes, that

'this question is an explanatory challenge for the micro-phenomenological method, since the grouping process is supposed to start without any pre-specified categories. If this is the case, however, then there are no (categorical) criteria for [...the grouping] in the first place. The analysis requires – from the outset – *intensional properties* as well; otherwise it could not even get off the ground. To solve this challenge is decisive for the justification of the entire micro-phenomenological research project. If intensional properties are already operative at the pre-reflective level of the grouping analysis, then one must clarify how we can get methodologically controlled access to them at the reflexive phenomenological level as well.' (Tewes 2019: §7)

This holds a fortiriori for the second question, concerning the notion of invariant structures being 'essential' for understanding the experience under study (Tewes 2019: §5, compare the quote of Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83 above).

Tewes points out that as long as these questions remain open,

'so long as the generation of structure as such remains a "blind spot," one cannot rule out the possibility that the determination of synchronic and diachronic units might simply be outcomes of individual and cultural biases.' (Tewes 2019: §7)

Now, what is suggested by Tewes in order to 'get methodologically controlled access' to intensional (and possibly implicit) criteria for the validity of a grouping or a structural category seems to lead back to some of the notions of 'armchair phenomenology' (see §18 above). Namely, what he proposes is to assess whether the respective grouping or category expresses *necessary* aspects of certain types of experience. He interprets the expression of categories being '"essential" for understanding' such that

'to reduce [...] the varieties and richness of the described experiences to their [invariant] essences means to specify their necessary components.' (Tewes 2019: §5, emphasis added)

The identification of the necessary components of a specific (type of) experience (the intension of this class of experiences) may be possible, according to Tewes, thanks to the capacity of 'intution', which he defines – with reference to George Bealer (1999) and with striking similarity to the Husserlian concept of eidetic intuition (see §18 above) – as 'a human faculty allowing [...] first-person access to structural content' (Tewes 2019: §8). Through the identification of the necessary components, 'intuitions are already operative in the way we find suitable intensional properties to classify the synchronic and diachronic units of the process' (Tewes 2019: §8).

This suggestion to understand microphenomenological analysis as being underpinned by intuitive access to necessary components of a (type of) experience is an attempt to integrate microphenomenological analysis with procedures of reasoning that are already established in one way or other in scientific and philosophical thought. In other words, it is an attempt to make the underlying reasoning of microphenomenological analysis explicit.

And while Tewes seems to be correct in claiming that '[t]o solve this challenge is decisive for the justification of the entire micro-phenomenological research project' (Tewes 2019: §7), it is going to be argued in the following that his proposed solution actually does not fit well with the constructivist approach of microphenomenology and empirical phenomenology more generally. The central problem is that Tewes' suggestion aims for necessity claims. In this way, it is akin to the inference process of deduction. What is going to be suggested here (see §31 below) is that the inference process in microphenomenological analysis is more consistently understood as abduction (which does not aim for necessary, but 'only' for sufficient conditions).

§27 Abduction

The term *abduction* was introduced by Charles Sanders Peirce to denote an independent mode of inference besides deduction and enumerative induction. In fact, as a first approximation, we may understand abduction as an umbrella term for all modes of reasoning that are not deduction or enumerative induction.

Deduction is 'logical' inference in the strict sense. It follows logical rules that are assumed to be necessarily truth-preserving, meaning that if the premises are true, then the conclusion must be true as well. In other words, the conclusion is a necessary condition for the premises.

Inductive inferences are inferences in which the truth of the conclusion is not made necessary, but only probable by the truth of the premises. Inferring the probable typically involves some sort of evaluation of frequencies and probabilities, thus, induction (in this specific sense) is also called enumerative induction. It 'may be characterized as those inferences that are based purely on statistical data, such as observed frequencies [...] of a particular feature in a given population' (Douven 2011: §1.1).

Abduction, like enumerative induction, is a non-necessary inference: The conclusions are not made necessarily true by the truth of the premises. It is distinguished from enumerative induction by 'an implicit or explicit appeal to explanatory considerations, whereas in [...] induction, there is only an appeal to observed frequencies or statistics' (Douven 2011: §1.1).

Generally speaking, explanation is about pointing out a certain phenomenon, fact or property, typically not attended to before (the explanans). Through this, an answer is provided to the question why a certain other phenomenon, fact or property (the explanandum) obtains (Lipton 2004: 21). This may be achieved in two ways: either the explanans is a cause for the explanandum, or the explanans simply is an aspect of the explanandum, which has not been attended to before, it constitutes the explanandum (and this 'aspect' may also constitute the explanandum wholly, not only partly). Accordingly, two types of explanation may be distinguished: 'causal explanation' and 'constitutive explanation' (Dasgupta 2017: 75-76).

Example. 'Why is there a table here? One answer: Because someone put it there yesterday. Another answer: Because there are pieces of wood arranged table-wise. These answers are not in competition. The first has to do with the causal history that led to the table being here; the second explains what it is about the current situation that makes it the case that there is a table here. The former is called a causal explanation, the latter a *constitutive* explanation. [...]

Other examples are ubiquitous. Why is a faculty meeting occurring? Because the faculty are gathered in a room discussing matters of importance to the department, etc. Why is this water hot? Because its mean kinetic energy is high. Why have I lost this game of chess? Because my king is in check-mate. Here we have not causally explained what brought about the meeting, the heat, or the loss; we have rather explained what underlying facts constitute the phenomena.' (Dasgupta 2017: 75)

We may say that in abduction, the conclusion (as a possible explanans for the premises) is made *plausible* by the truth of the premises it explains (causally and/or constitutively); it is also said that the premises (as a possible explanandum for the conclusion) figure as *evidence* for the conclusion. The hypothesis that *best* explains the premises has the highest plausibility, and may thus be inferred from them. Accordingly, abductive reasoning, or at least a relevant aspect of it, is also often called 'Inference to the Best Explanation' (Harman 1965).^I

With abduction, it is possible to reach more informative conclusions than with deduction or induction. Both induction and abduction are, in contrast to deduction, *ampliative*

^IAlthough he refers to explanation, Peirce actually never speaks of abduction as inference to the *best* explanation (Douven 2011: supplement).

modes of inference: the conclusions they lead to, respectively, are not logically implied in the premises, and thus 'go beyond' them. Above that, abduction is also more powerful than induction in that it licenses not only conclusions that going beyond the premises but also being of another kind than the premises.

Example. To illustrate, Peirce gave the following example (Peirce 1868/1934: §270-§274, 1878/1932: §619-§625): Suppose you know that a certain bag contains beans, and that all these beans are white. Then you can infer from the fact that a handful of beans comes from the bag that these beans must be white. This deduction is necessary, but it does not add anything new to the premises, the known (or assumed) facts, it only highlights certain aspects of them (which may already be a lot, if the premises are more complex or general than the simple statement of some beans' color). Going beyond what is included in the premises is only possible with the ampliative modes of inference, induction or abduction: suppose you don't know the color of all the beans in the bag, but whenever you grab a handful of beans from it by chance, they turn out white. You may infer that all beans in the bag are most probably white. This induction goes beyond the known facts (or what is implicit in them). But it only infers facts of the same kind: namely, facts concerning the color of beans in the bag. Inferring conclusions that do not only go beyond the premises, but are also of a different kind is only possible by abduction: suppose that you know the bag contains white beans (while there may be other sources of white beans, of course). Now, you are presented with a handful of white beans of unknown origin. You infer that these beans are most plausibly from the said bag (because it is the closest available source of white beans, say). This inference not only goes beyond the known facts, but also to facts of a different kind: from the color of beans in the hand to the *origin* of beans from the bag.

Abduction may figure as an inference method both in generating hypotheses and/or in justifying hypotheses. Generating hypotheses falls into the so-called 'context of discovery', justification of hypotheses into the so-called 'context of justification'. Peirce suggested that abduction works primarily for generating hypotheses, as 'creative abduction', as it is also called. However, Peirce did not discuss any abductive rules for generating hypothesis, he considered this an accomplishment of tacit 'abductive instincts' (Peirce 1903/1934: §172,§212). Although there have been attempts to explicate and argue for creative abduction (Magnani 2001, Schurz 2008), abduction is currently mainly discussed as a means to justify hypotheses, as 'selective abduction' – a procedure of choosing the most plausible among pre-given hypotheses (which seems to be a departure from the Peircean picture, compare Douven 2011: supplement).

Philosophers of science assume abduction to be vital to scientific reasoning. It has even been called 'the inference that makes science' (McMullin 1992). An example is the inference to past events from the presently available evidence, such as a cosmologist concluding that the Big Bang was the origin of the universe, or an archaeologist concluding that certain past events have caused the traces being excavated today (Williamson 2016: 267). Abduction can also be used to arrive at general theories, not just conclusions about particular events, probably being 'the archetypical means of arguing for theories in natural science' (Williamson 2016: 267). Further, the scientific explanations do not have to be causal, '[t]hey may be constitutive instead' (Williamson 2016: 267).

Example. An example for both a scientific use of abduction to arrive at general theories and of constitutive explanation is the use of Kepler's laws of planetary motion as evidence for Newton's more general laws of motion. Newton's laws do not cause Kepler's laws, but they may be considered to explain them (constitutively) by subsuming them (Williamson 2016: 266-267).

Generally, the procedure of (selective) abduction may be characterized as follows: It consists in evaluating different hypotheses or hypothetical theories as potential explanations of a given body of evidence. A theory that qualifies as a potential explanation of the evidence and does better than the rivaling theories may be inferred as the *best* explanation of the evidence. Thus, in such an abductive inference, the evidence constitutes the premises

^IThat is, on the assumption that the given theory is true, it explains the evidence better than any alternative theory, on the assumption that this *alternative* theory is true.

and the inferred explanatory theory figures as the conclusion.

That a theory explains the evidence means, minimally, that the evidence is *entailed* by the theory (*if* the theory is true, then the evidence 'would be a matter of course' – as Peirce put it, Peirce 1903/1934: §189). Typically, the theory does not entail the evidence taken by itself, but together with auxiliary hypotheses (Thagard 1978: 86). The distinction between the actual theory and the auxiliary hypotheses is not a clearcut one, but it is useful to distinguish hypotheses that are applied to explain large parts of the evidence (these make up the core theory) from hypotheses that have only limited application (the auxiliaries). Of course, the auxiliary hypotheses should not entail the evidence by themselves, this would mean that the considered theory or hypothesis is redundant.

Note that the entailment relation is reversed in the case of deduction: Here, the premises entail the conclusion, the conclusion is necessary for the premise. In abduction, the conclusion or hypothesis (together with the auxiliary hypotheses) is 'only' sufficient for the premises/evidence – apart from many (in fact, infinitely many) other hypotheses that are also sufficient and thus possible explanations for the evidence. This means, especially, that abduction as a non-necessary mode of inference is fallible. The conclusion, that is, the hypothetical theory that is inferred abductively, may be false, although the premises, the evidence, are true.

Further, for a theory to qualify as a genuine *explanation*, or even the *best* explanation, more than just being sufficient for the evidence is needed (Haig 2014: 62,109-110). What is commonly invoked to compare theories or hypotheses as possible explanations are their so-called 'explanatory' or 'abductive virtues' (Douven 2011: §2). We are going to discuss an account of these virtues in the subsequent §28 in the context of their application in empirical science, which may then serve as a model for the application in philosophy (see §30 below) and, more specifically, phenomenology (see §31-§34 below).

§28 Abductive Theory of Method

Abduction has been discussed mainly with regards to empirical sciences (Thagard 1978, McMullin 1996, 2014) and not widely with regards to philosophy, let alone phenomenology. Nonetheless, these accounts of scientific abduction may arguably be transferred to philosophical reasoning. At least in some cases, they aspire to 'a reunification of scientific and philosophical method, since inference to the best explanation has many applications in philosophy' (Thagard 1978: 92).

The most comprehensive account of abduction as a research method is given by Brian Haig in his 'Abductive Theory of Method' (abbreviated as ATOM), which builds on the systematization of the theoretic virtues developed by Paul Thagard by the idea of 'explanatory coherence'. At the outset, Haig makes an important clarification, namely, that empirical scientific theories do not explain scientific data directly, but rather the phenomena that are detected in the data. 'Phenomena', in this scientific context means a 'relatively stable, recurrent, general features of the world that we seek to explain' (Haig 2014: 33). Phenomena are usually not directly observable. They have to be derived from the reports of direct observation, the data, by methods securing the data quality (controlling for confounds, calibration of measurement, and replication) and by the use of statistical inference tools (Haig 2014: 39-43). In other words, the main tool for the detection of phenomena is enumerative induction (see §27 above). Phenomena that have been established in this way,

¹Haig takes this point from James Bogen and James Woodward, whom he extensively references, compare Haig 2014: 33 and note 2, 164-165 for discussion and references.

'on account of their generality and stability, become the appropriate focus of scientific explanation (systematic explanation of more ephemeral events would be extremely difficult, if not impossible). Data, by contrast, are idiosyncratic to particular investigative contexts. They are not as stable and general as phenomena. Data are recordings or reports that are perceptually accessible. Thus, they are observable and open to public inspection. Phenomena are not, in general, observable. The importance of data lies in the fact that they serve as evidence for the phenomena under investigation.' (Haig 2018: 94-95)

So, we have a three-fold distinction in empirical science: Data serve as evidence for phenomena, phenomena, in turn, serve as evidence for theories and hypotheses, which explain the phenomena (but not the data in their totality).

Example. 'The so-called *phenomenal laws* of physics are paradigm cases of claims about phenomena. By contrast, the *fundamental laws* of physics explain the phenomenal laws. For example, the electron theory of Lorentz is a fundamental law that explains Airy's phenomenological law of Faraday's electro-optical effect' (Haig 2014: 33).

Dependent on context, a theory or hypothesis that bears an explanatory relation to certain phenomena may itself play the role of a phenomenon in relation to *another*, deeper, explanatory theory or hypothesis. Thus, being a phenomenon is a functional role, not a context-independent attribute (Haig 2014: 34).

Example. 'For example, the relevant empirical generalizations in cognitive psychology might be the objects of explanations in evolutionary psychology that appeal to mechanisms of adaptation. Those mechanisms might in turn serve as phenomena to be explained by appealing to the mechanisms of natural selection in evolutionary biology.' (Haig 2014: 34)

Another important clarification is provided by Haig in pointing out that a research project always follows a research question, or, more specifically, a research problem, including not only a question, but also the constraints imposed on possible answers to that question (Haig 2014: 133-135). For example, the detection of certain phenomena imposes constraints on the explanatory quest, since the phenomena define the explanandum in the first place, and the construction of explanatory theories itself is governed by various constraints imposed by methodology, research aim or broader metaphysical principles (Haig 2014: 135-136). The constraints of a problem may be more or less clearly formulated, and thus provide more or less effective guidance for their solution. A problem may be called 'ill-structured' to the extent that it still lacks the constraints required for its solution (Haig 2014: 134-135). Accordingly, a central task in the abductive research process is the clarification of the constraints of the problem guiding the research. From this perspective,

'we can say of scientific inquiry that its basic purpose is to better structure our research problems by building in the various required constraints as our research proceeds. It is by virtue of such progressive enrichment that problems can continue to direct inquiry. [...I]t is the *formulation* of problems that is the overriding concern of ATOM. The real challenge for researchers who adopt ATOM is to formulate ill-structured problems and better structure them so that they are capable of solution.' (Haig 2014: 135-136)

Proceeding from the established phenomena and following an evolving research problem, the *construction* of explanatory theories comprises three stages: theory generation, theory development and theory appraisal. These three stages stand for an increasing degree of abstraction, not for temporal succession. Thus, theory generation, theory development, and theory appraisal

'do not occur in a strictly temporal order, for although theory generation precedes theory development, theory appraisal begins with theory generation, continues with theory development, and extends to the comparative appraisal of well-developed theories.' (Haig 2018: 44-45)

This non-linearity holds also for the formulation and refinement of research problems: it does not stand at the beginning of the research process, but happens throughout (Haig 2018: 93-94). In being able to grasp the non-linear and iterative structure of the abductive research process,

'ATOM is also a method for theories-in-the-making. It encourages researchers to regard their theories as developing entities.' (Haig 2014: 27)

Each stage of theory construction is characterized as abductive by ATOM, with a specific kind of abduction operative on each of the stages, respectively. Theory generation proceeds by existential abduction, which hypothesizes the existence, but not the nature, of previously unknown or unattended entities and properties. Theory development makes use of analogical abduction, in which the phenomenon to be explained is modeled in analogy to similar phenomena and their respective explanatory hypotheses and theories. And theory appraisal is conduced through an inference to the best explanation, evaluating in how far rivaling explanatory hypotheses and theories comply with the abductive virtues of a good theory, on different stages of the generation and development process (which is never regarded to be definitively concluded, if theories are understood as evolving entities). Roughly, existential and analogical abduction are 'creative' forms of abduction, since they involve the generation and development of hypothesis, whereas the theory appraisal through inference to the best explanation constitutes a case of 'selective' abduction (compare §27 above). But analogy also has a role to play in theory appraisal, and thus contributes to 'selective' abduction, as we shall see below (§29). The stages of theory construction and appraisal, building on the phase of phenomena detection, are depicted schematically in figure 10.

Phases	Phenomena detection	Theory construction		Appraisal
		Generation	Development	
Strategies	Controlling for confounds Calibrating instruments Analyzing data Constructively replicating findings	Generating rudimentary plausible explanatory theories	Developing theories through analogical modelling	Evaluating the explanatory worth of developed theories in relation to rival theories
Inferences	Enumerative induction	Existential abduction	Analogical abduction	Inference to the best explanation

Figure 10: Phases, strategies and inferences in the abductive theory of method (Table 5.1 in Haig 2018: 92)

The existential abduction on the level of theory generation is made through statistical methods (the main statistical method Haig discusses is Explanatory Factor Analysis, Haig 2014: 63-66), but also through non-statistical methods, non-codified methods and heuristics (Haig 2014: 140). Existential abduction in this empirical-scientific setting is *causal* explanation, what is inferred abductively is the existence of previously unknown causes and causal mechanisms behind the detected phenomena.

The rudimentary explanatory hypotheses achieved on the stage of theory generation are committed to theory development by working them out into more detailed accounts of the 'hidden' causal entities whose existence, but not nature, is inferred (hypothetically) through existential abduction (Haig 2014: 97-98).

Theory development takes place, according to ATOM, typically as the development of *models*, with *analogical* modeling as the most important kind (Haig 2014: 97-102). It is widely acknowledged that models are crucial to scientific reasoning, but the various types and functions of models have not been classified in an univocally accepted way. Very

broadly, we may distinguish two types of models, theoretical models and data models, with the former being of greater sophistication and arising at a later stage of the research process than the latter. *Theoretical models* are those that figure in a more or less fully developed theory. Because theories are often known for their results and less for their generation process, theoretical models have become what is usually understood as 'scientific models' in the common sense of the term:

'A theoretical model of an object, real or imagined, comprises a set of hypotheses about that object. [...] Theoretical models typically describe an object by ascribing to it an inner mechanism or structure. This mechanism is frequently invoked to explain the behavior of the object. Theoretical models are acknowledged for their simplifying approximation to the object being modeled, and they are often small-scale theories with a limited scope of application.' (Haig 2014: 90)

Example. 'The Watson-Crick model of the DNA molecule and Markov models of human and animal learning are two examples of the innumerable theoretical models to be found in science.' (Haig 2014: 90)

Data models have less elaboration than theoretical models and the more pragmatic function of making the data manageable and representable. Building data models is basically what is going on in the process of phenomena detection and initial theory generation:

'Data are often rich, complex, and messy, and because of these characteristics, they cannot be explained. Their intractability is overcome by reducing them to simpler and more manageable forms. In this way, scientists rework data into models of data. [...] Because of their tractability, models of the data can be explained and used as evidence for or against theoretical models.' (Haig 2014: 91-92)

Analogical models are a kind of theoretical models which draw on types of entities and events that are already fairly well understood (from a scientific or a lifewordly background) that are hypothesized to be *analogous* to the entities which are hypothesized by existential abduction as the causes behind the phenomena. Thus, according to ATOM,

'increasing the knowledge of the nature of [...] causal mechanisms [whose existence has been abductively inferred] by analogical modeling is achieved by using the pragmatic strategy of conceiving of these unknown mechanisms in terms of what is already familiar and well understood.' (Haig 2014: 98)

Example. 'Well-known examples of models that have resulted from using this strategy are the model of chromosomal inheritance, based on an analogy with a string of beads; the model of natural selection, based on an analogy with artificial selection; and computational models of the mind, based on analogies with the computer.' (Haig 2014: 98)

In comparison to existential abduction, that only allows to infer the *existence* of causes behind the phenomena,

'analogical modeling [...] provides more detailed knowledge of [these] causes by enumerating the components and operations of their mechanisms.' (Haig 2014: 95)

The known class of entities or events from which the analogy is drawn is also called the *source* of the model, whereas the mechanisms and entities that are to be represented (indirectly) through the model is called its *subject* (Haig 2014: 98).

Example. 'In the biological example just mentioned, [Charles] Darwin fashioned his model of the subject of natural selection by reasoning by analogy from the source of the known nature and behavior of the process of artificial selection.' (Haig 2014: 98) \Box

Models in which the source and the subject are of different kind are called *paramorphs*. Generally, analogical models are paramorphs (in opposition to *homeomorphic* models, in which source and subject are of the same kind; for example, a toy airplane can serve as a homeomorphic model of a real airplane, Haig 2014: 98-99).

Of course, the analogy between the source and the subject of a model is not *sameness* in all relevant aspects (in fact, many important aspects of the subject are unknown and to be sketched in the first place through the modeling). Thus, analogical modeling is a kind of simplification strategy applied in empirical science:

'Scientists often study systems that are highly complex. This complexity, combined with limited knowledge about the domains under study, as well as scientists' cognitive limitations, regularly forces them to adopt simplifying strategies to make their research problems tractable. Modeling is one way of simplifying the depiction of complex domains.' (Haig 2014: 994)

More precisely, analogical modeling makes use of abstraction and/or idealization to some degree. Abstraction in this context means the deliberate elimination of properties of the subject (or 'target') of the model 'that are not considered essential to understanding the target' (Haig 2014: 994).

Example. Abstraction 'can be achieved in various ways. For example, one can ignore the properties, though they continue to exist, by eliminating them in controlled experiments or by setting the values of unwanted variables to zero in simulations.' (Haig 2014: 994)

Idealization, in contrast, is not the elimination, but the transformation of a property of the modeled subject 'into a related property that possesses desirable features introduced by the modeler' (Haig 2014: 994).

Example. 'Taking a spheroid object to be spherical, representing a curvilinear relation in linear form, and assuming that a human agent is perfectly rational are all examples of idealization in model building.' (Haig 2014: 994)

As already said, theory appraisal occurs throughout the process of theory generation and development, but it is most pertinent to the evaluation of theories whose development is considered as largely completed in the given research context (defined by the research problems). Thus, abductive theory appraisal may be expected to gain in methodological importance with the progression of theory construction.

§29 Explanatory Coherence

As said above (§27), abductive theory appraisal as inference to the best explanation has to make use of the virtues of a theory that constitute its explanatory worth. For a framework of theory appraisal, ATOM relies on the systematization of the abductive virtues in Paul Thagard's account of 'explanatory coherence' (Thagard 1978, 2000, 2007), which is discussed in the following.

Neither Gilbert Harman (1965), who introduced the term 'Inference to the Best Explanation', nor Peter Lipton (2004), whose monograph on the topic is the standard reference (Williamson 2016: 265), give a systematic account of the abductive virtues (Haig 2014: 112). The only systematic (if brief) account of the virtues besides Thagard's is the discussion by Ernan McMullin (McMullin 1996, 2014), the accounts of Thomas Kuhn (1977: 321-322) and Willard Quine and Joseph Ullian (1978: chapters 6 and 8) may be seen as predecessors.

Explanatory coherence is explicated in terms of only three main virtues or 'criteria for theory choice' (Thagard 1978), which nonetheless comprise in themselves what has been discussed as relevant virtues elsewhere. The three virtues of a good theory making out explanatory coherence are consilience, simplicity and analogy.

Consilience (a technical term introduced by William Whewell) stands for the ability of a theory or hypothesis to explain different phenomena (different patterns in different types of data), in this way making them 'leap together' (which is the literal meaning of 'consilience', McMullin 1996: 28-29). In short, 'one theory is *more* consilient than another if it explains more classes of facts than the other does' (Thagard 1978: 79).

Example. A classic example of consilience is the theory of evolution by means of natural selection being is supported by a convergence of evidence from genetics, molecular biology, paleontology, geology, biogeography, comparative anatomy, comparative physiology, and many other fields. Darwin himself took this as a strong reason speaking in favor of his theory (Thagard 1978: 77,81).

Note that the classes of facts being explained by one theory do not have to be included (as a proper subset) in the set of classes of facts being explained by another theory. This makes the comparison of consilience a non-trivial undertaking – which has to interplay with the other theoretical virtues (Thagard 1978: 79-80, this point will be taken up below).

The notion of *classes* of facts or phenomena is admittedly context-dependent. Nonetheless, this challenge seems to be

'merely pragmatic, concerning the way in which, in particular historical contexts, the scientific corpus is organized. [...And s]ince in general the proponents of competing theories share the same historical-scientific context, they agree on the division of facts into classes.' (Thagard 1978: 80)

Thus, consilience is evaluated with regard to various phenomena, but both their status as phenomena and their variety are actually accepted in relation to the current 'state of the art' of science. This evaluation of consilience is 'static' in the sense of being relative to a given point in the history of science, namely, the point of the development of the theory in question.

But consilience also has a diachronic or dynamic dimension. This is given in the case of prediction of *novel* phenomena by a theory. 'Novel' phenomena fall into a different 'class of facts' than the original evidence of the theory, but are implied in the theory (and thus predicted by it, McMullin 1996: 27). Thus, a successfully predicted novel result

'significantly extends the range of a theory of the diversity of its applications. What lends weight to the verification of such a result is the intuitive conviction that if the theory is false (i.e. if the underlying causal structure is not what the theory claims it to be), one would not expect a novel prediction to hold up.' (McMullin 1996: 27)

Example. '[F]or example, the discovery in 1965 of the cosmic background microwave radiation supported the Big Bang theory much more strongly than if that datum had been part of the quite different sort of evidence around which the theory had been originally constructed.' (McMullin 2014: 568) \Box

This dimension of theory appraisal evaluating the growth of consilience over time may be called 'dynamic consilience' (Thagard 1978: 83). Dynamic consilience is equivalent with some aspects of what has been called the (proven) 'fertility' of a theory (McMullin 1996: 27). With dynamic consilience,

'[w]hat one wishes to evaluate [...] is the possibility that the original theory was, in fact, nothing more than an ingenious way of saving the phenomena at hand, the postulated explanatory structure amounting to nothing more than useful fiction.' (McMullin 2014: 568).

Two other dimensions of consilience, orthogonal to the dynamic/static-opposition, are explanatory *breadth* and *depth*. The explanatory breadth of a theory is the sheer amount of different types of phenomena ('classes of facts') it can explain (Haig 2014: 113).

Example. The various known phenomena accommodated by evolutionary theory at the time of its development and later make up its consilience as explanatory breadth. \Box

Dynamically growing breadth of a theory that predicts and accommodates more and more types of phenomena may be called the *broadening* of the theory (Thagard 2007: 36).

Explanatory depth (Thagard 2007: 36-37,38-40) goes beyond explanatory breadth in comprising not only the explanation of variegated evidence, but also of other theories and hypotheses. Because it builds on hypotheses that have already won a certain degree of appraisal on their own, depth is inherently dynamic, occurring as deepening of these hypotheses 'when an explanation provides an underlying causal basis for a causal hypothesis' (Thagard 2007: 36). Usually, in the case of one hypothesis deepening another one, the deeper hypothesis also has independent evidence that supports it and which it explains, in turn (Thagard 2007: 36).

Example. 'For example, consider the germ theory of disease, which says that contagious diseases are caused by microorganisms such as bacteria, viruses, and fungi. (To modern ears, this might sound like a tautology, but contagion was recognized long before the pathological effects of germs.) A particular

instantiation of the germ theory identifies a specific disease that is caused by a specific microbe; for example, influenza is caused by viruses of the family *Orthomyxoviridae*. This theory has been deepened over the years by microbiological accounts that explain how viruses infect cells, replicate themselves, and disrupt the functions of cells and organs. For many viruses, biologists have identified all their genes and the functions they perform. Thus we know not only that myxoviruses cause different types of influenza, but how they do so by their mechanisms of attachment, infection, and reproduction. Some other examples of deepening in recent history of science include the use of microbiology to explain how genetic transmission works and the use of the quantum-mechanical theory of molecular bonding to explain how atoms combine into molecules, which explains molecular theories of chemical reactions.'

(Thagard 2007: 36-37)

Figure 11 illustrates the interplay of broadening and deepening: Hypothesis A has breadth through explaining a variety of evidence (and is broadened by explaining new kinds of evidence), furthermore, A is deepened by being explained by hypothesis B, which also explains additional evidence.

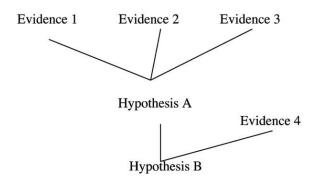


Figure 11: Broadening and deepening (Figure 1 in Thagard 2007: 37)

If explanation is understood at bottom in terms of causal mechanisms (as it commonly is in empirical science),

'we can develop an account of deepening in terms of parts. A deeper explanation for an explanatory mechanism M1 is a more fundamental mechanism M2 that explains how and why M1 works. M1 consists of parts, and M2 describes parts of those parts whose properties and relations change in ways that generate the changes in the properties and relations of the parts in M1.' (Thagard 2007: 38-40)

Example. '[M]edical theories such as the germ theory of disease have been deepened by finding lower-level mechanisms for the operations of cells and their microbial invaders. [...M]edicine knows enough about the parts of bacteria, viruses, and fungi to be able to explain how they invade and disrupt the normal function of bodily cells.' (Thagard 2007: 39)

In this way, deepening constitutes another aspect of the 'fertility' of a theory, realized in cases 'in which a theory's causal structure is gradually filled in and elaborated on' (McMullin 2014: 568-569).

But deepening also includes an aspect of non-causal, *constitutive* explanation (see §27 above). Namely, the causal mechanisms described by the deepening hypothesis usually are constitutive for the causal mechanisms described in the hypothesis being deepened.

Example. The explanation of Keplers laws by Newtons laws mentioned above (§27) is an example of 'constitutive deepening'. More generally, Newtonian mechanics forms an 'outstanding' example of a theory that has not only deepened others, but has also been considerably deepened by further theories, which have been deepened in turn. Newtonian mechanics

'afforded explanations of the motions of the planets and of their satellites, of the motions of comets, of the tides, and so on. But the general theory of relativity proved to be more consilient by explaining the perihelion of Mercury, the bending of light in a gravitational field, and the red shifts of spectral lines in an intense gravitational field. Quantum mechanics far exceeds any competitor in that it provides explanations of the spectral frequencies of certain atoms, of the phenomena of magnetism, of the solid state of matter, and of various other perplexing phenomena such as the photoelectric effect and the Compton effect.' (Thagard 1978: 81-82) \Box

It has been noted above that theory appraisal through the abductive virtues is considered to happen throughout the research process in the framework of ATOM. Especially, already the preliminary hypotheses created through existential abduction (on the stage of theory development) possess consilience of a nascent kind. They

'are consilient in the sense that they explain the *concurrences* embodied in the relevant patterns of correlations. By appealing to common causes, these [...] theories unify their concurrences and thereby provide us with the beginnings of an understanding of why they concur.' (Haig 2014: 75)

Now, for the 'virtuousness' of a theory, it is not only important that it explains various kinds of evidence (making it consilient), but also *how* it does so. This is measured by evaluating in how far a theory lives up to the virtue of *simplicity* (see Thagard 1978: 86-87, and McMullin 1996: 22, 2014: 565-566, who calls this virtue 'coherence').

Roughly, we may differentiate the actual core of a theory, the 'original theory', and auxiliary hypotheses, which are assumed to explain very specific parts of the overall evidence for the theory. Some of such auxiliary hypothesis are usually not avoidable in any theory. But they become problematic if they are assumed in an ad hoc manner. An ad hoc hypothesis is one that 'serves to explain no more phenomena than the narrow range it was introduced to explain' (Thagard 1978: 87). In avoiding such forced accommodation of the evidence, it is a virtue of a theory to be simple in the sense of including as few ad hoc hypotheses as possible.

Example. 'The Ptolemaic system [...] had many ad hoc features that counted against it. Each planet had associated with it, for example, a precise yearly period, either in its deferent or in its epicyclic orbital motion, yet the planetary motions were not linked in any physical way to one another. A coincidence? Ptolemy could factor it into his model in order to achieve empirical fit. But was this all that mattered? Kepler did not think so. Attaching the one-year period to the earth eliminated the coincidence, explained it away.' (McMullin 2014: 565-566)

Simplicity in the sense of 'non-ad-hoc-ness' is the relevant sense of 'simplicity' as a virtue in theory appraisal. Understood in this way,

'simplicity puts a constraint on consilience: a *simple* consilient theory not only must explain a range of facts; it must explain those facts without making a host of assumptions with narrow application. [...] Hence a simple theory is one with few ad hoc hypotheses. But "ad hoc-ness" is not a static notion. We cannot condemn a theory for introducing a hypothesis to explain a particular fact, since all theorists employ such hypotheses. The hypotheses can be reprehended only if ongoing investigation fails either to uncover new facts that they help to explain, or to find more direct evidence for them [...]. Moreover, an auxiliary assumption will not be viewed as ad hoc if it is shared by competing theories.' (Thagard 1978: 87)

So, consilience and simplicity place mutual constrains on each other, since 'making a theory more consilient can render the theory less simple, if extra hypotheses are needed to explain the additional facts' (Thagard 1978: 92). Thus, maximizing the goodness or 'virtuousness' of a theory involves a constant trade-off between describing as many different types of evidence as possible (consilience) and formulating hypotheses that hold as generally as possible within that body of evidence (simplicity).

Apart from the dialectic interplay of consilience and simplicity, the existence of *analogies* is a theoretical virtue in its own right, if only of supplementary nature (Thagard 1978: 89-91). If a theory can rely on an analogical model with another explanatory case as source, then this makes the theory more understandable and plausible:

'Not only does analogy between phenomena suggest the existence of analogy between explanatory hypotheses; it also *improves* the explanations in the second case, because the first explanation furnishes a model for the second one. Explanations produce understanding. We get increased understanding of one set of phenomena if the kind of explanation used – the kind of model – is similar to ones already used.'

(Thagard 1978: 91)

The main instance for the detection and formulation of analogies in the abductive research process lies of course in analogical modeling, on the stage of theory development in ATOM. Thus, analogy as an abductive virtue is already operative on this stage of the research process (Haig 2014: 98). In the further progression, consilience and simplicity may be expected to gain greater importance for theory appraisal, but,

'other things being equal, the explanations afforded by a theory are better explanations if the theory is familiar, that is, introduces mechanisms, entities, or concepts that are used in established explanations. The use of familiar models is not essential to explanation, but it helps.' (Thagard 1978: 91)

Thus, eventually, analogy is supplementary to consilience and simplicity, but it can play an important role in the justification of scientific theories.

Example. 'Darwin used the analogy between artificial and natural selection for heuristic purposes, but he also claimed the analogy as one of the grounds for belief in his theory. [...T]he explanatory value of the hypothesis of evolution by means of natural selection is enhanced by the familiarity of the process of artificial selection.' (Thagard 1978: 89,91)

Analogies of a certain kind may also be understood as constituting another aspect of the 'fertility' of theories. Namely, if in the face of anomalous phenomena (that are not implied or predicted by the theory), the theory nonetheless suggests an analogical model for explaining the anomalies. Through such a model, the theory has

'the resources to suggest possible modifications, possible avenues to explore [...]. The theory in this case serves somewhat as a metaphor can in literature, pointing in directions no longer restricted to strict logical consequence. Only a theory which has a measure of truth is likely to function in that manner.' (McMullin 2014: 568)

Example. '[T]he orbital model of the hydrogen atom suggested the notion of electron spin, originally as a way to explain what happens when heated hydrogen emitting light is subjected to a strong magnetic field (the Zeeman effects). Electron spin was not a novel result, [...] because it was not a logical consequence of the original theory. Rather, the model here serves as a metaphor, somewhat as a literary metaphor might' (McMullin 1996: 27-28).

We may understand this 'metaphorical' elaboration precisely in terms of analogy and call it 'dynamic analogy', in parallel to 'dynamic consilience'.

§30 Abduction in Philosophy

As has been illustrated by the sketch of abductive methodology (§28) and the virtues operative in theory appraisal (§29), abduction is used widely and essentially in empirical science. A philosopher who pleads for an explicitly abductive methodology also in philosophy is Timothy Williamson, thus taking up the agenda of a 'reunification of scientific and philosophical method' (Thagard 1978: 92, see full quote in §28 above).

Williamson proceeds from a very broad understanding of abduction, according to which abduction does actually not necessarily include explanatory considerations. Thus, not only do abductions need not be causal (see §27 above), but 'the criteria [...] for a good (potential) explanation do not depend on treating the relation between [the theory/hypothesis] and [the evidence] as specifically explanatory' (Williamson 2016: 267, emphasis added), that is, answering why-questions. Once we leave the domain of theories describing causal mechanisms (which have the 'why'-aspect built in, as it were), a theory may be sufficient for the evidence under study and excel at the abductive virtues without actually presenting a story why the evidence is such and not different. Thus, Williamson suggests that 'we should envisage the required relation between theory and evidence in more general terms' (Williamson 2016: 268). Accordingly, he does not use the label 'inference to the best explanation', but only 'abduction' from then on.

If abduction is not necessarily explanatory, it may be seen as an inference tool with a very general application – especially also in theoretical fields of philosophy. Williamson himself is primarily interested in an application of abduction in logic and likens this to mathematics, where he also sees abduction at work in the choice of axiom systems – both instances of non-explanatory abduction (Williamson 2016: 269-274).

But Williamson suggests a broad understanding of philosophical abduction also in another respect, going beyond 'armchair' applications (as in logic or mathematics). Namely, he asks (and answers) the question:

'From what evidence base should we start when applying abduction to the construction and selection of philosophical theories? [...T]he answer is in principle: our total evidence [...] includ[ing] whatever knowledge the natural and social sciences, philosophy, and common sense have already gained. None of our knowledge is irrelevant in principle to philosophy [...]. In particular, there is no restriction to knowledge gained in some special "conceptual" or "a priori" or "intuitional" or "armchair" way.' (Williamson 2016: 268)

Now, what are the advantages of this broad understanding of abduction? Williamson sees it as the driving power to explore new, productive avenues for philosophy. To be sure, many contemporary philosophers who identify themselves as 'analytic philosophers' understand themselves not as arguing abductively, but rather *deductively* for or against certain theories or hypotheses:

'[D]eductive methodology [is] still used by many contemporary analytic philosophers [...]. Indeed, it may be what they have in mind when they say that analytic philosophy is distinguished [...] by the imperative to argue for one's claims. Deductivists argue deductively for their claims.' (Williamson 2016: 276)

But against this official 'deductivism', Williamson holds that a deductive methodology actually cannot be very fruitful. He argues that what we can use deduction for is, in the first place, to determine the consequences of a theory (which constitute possible falsification instances). For example, assume that philosophers are able to show a certain fact $\varphi(x)$ about some randomly chosen x from a given domain. With this, they make a 'universal generalization' (Williamson 2016: 274): 'For all x holds $\varphi(x)$.' This yields a theory (in a minimal sense).

'Universal generalization' is actually a (deductive) logical rule of inference, by which $\forall x \varphi(x)$ is deduced by taking an arbitrary element c from a domain and showing that P(c) is true. The selected element c must be an arbitrary, and not a specific, element of the domain. The idea is: If $\varphi(c)$ must be true, and nothing specific has been said about c, then $\forall x \varphi(x)$ is true. Or, in short: if $\varphi(x)$ holds for any x, then it holds for all x. But Williamson seems to use the expression 'universal generalization' in a looser sense here. He reckons with the possibility of showing a counterexample to $\forall x \varphi(x)$. But if in fact a strict deductive universal generalization had been accomplished, such a counterexample would not be possible to construct, the whole point of the rule is to exclude this possibility. Accordingly (and more realistically), what is meant with 'universal generalization' here is generalization that does rely on some implicit assumptions on the representative element c (and these implicit assumptions may be wrong, making room for the possibility of counterexamples). Granting that we have arrived at a universally generalized theory in some way or other, Williamson tells us:

'For negative conclusions, [deductive] methodology can work well. Using uncontroverted principles of logic [if we grant for the moment that we have enough 'uncontroverted principles' accepted by all parties in the debate], one may succeed in showing that an opponent's universal generalization is inconsistent with an uncontroverted description of an example, or even with itself.' (Williamson 2016: 276)

Thus, one may show a counterexample for the theory: From 'For all x holds $\varphi(x)$ ', one may deduce some singular sentence ψ and then show $\neg \psi$ (the theory is thus 'inconsistent with an

uncontroverted description of an example'). Or, for a more complex theory (and theories typically are), which consists of many generalized sentences, one may show that two of these sentences actually contradict each other (in this case, the theory is 'inconsistent with itself').

But in this way, deduction produces only negative results, thus we may ask: can deduction also be used in a positive way? And Williamson raises exactly this question:

'However, [...] one should presumably aspire to more positive conclusions too, such as informative universal generalizations of one's own.' (Williamson 2016: 276)

But, when relying on deduction, 'one typically needs informative universal premises in order to derive an informative universal conclusion' (Williamson 2016: 276). This is an upshot of the feature of deductive inference being non-ampliative (see §27 above): the conclusion of a deduction cannot go beyond its premise. And this is exactly the spot where the problem lies for deductivism. Since, '[a]ll too often, if the argument is deductively valid, opponents simply reject one of those informative universal premises as "question-begging"' (Williamson 2016: 276). That is, the proponent is accused of assuming the premise only to deduce the conclusion. By trying to deduce 'the rejected premise from further informative universal premises, [...] an infinite regress looms' (Williamson 2016: 276). So, that is no option. In the end, the last resort is this:

'To avoid the regress, one may declare the premise "self-evident," [...] or an "intuition," but no such talk forces a sceptic to accept one's premise. Such rules of engagement are conducive to deadlock. [...] When both sides follow the deductive paradigm, the usual result is stalemate.' (Williamson 2016: 276)

This may be a somewhat stylized picture, but it seems not too far off the mark for the current situation in analytic philosophy. And it shows that it is problematic trying to use inference to conclusions being necessitated by the premises as the only means to generate new insights.

Now, Williamson contends that abductivism does not run into these problems:

'An abductive methodology bypasses deductive deadlocks, by encouraging both the accumulation of more evidence of various kinds and the development of better explanations of that evidence (which may simply bring it under illuminating generalizations¹).' (Williamson 2016: 276)

The crucial point is that abduction is *ampliative*, allowing for conclusions that go beyond the premises. Not everything that may be reached by inference has already to be assumed in the premises. This makes it possible to 'bypass the deductive deadlock'.

Further, Williamson observes that even in a deductivist methodology, there is a hidden role for abduction. If we take up the aforementioned question how philosophers actually arrive at 'informative universal premises in order to derive an informative universal conclusion' (Williamson 2016: 276, see full quote above), the simply answer is: by abduction. Thus, 'abduction often plays a significant role on the quiet within deductivist inquiry, since it may be used unofficially to support premises of the official deduction' (Williamson 2016: 276). But then, the question ensues why we should actually stick exclusively with deduction:

'Indeed, once one is permitted to use abduction in supporting the premises of the deduction [that is supposed to lead to the hypothesis], why not use it directly to support the conclusion [the hypothesis itself]?' (Williamson 2016: 276)

Williamson's bottom line is that '[i]t is better to use deduction within an overall abductivist methodology than to use abduction within an overall deductivist methodology' (Williamson 2016: 276).

Above that, Williamson proposes analogical modeling, in a similar way as applied in

^IThus actually not being explanations in the sense of answering why-questions, but in the broad non-explanatory sense Williamson suggests.

empirical science (see \$28 above), as a part of abductive philosophical methodology:

'Thinking beings, especially human beings, are paradigms of systems too complex to be best understood in terms of exceptionless universal laws [...]. Many branches of philosophy focus on thinking beings, especially human beings[,...] the model-building methodology is appropriate for such branches of philosophy.' (Williamson 2016: 280, compare Williamson 2017)

So, because exceptionless laws cannot be expected, in philosophical model-building, corresponding to the abstractions and idealizations in empirical modeling, it is advisable, or even unavoidable, that 'the requirements of evidential fit are relaxed' (Williamson 2016: 280).

3.2 Applying Abduction in Empirical Phenomenology

The wide 'philosophical' sense of abduction is going to be applied in the following to microphenomenology (§31-§33). Interpreting microphenomenology as an abductive process fits it continuously into an abductive understanding of reasoning in the sciences or the humanities going beyond the micro(phenomenological)-level. This makes it possible to see how the various microphenomenological descriptions and analyses may be integrated into a larger theoretical whole, and further, to situate empirical phenomenology more generally as a research program (§34).

§31 Microphenomenology and Abduction

It is not clear what Williamson as a philosopher who stands avowedly in the analytic tradition thinks about phenomenology, and he does not speak about it, let alone an application of abduction to the phenomenological project. But he makes a very general claim about modes of reasoning and it seems well possible to look how this claim applies in the case of phenomenology. Above that, Williamson concedes that no evidence 'is irrelevant in principle to philosophy' (Williamson 2016: 268, see full quote in §30 above). Thus, we may especially examine how his general considerations play out in (empirical) phenomenology, which starts from very specific evidence, namely, first-person evidence.

We may begin by noting that the initial parallels of the suggestion of abductive methodology for philosophy and the idea of an empirical phenomenology are striking: The main argument for doing phenomenology explicitly is that, taking immersive primacy of lived experience serious, we do it *implicitly* all the time anyway (see §16 above), just as abduction that 'plays a significant role on the quiet within deductivist inquiry' (Williamson 2016: 276, see full quote in §30 above). Now, if we are pleading to make abduction explicit, because it is widely applied implicitly, we should also accept the demand to make implicit phenomenology explicit – in short, to integrate abductive with phenomenological methodology. And the obvious candidate for such an integration is empirical phenomenology as opposed to 'armchair' phenomenology invoking intuition into relations of necessity, as exemplified in Tewes' suggestion on the proper grounding for microphenomenological analysis (see §26 above).

To see why, consider again the initial question raised above (§26): What are the inferential processes underlying microphenomenological analysis? Both Tewes' suggestion and the abductive one are attempts to make these inferential processes explicit. Before going more into detail concerning the possible understanding of the microphenomenological analysis process as abductive (see §32,§33 below for this), we can already note the most

¹And phenomenology, proceeding from the methodological primacy of lived experience (§6-§13), takes this to be a *privileged* evidence base. Thus, in transferring Williamson's considerations to the case of phenomenology, we may make use of his permissiveness, while being ourselves more restrictive.

crucial difference to Tewes' approach: Like deduction, his suggestion aims for the *necessary* components or conditions of the experience under study. In contrast, an abductive procedure in microphenomenological analysis aims 'only' for hypotheses that constitute *sufficient* conditions of the experience under study (and that do well on the abductive virtues, see §27 above).

Now, as a first point speaking for the abductive in comparison to the 'necessary-components' interpretation, we may note that, the notion of 'invariance' as 'essential' to the understanding of an experience (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83, see full quote in §26 above) does not directly lead to 'necessary components' of the experience. To be 'essential' or indispensable for the understanding of an experience (or a type of experience) is not the same as being necessary to the experience itself. For the understanding of an experience (or a type of experience), a sufficient condition of that experience, that is distinguished by certain abductive virtues, may be just what is needed. This fits well with the characterization the microphenomenologists give of the analysis process: For example, Valenzuela-Moguillansky and Vásquez-Rosati speak of different structural descriptions that have been developed in one analysis as affording alternative 'perspectives' on the experience under study (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §97, see §33 below for discussion). So, the analysis process seems to give rise to alternative structural descriptions (which compete in terms of how much they provide 'understanding') instead of one monolithic set of necessary 'essences' of the studied experience.

Above that, as has been already argued above in the discussion of imaginative variation (see §18 above), the appeal to necessary essences and to intuition as a capacity to access them may lead into an analogous situation as the 'deductive deadlocks' Williamson warns of (see §30 above). The critical point is not so much the question whether there is intuition in the general sense of a capacity granting 'first-person access to structural content' (Tewes 2019: §8, see full quote in §26 above). There certainly has to be something like this, otherwise we would not be able to perform, for instance, the initial grouping of singular experiences, as Tewes rightly remarks. The problem is that the idea of an intuitive access to relations of necessity may put already too much theoretical and epistemic weight on intuition. We may end up with the situation of one (micro)phenomenologist claiming to have intuited the necessity of one specific structural feature to a certain (type of) experience and another phenomenologist claiming something totally different on basis of her intuition.

In contrast to this, microphenomenology does not aspire to arrive at hypotheses (or 'conclusions') with some kind of (inference) procedure guaranteeing necessity. It tries to shun assumptions on the putatively basic and necessary features of experience. Rather, what microphenomenology tries to elicit are fallible hypotheses on the nature of experience from descriptions and analyses that are as presuppositionless as possible (see §21-§24 above). More generally, empirical phenomenology (proceeding by 'factual variation' in interviews and analysis) may be understood precisely as an attempt to dissolve the 'deadlocks' of armchair phenomenology (proceeding by imaginative variation and eidetic intuition), just as abductivism is meant to dissolve the deadlocks of deductive argumentation (see §18,§30 above). And an interpretation of microphenomenological analysis as abductive makes room exactly for this, since abduction does not, as already said, aspire for necessary conclusions either.

In sum, the interpretation of microphenomenology as abductive may open a middle-ground between, on the one hand, the attempt to give a frightfully circular basis to this methodology^I and, on the other hand, the potential deadlocks of the attempt to point out necessary components of certain types of experience and to argue from intuitive access to

^IThrough reliance on microphenomenological self-explication alone, see §26 above.

the underlying conceptual content of experiential categories.

Now, the question is of course: how can microphenomenological analysis be understood as an abductive process? In approaching this question with the concepts concerning abduction discussed above (§27-§30), we may note that microphenomenological analysis understood as an inference process is certainly *ampliative* (see §27 above). Microphenomenology aims at unifying the singular descriptions in specific structures, and these, in turn, in generic structures. It goes from the singular (descriptemes) to the specific (structure) and from there to the generic (structure). This is an ampliative progression, therefore definitely not a deductive inference. In line with this observation, microphenomenology is characterized by its proponents as an 'inductive' or 'bottom-up' approach. Accordingly, the identification of categories in the microphenomenological analysis proceeds 'from the utterances to the categories, in a progressive manner from lower to higher levels of abstraction' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §70, see full quote in §21 above). This is contrasted by the microphenomenologists to 'deductive approaches' applying a 'top-down identification [...] of previously established instances of abstract categories' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §70).

But calling microphenomenology a 'bottom-up' as opposed to a 'top-down' approach is still a very general characterization. The interesting question remains of course: *In which way* may microphenomenology be understood as going 'bottom-up'? Microphenomenology is surely not inductive in the narrow sense of statistical inference. It is even stated that if a feature of experience is found only *once* in all interviews, but seems to be a structural feature nonetheless, it is kept in the generic structure (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83). So, it may be plausible to interpret the 'inductive' or 'bottom-up' procedure in microphenomenological analysis as being in fact *abductive*.

More precisely, microphenomenology can only be interpreted as abductive in the broad sense of constitutive-explanatory or non-explanatory inference (see §30 above). Since, of course, phenomenology does not search for causes 'behind' the phenomena (on which it exerts epoché, see §13 above). But microphenomenology (and transcendental phenomenology more generally) is also not only trying to 'save the phenomena', as an empiricist understanding of science would have it (Haig 2014: 33), but to detect the usually unattended features of experience that are constitutive of the 'phenomena' (experiences of things) normally appreciated in the natural attitude (see §14 above). In this sense, we may speak of a specifically phenomenological abduction, that is constitutive rather than causal-explanatory (see §27,§29 above). Above that, in giving an account not only of the 'why' (in a constitutive sense), but also, and maybe even more prominently, of the 'how' of the experience under study, (micro)phenomenology may be interpreted as aiming at non-explanatory abduction.

§32 Abductive Theory of Microphenomenological Method

So far, it has been argued that the broad sense of abduction seems to fit well with microphenomenology. And also the Abductive Theory of Method (ATOM), as described above (§28,§29), suggests itself as a model for microphenomenological methodology. Namely, ATOM has been developed explicitly for an application in the humanities, especially in psychology (Haig 2014), and also as a reconstruction of qualitative research (specifically, the approach of Grounded Theory, see Haig 2018). Haig makes it clear that he understands ATOM as a compositional and flexible model of method:

¹This affords also a precise interpretation of 'phenomenological constitution' (see §14 above) in bringing the notion together with the abductive approach, and freeing it from the association with the notion of intuition of necessary essences through imaginative variation (see §18,§26 above).

'By incorporating a good number of sub-methods within its fold, ATOM is [...] intensely compositional. And, although the structure of the theory is stable, its specific composites can vary markedly, depending on their suitability to the investigation at hand.' (Haig 2018: 91)

Nonetheless, it has to be noted that ATOM is rooted in the 'objectivist' framework of scientific realism (Haig 2014: 17-23, McMullin 1996: 29-31, 2014: 569-570 Thagard 2007, compare §4 above), and accordingly proceeds from a causal-mechanistic understanding of explanation: Phenomena are detected by objective third-person observation and (mainly) statistical methods, on this basis, the existence and structure of causal entities which produce these phenomena, is then inferred abductively (see §28 above).

In the transcendental-phenomenological perspective developed here (see §13 above), this way of understanding ATOM does not seem warranted. On the one hand, the commitment to scientific realism does not seem to be necessary for an understanding of the *practice* of abduction. On the other hand, taking explanation as merely causal-mechanistic may be too narrow for an understanding of the varieties of this practice.

Apart from this phenomenological interjection, a more general point can be made: The humanities, to which ATOM is meant to be applied, do not always proceed by enumerative induction, nor always aim for causal explanation; especially, philosophy does so only seldomly – it is not 'scientific' in this sense. Thus, to bring ATOM to a more general application in the humanities, it seems that the theory has to be adjusted precisely to the wide sense of abduction suggested by Williamson.

Especially, such an adjustment of ATOM, which we may call a 'broadening' in precisely the sense of explanatory breadth (see §29 above), enables us to apply it to microphenomenology: Firstly, in the phenomenological perspective, we can simply exercise epoché on the realist component of ATOM and see how well it does as a purely descriptive account of the practice of explanation (from a participatory, enactive perspective independent of realist or anti-realist inclinations). No appeal to 'real' causal mechanisms is necessary (but also no rejection of them). Secondly, this move enables us to broaden the understanding of the abductive process in theory generation, development and appraisal beyond causal explanation described in ATOM. We may say that the application of ATOM in empirical science may serve as the source of a model for the application of ATOM in empirical phenomenology (which is of course different in relevant respects). But although the realist appeal of ATOM is put into brackets in this application, the realist-representationalist intuitions at work in this theory still stand (though in a 'phenomenologically reduced' way). In this way, ATOM may enable us to make sense of the realist notion of correspondence as a 'regulative ideal' in microphenomenology (Bitbol and Petitmengin 2013: 271, see full quote in §19 above).

But the 'broadened' interpretation of ATOM also raises a question. Namely, how may evidence ('phenomena' in the sense discussed in the context of ATOM in §28 above) be generated in microphenomenology, if not by enumerative induction? The straightforward answer is that in microphenomenology, the detection of 'phenomena' is itself a process of abduction.

Indeed, the process of defining specific structures on the basis of structural statements and descriptemes already seems to be (in a basic sense) an abductive process as modeled in ATOM: every specific structure plays the role of a 'theory' unifying and organizing the descriptemes of the specific experience. This 'theory' is an abductive hypothesis arrived at through a 'miniature' process of theory generation, development and appraisal (see §33 below for details).

The specific structures, in turn, play the role of evidence or 'phenomena' in relation to the generic structures. As has been pointed out above (§28), 'being a phenomenon' is to be understood as a functional role, dependent on context. In the context of generic analysis,

the specific structures are the 'phenomena' and the generic structure is the 'theory'.

So, we have abductive processes 'nested' into further abductive processes of greater abstraction, with the 'theories' on the level of lower abstraction playing the role of 'phenomena' on the level of lower abstraction. In other words, there is a two-step evidence-theory relation in microphenomenology from descriptemes to specific structures and from specific structures to generic ones.

Of course, in 'broadening' ATOM from causal-explanatory to constitutive-explanatory or even non-explanatory abduction, we have to speak of 'abduction' in the broad sense, where the original formulation of ATOM speaks of 'abduction' in the sense of 'giving explanations' and of 'explanation' in the sense of 'pointing to causal mechanisms' (compare §28 above). Apart from an adjusted understanding of 'existential abduction', 'analogical abduction', and so on, this means especially that the concept of 'explanatory coherence' operative in theory appraisal has to broadened 'abductive coherence'. Abductive coherence in this wide sense may enable us to approach the initial question raised above (§26), concerning the reasoning and inference processes underlying microphenomenological analysis.

A first step in that direction is attempted in the following by sketching out how an 'abductive method of (micro)phenomenological method' may make use of the broad sense of abduction on the different levels of the analysis process. Remember that microphenomenological analysis comprises two levels: *Specific* analysis aiming for the 'specific structure' of one singular experience and *generic* analysis aiming for the 'generic structure' of a certain type of experiences. In line with the idea of abductive processes on increasing levels of abstraction being 'nested' into another, the specific and the generic stage of microphenomenological analysis, respectively, are going to be interpreted by the model of the abductive research process as described by ATOM. This includes of course a 'scaling down' of ATOM's overall abductive research process to the reasoning in particular analysis steps and presupposes the adjusted understanding of 'abduction' mentioned above in this paragraph (for the relevant notions from the context of microphenomenological analysis and ATOM, refer back to §23 and §28 above). The principle interpretation is analogous for the generation of diachronic and synchronic structures.

§33 Abduction in Microphenomenological Analysis

To begin with, we may consider *specific analysis* as an abductive process generating the specific structures as hypotheses or as small-scale 'theories'.

As said above (§31), what plays the role of 'phenomena' or evidence on the level of specific analysis are the *descriptemes*. Note that the descriptemes are not 'raw data', rather, they are generated through the preparation of the interview data through detection of potentially 'structural statements' and their fragmentation into minimal expressive units. This process is already a basic kind of 'phenomena detection' in the sense of ATOM. The structural statements and descriptemes are taken (hypothetically) as indicative of invariant structures of experience, in other words, of what is called 'phenomena' in ATOM.

It was already indicated (§30) that the interpretation of microphenomenology as abductive in Williamson's sense benefits from his permissiveness regarding the evidence base for abduction: this enables us to proceed from the specific kind of evidence formulated in the first-person perspective. But this specificity has to be qualified: Williamson wants to take all of our knowledge as possible evidence (Williamson 2016: 268, see full quote in §30 above). In contrast, phenomenology in the spirit of the epoché aspires to bracket all (or most) of our knowledge and start only with experience (see §13 above). This holds especially for microphenomenology, which even tries to bracket any knowledge about the studied experience itself as far as possible (see §21 above). Thus, it may be overstress-

ing the term 'knowledge' to apply it to the basic microphenomenological evidence, the descriptemes. They may be understood as words indicating instances of lived experience, but not as expressing propositional knowledge about the experience (Petitmengin and Bitbol 2009: 388-389, 2011c: 34-35).

Accordingly, the descriptemes that microphenomenology takes as evidence are understood as valid or 'true' by the criterion of 'performative coherence' (see §24 above), thus in a different way as it is usual in analytic philosophy (where truth is typically understood in relation to language, abstracting from practice: either by a conception of truth as correspondence or truth as coherence within a theoretical framework, not within a network of practices). But there seems to be no principal problem with 'plugging' the performative understanding of truth and validity into an abductive framework. Quite on the contrary, it fits quite well, since the validity of abductive reasoning itself is typically understood as falliblistic and pragmatic (Thagard 1978: 92).

The procedure of generating specific structures from the descriptemes by applying abstraction operations may be understood as the 'theory construction' in the sense of ATOM on the stage of specific analysis.

A step that precedes the application of abstraction operations proper is the initial 'extensional grouping' of descriptemes into diachronic and synchronic 'clusters'. This may be understood as a case of existential abduction: By extensionally grouping the descriptemes, the existence of a common 'intensional property' (Tewes 2019: §7), a common constitutive aspect of the experiences described by the descriptemes, is assumed, but the nature of this common feature is left unspecified.

The subsequent 'iterative interrogation' of the extensional categories, to make the criterion of grouping explicit, is a first step towards an intensional categorial structure. This may accordingly be seen also as a first step in 'theory development' (in a very basic sense) on the level of specific analysis. The next and crucial step in 'theory development', the definition of a specific structure (diachronic or synchronic), may be interpreted as kind of analogical modeling. According to this interpretation, the diachronic and synchronic structures form as models for the experience under study.

More generally, in line with Williamson's proposal of philosophical model-building (see §30 above), microphenomenological structures (specific and generic) can be understood as phenomenological models. The structures defined in the analysis are 'paramorphs' in an important respect: They are (imagined and constructed) things, and not experiences (in the sense of the opposition introduced in §2 above). We normally use linguistic or iconic representations of the categorial and of the temporal order of worldly things, not of experiences, or at least not on the level of detail of microphenomenology. In accordance with this 'normal' use of words or pictures, the structures are clearly confined in detail and discrete, unlike the experiences they are representing, which are richly detailed and possibly continuous in nature (see §49 below for discussion). In other words, they are like the worldly things we are used to talk about in the 'natural attitude' – and which can thus be considered the 'source' of the structural models, while lived experience is their 'subject'. And this indirect way of modeling lived experience is arguably the only way to talk about it, since language is geared towards worldy things (see §44 below for discussion). This is in line with the point made above (§17), that also a constructive and enactive approach to phenomenology includes an objectification of experience, in the form of a posited 'object' or construct (through an enactive process of construction).

Thus, the structures defined in microphenomenological analysis do not aim to elicit the immersive character of experiences. Through reading and beholding the semantic networks and temporal sequences, one does not (necessarily) get an immersive standpoint 'in' the

described experience. A contrasting case to this experiential *modeling* would be an artistic *expression* of an experience – a poem, say – that is aimed at eliciting something akin to that experience (Bitbol and Petitmengin 2011c: 34). But the structures are certainly not meant to elicit the experiential qualities they are representing in the recipient in such an immersive manner.

Arguably, there is also already another aspect of analogous modeling in the process of defining a specific structure, namely, through analogy to other experiences: those aspects which are considered to be 'structural' (possibly also present in other experiences of similar kind) are deemed so by analogy to other (imagined) experiences of the same kind (this seems to lie at the core of the 'local imaginative variation' employed in the detection of 'structural statements'). The specific structure is implicitly indicating other, analogous instances of lived experiences.

And of course, the microphenomenological structures exhibit, like other analogical models, a degree of idealization and abstraction. They are not one-to-one representations, but highlight certain aspects of the type of experience under study that are of interest at the background of the pursued research question or problem. Thus, disregarding the 'content' in favor of the 'structural' aspects of an experience in microphenomenology may be understood precisely as the kind of abstraction going on in analogical modeling ('eliminating properties [...] that are not considered essential to understanding the target', Haig 2014: 994, see full quote in §28 above, and note the parallel to the formulation 'essential to understanding' by Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83 quoted in §26 above). The 'understanding' won through abstraction may be interpreted in terms of generalization (or generalizability) through analogy with other experiences. Idealization, as the transformation of properties in the model into properties that are easier to handle, is given in microphenomenological structures through the treatment of experiences and their aspects, which are continuous, like things and their parts, which are discrete.

An analogue to 'theory appraisal' in microphenomenological analysis can be seen in the iterative revision of already defined categories, which leads either to their further elaboration or to their correction. The iterative procedure in microphenomenological analysis fits well with the notion in ATOM that the three stages of theory generation, development, and appraisal do not stand for temporal succession, but for an increasing degree of abstraction, and do not have to come in linear temporal order.

More specifically, the iterative revision may be interpreted as a case of applying and balancing the aspects of 'abductive coherence' (in the broadened sense), the virtues of a good theory or hypothesis (see §29,§31 above). In the detection and evaluation of specific structures through the 'analogical modeling' already sketched, the virtue of analogy is already operative (and most likely indispensable). Specifically, analogy to other (imagined or remembered) instances of lived experiences of a similar type (especially, to the specific structures that have already been detected) may be expected to be most relevant for contribution of a specific structure to the 'understanding' of the studied (type of) experience.

But above that, microphenomenological versions of consilience and simplicity may also be expected to play a role in the definition of structural categories. Remember that *consilience* is defined as the ability of a hypothesis to make different classes of phenomena/evidence 'leap together'. Now, in microphenomenology, classes of phenomena/evidence are defined through the categories organizing the descriptemes, arrived at through the abstraction operations and represented through semantic networks. Thus, in this setting, consilience may be interpreted as follows: a category can be considered as the more consilient, the more other categories it generalizes or aggregates. As in the case of abduction in the sciences, the virtue of *simplicity* acts as a counterweight to consilience: it speaks against introducing

categories in an ad hoc manner only to generalize or aggregate as many other categories as possible. Bringing this interpretation to bear on the stage of specific analysis in microphenomenology, the definition of the categories in specific structures may be interpreted as balancing of these two tendencies.

Moving one level of abstraction up, to generic analysis, we may note that – according to the idea of 'nested' abductive reasoning processes (see §32 above) – the evidence or 'phenomena', which generic analysis as an abductive process may build on, are the structures defined in specific analysis. Thus, on this interpretation, the process of 'phenomena detection' in the sense of ATOM is nothing else than the process of defining specific structures just described (as an abductive process in its own right). More precisely, the specific structures may be understood as 'data models' on which generic analysis can build. But not only the specific structures serve as 'phenomena' or evidence for the generic structures, since, in line with the iterative approach of microphenomenology, also the descriptemes are referred back to throughout the process of defining a generic structure (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §76,§78).

The 'theory generation' in generic analysis then consists in the comparison between the different specific structures (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §72,§91-§97). But above that, the generic synchronic structure of an already defined generic diachronic phase may also be elicited from the descriptemes from all interviews that have been ascribed to this phase (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §84-§90). Of course, the different paths of analysis are likely to lead to structures that are different in some respect. The idea is that 'the resulting structures allow us to see different perspectives of the same phenomena' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §97, unless of course there are obvious contradictions in these structures). This fits well with the interpretation of the generic structures as models highlighting relevant aspects of the studied experience. A model may also be characterized in terms of giving a certain perspective on a phenomenon, highlighting certain aspects while neglecting others, while other models may open other perspectives on the same phenomenon.

Accordingly, 'theory development' on the stage of generic analysis may be understood, as on the stage of specific analysis, as analogical modeling through analogy to things and analogy to other instances of experience. Above that, generic analysis draws on various specific structure, thus, it may also be understood as modeling through analogy between the different specific structures. The generic structures are of course to be expected to be even more abstract and idealized models than the specific structures.

In the 'theory appraisal' on the level of generic analysis, the virtues consilience and simplicity can be expected to play a more important role than the virtue of analogy in comparison to the stage of specific analysis, since the categorization is carried out on a higher level of abstraction. But the interplay between consilience and simplicity may be understood basically in the same way as in the definition of specific structures: consilience speaks for defining categories that generalize or aggregate many other categories, simplicity speaks for avoiding ad hoc generalizations or aggregations. In this sense, it is mentioned by the microphenomenologists as an aim of generic analysis 'to arrive at the most "parsimonious" structure' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §97). The abductive virtue of simplicity affords a straightforward interpretation for this statement.

The categories in the generic structure typically become more general than the categories in the specific structures, to accommodate a greater range of specific experiences. Thus, the microphenomenologists inform us that

'[o]ften an aspect of an experience [...] in the specific structure, is "diluted" in the generic analysis,

^IIn this case, it is indicated for each descripteme from which interview it originates.

becoming part of a unit with a higher level of generalization.' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §82)

This can be seen as an application of consilience, since the generic categories are 'diluted' precisely for the purpose of subsuming a greater variety of specific instances of lived experience (expressed by the descriptemes).

The search for a trade-off between the theoretical virtues may be understood as the iterative process in microphenomenology of searching for a point where the generic structural categories and the implicit understanding of the (type of) experience 'come together' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §102, see full quote in §26 above). In the same vein, the abductive trade-off affords also a possible interpretation of the formulation that the aim of the analysis is to find categories that are "essential" for understanding the experience we are studying' (Valenzuela-Moguillansky and Vásquez-Rosati 2019a: §83, see full quote in §26 above). Balancing this trade-off may be seen as an instruction of how to look for what is 'essential' for the understanding of the experience under study.

In this way, abductive coherence (expressed through the theoretical virtues consilience, simplicity and analogy) may serve as an elucidation of the 'what' of performative coherence on the level of microphenomenological analysis (complementing the 'how' described through microphenomenological meta-analysis and self-explication, compare §26 above). The hope is that this will ultimately enable us to fulfill the desideratum for microphenomenological methodology that Tewes has made out: to get explicit and 'methodologically controlled access' to the underlying reasoning processes of microphenomenological analysis and their 'performative' validity criteria (Tewes 2019: §7, see full quote in §26 above).

Above that, the broader research process of microphenomenology with its iterative structure may be understood as the step-by-step treatment of a research problem in the sense of ATOM, comprising a research question and certain constraints on possible answers to that question. In precisely this sense of research problems, microphenomenological research can be understood to consist of an ongoing process of 'formulat[ing] ill-structured problems and better structure them so that they are capable of solution' (Haig 2014: 136, see full quote in §28 above). The relevant constraints of a microphenomenology research problem contain the following questions (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §5.2): Which diachronic and synchronic aspects (detected in pilot studies and/or during the main research process) are to be explored in the interviews? Moreover, to which level of detail does the inquiry have to extend? 'How much' do we have to know to answer the research question? And how much can expect to find out? Above these general questions, on a more practical level, the following questions have to be answered: Are the experiences to be invoked or provoked? What temporal location does the interview have in relation to the experience (before, just before or maybe even during the interview) – and what follows from this for the approach taken in the questioning? Is it advisable and possible to use 'front-loaded' phenomenological categories (Gallagher 2003, compare §21 above) in the interviews? What is the required level of expertise for interviewees and interviewers and the required number of interviews per interviewee? These constraints, which are continuously adjusted through the refinement of the research protocol, contributing in this way to a better structuring of the initially ill-structured research problem.

§34 Empirical Phenomenology as Abductive

So far, the following has been argued: Firstly, abduction suggests itself as an explication of the inferences taking place in microphenomenological analysis. Abduction is, in contrast to deduction, a non-necessary mode of inference, in parallel to the contrast between microphenomenology and 'armchair' phenomenological methods (see §31 above). Secondly,

the reasoning processes in microphenomenology can indeed be understood as abductive with the help of an adjusted form of ATOM (see §32 above). Thirdly, this understanding allows to make sense of the application of abductive virtues in the microphenomenological analysis, suggesting an interpretation of 'performative coherence' in terms of abductive coherence (see §33 above).

Now, abductive inference may not only serve as a model to make sense of the reasoning going on in microphenomenology, but also in empirical phenomenology more generally. The deeper affinity with abduction becomes obvious when taking into consideration that empirical, enactive phenomenology can only be – like object-oriented empirical science – an open-ended and fallibilistic research program. Thus, as Kordeš points out, the 'hopes [...] shared by many [...] phenomenological researchers' amount to the aim

'to reach the standards of conventional science: repeatability, intersubjectivity, and, as a result, the derivation of general laws, perhaps even predictability. [...] Their research is therefore expected to reveal stable, recurring structures that would be valid intersubjectively and intersituationally[,...] experiential modalities on which the majority of researchers would reach an intersubjective agreement.' (Kordeš 2016: §31,§39)

But this aim is still a desideratum, and empirical phenomenology is bound to remain agnostic as to whether and how this desideratum may be fulfilled. Precisely by trying to avoid the preconceptions of 'armchair' phenomenology (see §18 above) it cannot make a preliminary judgment on these matters – as Husserl does in his optimistic expectations on intersubjective consensus (Husserl 1913/1976: §87, p.201, see quote in §18 above). In avoiding anything like the optimistic Husserlian verdict, Kordeš holds that

'[s]uch expectations [of intersubjective agreement] are perfectly viable if we believe that what we are researching is "something out there" - something that is "there" regardless [...] of the observer. But if we are ready to give up this assumption and instead choose to regard the act of observing and the observed object as an indivisible unit, such expectations are no longer self-evident. [...]' (Kordeš 2016: §39)

In other words,

'one has to accept that what is being researched is not necessarily a[n intersubjectively] shared area. There is a strong intuition that the laws governing our experience are shared and uniform, but that does not suffice as an argument on which to base a research project. [...W]e must accept the possibility that perhaps (despite our best efforts directed towards such goal) we will never reach invariant results and thus a fully-fledged scientific project.' (Kordeš 2016: §52)

Nonetheless, this initial (and maybe even ultimate) uncertainty does not amount to an existential threat to empirical phenomenology. It is no different than that which empirical science had to face in its formation, and poses a task as much as it poses a challenge:

'[S]cience as an open-ended inquiry is all about gathering evidence and following it wherever it leads. Bearing this in mind, it would actually be unscientific to abandon our research even before it actually begins just because there are no guarantees that it will ultimately be possible to create a general, intersubjective model. After all, this would not be much different from the situation of biologists in the times of Alexander von Humboldt, gathering samples everywhere they went without knowing for certain if they would ever be able to produce a system, i.e., capture the general idea.' (Kordeš 2016: §52)

For this endeavor of 'gathering evidence and following it wherever it leads', an abductive framework seems to be optimally suited. On the one hand, it is flexible enough to enable an open-ended and fallible research process, as opposed to a necessity-oriented approach, which risks to lead into deadlocks. On the other hand, the abductive guidelines of theory construction and appraisal (in their broadened form, which is still open for development) provide sufficient methodological criteria to avoid the research process from going astray.

Above this, an abductivist understanding of empirical phenomenology may help to situate it as a research program into a larger context of reasoning in the sciences or the humanities. More specifically, since the focus of empirical phenomenology are specific,

singular experiences, it is restricted to a micro(phenomenological)-level of investigation. Microphenomenology is going 'bottom-up' (and the demand to bracket presuppositions about experience in the interview and the analysis is mainly due to this 'inductive' character of microphenomenology). But this means, especially, that microphenomenology is going 'up', it is developing abstractions of lived experience. And these abstractions are not an end in themselves, they have to interact with other abstract hypotheses and theories (of other origins than microphenomenology) to have theoretical and eventually also practical impact. Now, interpreting microphenomenology as an abductive process opens a straightforward way to make sense of this interaction by fitting it continuously into an abductive understanding of inquiry that may extend both beyond the micro-level and beyond the phenomenological domain. This follows from the broadened interpretation of ATOM, in which 'phenomena detection' does not have to be inductive, but can also be abductive (see §32 above). Accordingly, if we understand empirical (micro)phenomenology as abductive, it may serve as a method for 'phenomena detection' in this context of broadened abduction. In other words, microphenomenologically produced structures may be taken as evidence for further research employing other methods and drawing also on other kinds of evidence.

On the one hand, this opens the possibility to a 'meso'- or 'macro'-level of phenomenological inquiry into experiential structures with greater temporal expansion, possibly making use of constitutive explanation (see §27 above). On such a 'meso'- or 'macro'-level, it is to be expected that other types of evidence apart from interview data have to be admitted to empirical phenomenology. Microphenomenological evidence is most likely too fine-grained for meso- and macro-research questions and problems (although microphenomenological results may serve as evidence, in turn). Of course, we may not expect the same standards of validation to hold for this wider evidence base for inquiry into the invariant structures of lived experience. In this vein, Kordeš, when discussing the question whether we may actually find invariant structures of experience, holds that '[t]here is only one way for us to find out: to allow (at least at the start of such a research endeavour) for data that are not necessarily intersubjectively validated' (Kordeš 2016: §39). Thus, all kinds of evidence from other sources than microphenomenology may play a role: empirical observation and inductive generalization, but also anecdotal evidence, imagined or real life-world examples, literary descriptions, thought experiments, and, last but not least, the descriptions on the invariant structures of lived experience proposed by classical phenomenology (understood, of course, as abductive hypotheses) – anything that might be of help from 'our total evidence[...] includ[ing] whatever knowledge the natural and social sciences, philosophy, and common sense have already gained', as Williamson has it (Williamson 2016: 268, see full quote in §30 above). This has of course to be taken with the caveat that that we may actually err in what we take to be our 'knowledge' (Williamson 2016: 278-280) and that not any kind of knowledge may serve as evidence for any kind of question – it has to be argued that certain evidence is relevant for certain questions. Above that, in being linked back to and controlled by microphenomenological evidence and results, this widened evidence base gains an important instance of control and adjusted methodological tools for intersubjective validation.

On the other hand, the integration of (micro)phenomenology with a broader abductive research paradigm opens the possibility to go beyond the phenomenological sphere, to explanatory entities lying 'beyond' the phenomena. More precisely, the generic structures, produced by microphenomenological studies as (hypothetical) results, may serve as 'phenomena' or evidence for further abductive reasoning in the humanities (applying abduction in the wide sense) or in the sciences (applying abduction in the narrow, causal-

¹ [I]ntersubjectively validated according to the high standards set by microphenomenology, that is.

mechanistic sense). So, by producing generic structures of experience as 'phenomena' in the sense of 'relatively stable, recurrent, general features' (Haig 2014: 33, see full quote in \$28 above), microphenomenology may serve as 'phenomenology' in the functional sense that has become common in scientific practice. But note that taking generic structures produced by microphenomenology as evidence is a crucial amendment of this understanding of 'phenomenology'. Microphenomenology offers alternative second-person procedures as complementary to third-person observation and statistical generalization as methods for detecting 'phenomena'. And since inquiry arguably has to start with 'phenomena' (of some kind or other) as evidence, it is to be expected that the integration of second-person evidence will alter the face of the overall inquiry process considerably – by moving lived experience from its position the 'dead angle', described in §4 above, more into the focus of inquiry. This would amount to moving second-person methods into a mediating role for a 'mutual enlightenment' (Gallagher 2012: 314) of third- and first-person accounts. In the conception of inquiry resulting from such an adjusted approach, the first- and the third-person perspectives are meant to place 'mutual constraints' on each other (Bitbol 2002: 182, compare also Varela 1996).

Be this as it may, it should be clear from the argumentation so far that the described continuity of phenomenological and microphenomenological reasoning with abductive inquiry on a 'meso'- or 'macro'-level is not feasible with a necessity-oriented understanding of this reasoning (see §26 above). The necessity-claims produced by such an approach to phenomenology cannot play the role of fallible evidence to be explored further abductively, but only that of background laws or premises for deductive reasoning (which is an overblown aspiration, as the discussion above was meant to show).

4 Pure Experience as a Descriptive Framework for Empirical Phenomenology

As discussed so far, empirical phenomenology, of which I have treated microphenomenology as the main exponent, aspires to go beyond 'armchair' methods for the description and reflection of lived experience. This means that an empirical approach to phenomenology cannot adopt uncritically the conceptual framework in which the preconditions and the results of these armchair approaches (variant as they may be) are formulated.

Section 4.1 argues that most basic categorial framework subtending 'armchair' approaches to experience is the structure of a subject of experience being intentionally directed towards an object of experience. This subject-object duality as a structure that is characteristic of *any* imaginable experiential field, and through which, in turn, any experience has to be categorized. But if we proceed in this way, then we install the subject-object duality as a presuppositionless Given in experience.

As an alternative that is independent of the duality, the approach of 'pure experience' (developed by William James) is proposed in section 4.2. In the pure-experiential framework, subject and object of experience are seen as relational configurations within a basic field of pure experience that is in itself independent of the subject-object duality.

4.1 The Subject-Object Duality and the Categorial Myth of the Given

The three aspects that make up (at least implicitly) the 'phenomenological' framework of analytic philosophy of mind – intentionality, subjective character and qualitative character – have already been discussed above in passing, they are going to be discussed more systematically in §35. Then the parallel notions of noesis, noema and hyle are characterized (§36), and eventually, both frameworks are traced back to a basic subject-object duality as the underlying conceptual schema (§37). Precisely this schema is then argued to constitute a paradigm case of the 'categorial' Myth of the Given. This is discussed with regards to the noesis-noema correlation and a parallel case is made for the analytic framework (§38).

The problems of presupposing the subject-object duality may be circumvented in the context of so-called 'genetic phenomenology', which does not take the subject-object duality as statically given, but tries to describe it as dynamically arising and being sustained in a process within lived experience (§39). Especially, microphenomenology can be understood as a genetic approach of phenomenology in this sense. But, it is argued that the genetic approach only points in a direction beyond the phenomenological myth of the Given, it does not by itself lead there, since it also makes quite substantial assumptions on the nature of experience.

§35 Intentionality, Subjective and Qualitative Character in Analytic Philosophy of Mind

As said above (§4), the objectivitst take on experience characteristic of analytic philosophy of mind frames experience by way of 'mental states', 'properties', or 'occurrences' that are objectively describable states, properties, or occurrences in an objectively describable world (of things). Departing from this, it has been argued above, firstly, that what 'objectively describable' is supposed to mean is actually still open for clarification (§5) and, secondly, that any possible clarification cannot help but being imbued with implicit phenomenology (§16). Accordingly, the basic categories of analytic philosophy of mind are going to be interpreted in the following as broadly phenomenological notions, even though often only implicitly and crudely developed.

The received view in analytic philosophy of mind (received to a great extent from Franz Brentano, who has also informed Husserlian phenomenology) is that every experience has an *intentional*, object-directed, aspect and a *phenomenal* aspect which, in turn, subdivides into a *subjective* and a *qualitative* character. These three aspects are going to be discussed briefly in the following.

Intentionality has already been introduced above as the notion of experience being experience (as) of things – the 'objects of experience'. While this notion has been devised above (§6) to highlight the 'accessive primacy of experience', it is usually employed in the opposite direction, to claim that experience cannot be understood independently of its 'directedness' towards objects. This claim appears as a matter of course from the 'natural attitude' (see §2 above): If experiences are understood as occurrences among pre-given things (figuring as subjects and objects, respectively), then experience is first and foremost an intentional state (even if the experience is only hallucinatory, and there is 'in fact' no object).

Accordingly, in the third-person, 'objectivist' picture building on the natural attitude, intentionality is usually not characterized through reference to an immersive field of lived experience. Rather, intentionality is introduced as an aspect of *mental states* (or events):

'One way philosophers have often explained what they mean by "intentionality" is this: it is that aspect of mental states or events that consists in their being of or about things, as pertains to the questions, "What are you thinking of?" and "What are you thinking about?" Intentionality is the aboutness or directedness or reference of mind (or states of mind) to things, objects, states of affairs, events.' (Siewert 2016: §2)

Lived experience is re-introduced, as it were, into the basic objectivist picture of philosophy of mind only as a secondary aspect, a certain characteristic trait that (at least some) mental states exhibit apart from their intentionality. Accordingly, it is often called the 'phenomenal character' of the respective state. Another way of expressing that a certain mental state has phenomenal character is by saying, somewhat ambiguously, that it is a 'conscious state' (this is ambiguous, because the term 'consciousness' is also used to signify intentionality: intentionality is 'consciousness of' something – this ambiguity may be circumvented by speaking of 'phenomenal consciousness' when aiming to indicate phenomenal character). A state, event, process, or property is said to exhibit 'phenomenal character' (to be a 'conscious state'), if it makes sense to ask or say 'what it is like' to be in that state, to undergo this event or process, or to have that property.

Example. Charles Siewert illustrates the use of the expressions 'phenomenal character', '(phenomenal) consciousness' and 'what it is like' as follows:

'On an understanding fairly common among philosophers, consciousness is the feature that makes states count as experiences in a certain sense: to be a conscious state is to be an experience. Widely (but not universally) accepted examples would include sensory states, imagery, episodic thought, and emotions of the sort we commonly enjoy. For instance, when you see something red, it looks somehow to you; when you hear a crash, it sounds somehow to you. Its looking to you as it does, and its sounding to you as it does are experiences in this sense. Likewise, when you close your eyes and visualize a triangle, or when you feel pain, the visualizing and the feeling are experiences. Similarly, you typically have experiences in thinking about how to answer a math problem, or what to say in an email, in recalling where you parked the car, and in feeling anger, shame, relief, or elation. Experiences in this sense are said to have varying "phenomenal character" for one who has them. [...]

The relevant notion is also often introduced by saying that there is, in a certain sense, always "something it is like" to be in a given conscious state – something it's like for one who is in that state – and what it's like for you to be in a state is what makes it a conscious state of the kind it is.' (Siewert 2016: $\S1$)

Defining lived experience as 'phenomenal character' is a specific kind of conceptually 'squeezing' the term 'experience' (compare §4,§7 above). If considered in this way, lived experience is often treated as being only of secondary importance for understanding some

particular 'mental state' or 'the mind' in general. The actual 'mark of the mental' is thought to lie in its intentional-cognitive function, not in its phenomenal character.

A further common move in the philosophy of mind is to distinguish two aspects of the phenomenal character of a mental state: 'subjective' and 'qualitative character'. The subjective character of experience signifies the idea that a mental state is typically not only an experience of an object, but also for a subject, that is, for me. The 'for me' does not have to be interpreted in a full personal sense, it can also just be 'subjective' in a minimal, pre-personal sense. The qualitative character of a mental state basically stands for everything else that makes up its 'what it is like'-ness. This distinction of subjective and qualitative character is clearly accentuated by Uriah Kriegel:

'When I have a conscious experience of the blue sky, there is something it is like for me to have the experience. In particular, there is a bluish way it is like for me to have it. This "bluish way it is like for me" constitutes the phenomenal character of my experience. Phenomenal character is the property that makes a phenomenally conscious state (i) the phenomenally conscious state it is and (ii) a phenomenally conscious state at all.

The bluish way it is like for me has two distinguishable components: (i) the bluish component and (ii) the for-me component. I call the former qualitative character and the latter subjective character. [...A] phenomenally conscious state's qualitative character is what makes it the phenomenally conscious state it is, while its subjective character is what makes it a phenomenally conscious state at all. Thus, my conscious experience of the blue sky is the conscious experience it is in virtue of its bluishness, but it is a conscious experience at all in virtue of its for-me-ness.' (Kriegel 2009: 1)

The relation between intentionality and phenomenal character is subject to controversy in analytic philosophy of mind. Some consider intentionality as the 'mark of the mental' to be only ascribable from a third-person perspective, denying that intentional states have any 'what it is like' to be in them. Others see deep connections between the phenomenal character of experience and its intentionality. These controversies give rise to a continuum of 'separatist' positions on the one side and '(reductionist or non-reductionist) intentionalist' positions on the other side (compare §7 above, see Siewert 2016 for an overview). But what is widely accepted are the three aspects of experience as basic categories which have to be accommodated in one way or another in the philosophy of mind (and be it by eliminating one in favor of another or reducing one to the other).

§36 Noesis, Noema and Hyle in Phenomenology

While the distinction of an intentional, a subjective and a qualitative aspect of experience is usually introduced in a taken-for-granted manner in analytic philosophy of mind, the phenomenological tradition – as is to be expected – treats this distinction in a more serious and explicit (if not necessarily more straightforward) manner.

To begin with, Husserl took over from Brentano the concern with intentionality, and it has stayed in the focus of the phenomenological movement that came after him. Husserl speaks of intentionality as an issue

'which one can downright designate as the general theme of "objectively" oriented phenomenology [...]. It is an essential peculiarity of the sphere of experience as such insofar as all experiences in some way or other share in it, although we cannot say of *every* experience in the same sense that it has intentionality [...]. The concept of intentionality [...] is a wholly indispensable initial and basic concept for phenomenology.' (Husserl 1913/1976: §84, pp.187,191, own translation following Husserl 1913/1982:

^IMeaning: phenomenology that is oriented towards describing the constitution of objects and objectivity within lived experience (in other words: transcendental phenomenology).

 $199,202)^{I}$

Intentionally as an 'initial and basic concept for phenomenology' is understood, in accordance with the transcendental-phenomenological approach (§13), of course not as a relation between things in the world (as in the natural attitude), but as an occurrence within the field of lived experience.

Husserl characterizes intentionality as an inner-experiential correlation of the intentional object and the aspects of experience 'through' which this object is appearing (or several intentional objects and their respective ways of appearing). The former is also called the 'noema' by Husserl (Husserl 1913/1976: §88, pp.202-205), the latter comprise what he calls 'noesis' and 'hyle', (Husserl 1913/1976: §85, pp.191-196). Roughly, whereas 'noema' can be equated with the intentional object, 'noesis' corresponds to 'subjective character' and 'hyle' to 'qualitative character' as distinguished above in §35. Husserl introduced these Greek expressions as technical terms to indicate their transcendental status.

He claimed that noesis, noema and hyle are discernible through imaginative variation and eidetic intuition (see §18 above), which reveals noesis and hyle as the 'actual components of intentional experiences' and the noemata as their 'intentional correlates':

'If [...] we begin with the most universal distinctions which, so to speak, can be seized upon at the very threshold of phenomenology, and which are determinative for all further methodic proceedings, then with respect to intentionality we immediately confront a wholly fundamental distinction, namely, between the *actual components* of intentional experiences and their *intentional correlates*' (Husserl 1913/1976: §88, p.202, own translation following Husserl 1913/1982: 213)^{II}

The experienced thing considered in the phenomenological stance, as experienced, intentional object, is what Husserl calls the 'intentional correlate' of experience.

The hyle ($\H0\lambda\eta$, 'matter'), in turn, is contrasted to noema and noesis as those 'experiences, resp. the aspects of experience, which bear in themselves the specific trait of intentionality' (Husserl 1913/1976: 192, own translation following Husserl 1913/1982: 203). III These aspects of experience make up the $morph\acute{e}$ – 'form' as opposed to 'matter' –, the intentional structure of experience. The hyle, in contrast, is the non-intentional aspect of experience, it comprises

'certain "sensous" experiences, "sensation-contents" such as color-data, touch-data and tone-data, and the like, which we shall no longer confuse with appearing aspects of things – coloredness, roughness, etc. – which "present themselves" experientially through them. Likewise sensations of pleasure, pain, tickle etc. and presumably also sensations of the sphere of 'drives'. We find such concrete experience-data as components in more comprehensive concrete experiences, which are intentional as a whole, in such way that those sensous aspects are overlaid by a stratum, [...] through which precisely the concrete intentional experience arises from the sensous, which has in itself nothing pertaining to intentionality.'

^IOriginal: 'die man geradezu als das Generalthema der "objektiv" orientierten Phänomenologie bezeichnen kann [...]. Sie ist insofern eine Wesenseigentümlichkeit der Erlebnissphäre überhaupt, als alle Erlebnisse in irgendeiner Weise an der Intentionalität Anteil haben, wenn wir gleichwohl nicht von jedem Erlebnis im selben Sinne sagen können, es habe Intentionalität [...]. Der Begriff der Intentionalität [...] ist ein zu Anfang der Phänomenologie ganz unentbehrlicher Ausgangs- und Grundbegriff.'

^{II}Original: 'Gehen wir [...] auf allgemeinste Unterscheidungen aus, die sozusagen gleich an der Schwelle der Phänomenologie faßbar und für alles weitere methodische Vorgehen bestimmend sind, so stoßen wir hinsichtlich der Intentionalität sofort auf eine ganz fundamentale, nämlich auf die Unterscheidung zwischen eigentlichen Komponenten der intentionalen Erlebnisse und ihren intentionalen Korrelaten'.

^{III}Original: 'die Erlebnisse, bzw. Erlebnismomente, die das Spezifische der Intentionalität in sich tragen.'

(Husserl 1913/1976: \$85, p.192, own translation following Husserl 1913/1982: 203)^I

The first component of the intentional 'stratum' of experience is the *noesis* (from the Greek $vo\tilde{u}\varsigma$, "mind"), as that

'[w]hat forms the matter into intentional experiences and what brings in that which is specific to intentionality [and which] is precisely the same as that which gives talk of consciousness its specific sense: precisely according to which consciousness eo~ipso indicates something of which it is consciousness.' (Husserl 1913/1976: §85, p.194, own translation following Husserl 1913/1982: 205)^{II}

The noesis, as said above, corresponds to the notion of subjective character (in a basic sense) and is also sometimes called, somehow misleadingly, the 'act of consciousness' (misleading, since a noesis does not have to be a active doing, it can also be a passive undergoing).

The second component of the intentional 'stratum' of experience is the *noema* (from the Greek νόημα, "thought", or "what is thought about") as '[t]hat which is "on basis of" the hyletic experiences and "through" the noetic functions "transcendentally constituted"' (Husserl 1913/1976: §97, p.228, own translation following Husserl 1913/1982: 239). III The noema is the intentional object precisely as it is appearing in experience. It is the object of experience, considered not as 'real thing', but transposed into a phenomenological key through the *epoché* (Husserl 1913/1976: §97, p.228, own translation following Husserl 1913/1982: 239).

As indicated above, Husserl speaks of the noema also as the *correlate* of the noesis (or, more precisely, of the unity of hyle-being-formed-by-noesis). Every particular noesis is correlated to a particular noema and types of noeses are correlated to types of noemata:

'Corresponding in every case to the multiplicity of Data pertaining to the actual [reellen] noetic content, there is a multiplicity of Data, demonstrable in actual pure intuition, in a correlative "noematic content" or, in short, in the "noema" [...].

Perception, for example, has its noema, most basically its perceptual sense, i.e., the perceived object as such. Similarly, the particular case of remembering has its remembered object as such, [...] the judging has the judged object as such, liking has the liked object as such etc.' (Husserl 1913/1976: \$88, p.203, own translation following Husserl 1913/1982: 205)^{IV}

§37 The Subject-Object Duality

As we have seen in the previous §35-§36, experience is characterized, in the phenomenological as well as the analytic tradition (which is at least implicitly phenomenological), by

^IOriginal: 'Zu den ersteren gehören gewisse, der obersten Gattung nach einheitliche "sensuelle" Erlebnisse, "Empfindungsinhalte" wie Farbendaten, Tastdaten, Tondaten u. dgl., die wir nicht mehr mit erscheinenden dinglichen Momenten, Farbigkeit, Rauhigkeit usw. verwechseln werden, welche vielmehr mittels ihrer sich erlebnismäßig "darstellen". Desgleichen die sensuellen Lust-, Schmerz-, Kitzelempfindungen usw., und wohl auch sensuelle Momente der Sphäre der "Triebe". Wir finden dergleichen konkrete Erlebnisdaten als Komponenten in umfassenderen konkreten Erlebnissen, die als Ganze intentionale sind, und zwar so, daß über jenen sensuellen Momenten eine [...] Schicht liegt, [...] durch die aus dem Sensuellen, das in sich nichts von Intentionalität hat, eben das konkrete intentionale Erlebnis zustande kommt'

^{II}Original: 'Was die Stoffe zu intentionalen Erlebnissen formt und [...] das Spezifische der Intentionalität hereinbringt, ist eben dasselbe wie das, was der Rede vom Bewußtsein seinen spezifischen Sinn gibt: wonach eben Bewußtsein eo ipso auf etwas hindeutet, wovon es Bewußtsein ist.'

^{III}'Das "auf Grund" der stofflichen Erlebnisse "durch" die noetischen Funktionen "transzendental Konstituierte"

^{IV}Original: 'Überall entspricht den mannigfaltigen Daten des reellen, noetischen Gehaltes eine Mannigfaltigkeit in [...] einem korrelativen "noematischen Gehalt", oder kurzweg im "Noema" [...].
Die Wahrnehmung z.B. hat ihr Noema, zu unterst ihren Wahrnehmungssinn, d.h. das Wahrgenommene als solches. Ebenso hat die jeweilige Erinnerung ihr Erinnertes als solches eben als das ihre, [...] wieder das Urteilen das Geurteilte als solches, das Gefallen das Gefallende als solches usw.'

a structure of a subject (or 'noesis') being intentionally directed to an object (or 'noema'). Over and above this structure, there is the qualitative character (or 'hyle') of the experience in question.

But this 'qualitative character' is basically only superadded to (or rather, underlaid by) the subject-object structure: What can be characterized as a subjective act of intentional consciousness is attributed to the subjective or noetic pole, what can be characterized belonging to an intentional object is attributed to the intentional, object-oriented, or noematic pole. And only what defies clear attribution to either of these poles is categorized as qualitative character or hyle. The status of the qualitative aspect as a mere appendage to the subjective and objective pole in experience makes it plausible to say that what subtends the Husserlian and the analytic framework is the basic opposition of a subject and an object (in some form or other).

'Objectivist' analytic philosophy of mind presupposes the subject-object duality already in a naive sense, since it proceeds from the natural attitude picture of experience-transcendent pre-given things figuring as subject and/or objects of experience, respectively (as in the lifeworldly, common sense picture sketched in §2 above). And this distinction is perpetuated in the 'unofficial', implicit phenomenological picture that is inserted into the basic objectivist framework. Thus, the subject-object duality is not only imposed 'from the outside' on experience (from the third-person perspective of a world of things), but also assumed 'from the inside' (from the mainly unofficial first-person perspective of lived experience).

But also transcendental phenomenology of Husserlian descendancy, which brackets any assumptions concerning 'the outside' of experience, assumes the general distinction of subject and object. In this setting, the subject-object duality is still in place, albeit in a transcendental mode: as a presupposed basic structure of the transcendental field of experience.

§38 The Subject-Object Duality as a Phenomenological Mythical Given

So, what we see both from a Husserlian and from an analytic background, is a presupposition of the subject-object duality as a basic structure. It is taken as basic in the sense that it has to be presupposed to understand any other structure of experience. But simply presupposing the duality in such a way leads into a specifically phenomenological Myth of the Given (going beyond the epistemic Myth discussed in §9 above). Carl Sachs (2014, 2020) and Dionysis Christias (2018) have argued this with regards to the noesis-noema correlation as explicitly developed in the Husserlian tradition. More specifically, Sachs and Christias alike argue that the positing of the noesis-noema correlation as presuppositionless presupposition of all understanding of experience commits what James O'Shea has dubbed in a reconstruction of Sellars' philosophy the 'Myth of the Categorial Given' (O'Shea 2007: 115-116).

O'Shea refers to what Sellars has called in his 1981 Carus Lectures 'perhaps the most basic form of what I have castigated as "The Myth of the Given" (Sellars 1981: 11). This 'most basic form' of the Myth is present, according to Sellars, in any line of thought that includes the idea that '[i]f a person is directly aware of an item which has categorial status C, then the person is aware of it as having categorial status C' (Sellars 1981: 11). In other words, the Myth of the Categorial Given, as O'Shea summarizes it, consists in claiming that there is a

'privileged type of direct awareness, whether intellectual insight or sensory receptivity, that has the following revelatory power: simply being directly aware in that way of something x which is in fact of such and such a kind or sort by itself provides one with the direct awareness of x as being of that kind

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or sort.' (O'Shea 2007: 115)^{I}
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In still other words (Sellars' own), the categorial Myth of the Given holds it to be possible (under the right circumstances, at least) 'that the categorial structure of the world – if it has a categorial structure – imposes itself on the mind as a seal on melted wax' (Sellars 1981: 11, emphasis deleted).

Now, this 'most basic form' of the Myth of the Given can be directly applied in the area of transcendental inquiry, broadly construed (including transcendental phenomenology in the sense expounded in §13 above). Since, as Christias points out, it

'need not follow from this definition [of the categorial Myth of the Given] that what imposes its categorial structure on the mind is radically external to the mind. On the contrary, the "Given" element which imposes its categorial structure on the mind "as a seal imposes an image on a melted wax" may well be the mind *itself*, transcendentally considered.' (Christias 2018: 519)

From a phenomenological perspective, as has been argued above (§13), 'the mind, transcendentally considered' is just another name for the general structures of lived experience. Because the elucidation of these structures is the aim of phenomenology, it has to take the danger of a categorial Given seriously:

'The reason why the Myth of the Categorial Given matters to phenomenology [...] is that phenomenology purports to disclose the mind's own categorial structure. But if the mind is no more given to itself than the world is given to the mind - if our self-understanding is as mediated and fallible as is our understanding of the world - then the Myth of the Categorial Given applies to [...] phenomenology.' (Sachs 2020: 292)

Now, that our understanding of experience is just as mediated and fallible as is our understanding of the world, this is precisely the starting point of what has been developed above as 'empirical phenomenology' (motivated directly from what has been pointed out as the main methodological reason to do phenomenology, namely, 'immersive primacy of experience', see §18 above).

Empirical phenomenology does indeed, as all transcendental-phenomenological approaches, aim 'to disclose the mind's own categorial structure', the intersubjectively invariant structures of lived experience. But this disclosure is not understood as a kind of 'essential intuition', as

'in Husserl's insistence that the essential kinds to which intentional phenomena belong are revealed by eidetic intuition totally independently of their role and use in a public categorial framework transmitted through language from generation to generation.' (Christias 2018: 525)

Against this idea, empirical phenomenology is unified with the critics of the categorial Given in holding that we cannot simply step out of the 'public categorial framework transmitted through language from generation to generation'. This framework is part of the experienced life-world we are immersed in. Thus, the rejection of a categorial Given is directly linked to the notion of immersive primacy that motivates empirical phenomenology. The evolving and constructive character of our conceptual framework means that

'the categorial structure [...] of the mind cannot be somehow directly "read off" or intuited on the basis of the basic descriptive and explanatory concepts [...] we actually employ in our everyday language. Those concepts [...] are [...] not unchangeable essences which put us in direct conceptual contact with the essential categorial structure of [...] the mind.' (Christias 2018: 518)

In this broader context, avoiding the categorial Myth of the Given can be understood as the prime reason for empirical phenomenology to reject the notion of eidetic intuition through imaginative variation. A phenomenological mythical Given in the categorial sense

^IThe categorial Myth of the Given is presupposed by the epistemic Myth, as O'Shea goes on to add: 'The idea of the directly apprehended *categorial* given is "basic" in the sense that, were it not a myth, it is precisely what would provide the mere given with the right cognitive shape to play the foundational evidential role that is envisioned for it in the myth of the *epistemic* given' (O'Shea 2007: 115).

seems to be what stands behind the 'deadlocks' of armchair phenomenology purporting to proceed by intuition of necessary essences (see §18,§31 above).

Now, the categorial structure that is treated as imposing itself on the inquirer's mind in the analytic and phenomenological (and certainly other) traditions alike is the duality that has been detected above (§36-§37): namely, the subject-object duality, or, in Husserlian parlance, the correlation between noesis and noema. Accordingly, Sachs points out that

'in the specifically phenomenological version of the Myth, what is Given is precisely [...] the noesis-noema correlation' (Sachs 2014: 161-162).

If we take the noesis-noema correlation as one of 'the most universal distinctions which, so to speak, can be seized upon at the very threshold of phenomenology, and which are determinative for all further methodic proceedings' (Husserl 1913/1982: §88, p.213, see full quote in §36 above), then it constitutes a mythical Given in the sphere of phenomenology: it has to be assumed *before* all phenomenological reflection as a presupposition that is itself presuppositionless. Therefore, it is not in any way sensibly criticizable by subsequent reflections, and the distinction between correctness and incorrectness indeed no longer makes sense for it – which Christias makes out as the problematic status of the mythical Given (Christias 2018: 516, compare §9 above). Thus,

'the noesis-noema correlation [...] is a clear case of the myth of the categorial Given, in which what is categorially Given is [...] the *immanent correlational structure of* [...] the intentional "poles" [...] (subjective act and objective content)' (Christias 2018: 523).

Concrete interpretations of the subject-object duality or the noesis-noema correlation may differ, of course. What renders any of such specific interpretations categorially Given is the (most often implicit or even inadvertent) ascription of the status as an uncritizable presupposition. In this way, they become

'transcendental (or phenomenological) versions of the Given in the sense that they conceive their distinctive (non-empirical) domain of inquiry as [...] explanatorily self-contained, that is, completely independent of the realm, methods (descriptive and explanatory resources) and self-correcting character of empirical inquiry.' (Christias 2018: 519)

Empirical phenomenology, in contrast, is of course the attempt to implement the program of transcendental phenomenology in a way that avoids such an understanding of its domain and method of inquiry as 'self-contained' by opening it up to the 'self-correcting character of empirical inquiry'.

We may sum up the main line of argument up to this point as follows: it is methodologically indispensable for us to do transcendental phenomenology of some kind (§16), but the very reason for this, immersive primacy (§12-§13), also urges us to do phenomenology in a way that avoids the Myth of the Given (§9). And proceeding from the subject-object duality in a transcendental-phenomenological setting renders us susceptible to the Myth of the Given in its categorial and subsequently also in its epistemic form.

The case is more ambiguous for analytic philosophy of mind, mainly because its exponents are not clear about the status of the subject-object duality in their methodological approaches. But it is fair to assume that it plays at least implicitly a phenomenological role. For example, in Kriegel's introduction of subjective character (which constitutes one pole of the subject-object duality) cited above (§35), he seems to presuppose that the categorial distinctions he draws are simply 'plain to see'. This is not only a case of 'implicit' or 'unofficial' phenomenology (see §16 above), but also one that buys into the categorial Given in taking it to be granted that by simply pointing out a case of an experience with a certain 'categorial status C' (with C=subjective character), the readers are 'aware of it as having categorial status C' (Sellars 1981: 11, see full quote above).

§39 Genetic Phenomenology: Fluidizing the Subject-Object Duality

Now, it may be noted that Husserl himself (instead of stopping with the noesis-noema correlation as the ultimate categorial schema) has already opened a way beyond the static subject-object duality that constricts phenomenology as a categorial Given in the form of the noesis-noema correlation. Namely, Husserl saw the noesis-noema correlation only as a preliminary result on the level of what he called *static* phenomenology. Already in developing the notion of the noesis-noema correlation, he pointed out that the deeper level of phenomenological reflection is one that does not take the subject-object duality as statically given, but tries to describe it as dynamically arising and being sustained in a process within lived experience (Husserl 1913/1976: §81, pp.181-182). This is the level of reflection that Husserl came to call *genetic* phenomenology (see Husserl 1928-1929/2001: 624-645).

Andrea Pace Gianotta points out that, through aiming to describe the subject-object duality arising in the temporal flow of experience,

'genetic phenomenology "deepens" the analysis of the dual structure of experience, investigating the genesis of the intentional correlation between subject and object. [...F]rom the standpoint of genetic phenomenology, at the heart of experience we find a flow of "primal impressions" (*Urimpressionen*) that are neither subjective nor objective, being the primal dimension on the basis of which the subject and the object are co-constituted in reciprocal dependence.' (Pace Gianotta 2018: 37)

Genetic phenomenology does no longer aim only at an account of how objects of experience are constituted (see §14 above), but also at an account of the 'genesis of the constitution' (Husserl 1928-1929/2001: 644) of object and subject of experience (Pace Gianotta 2018: 38). The subject-object duality is not rejected in principle in the genetic-phenomenological perspective, but only as a static, unchanging structure of experience. It is fluidized, as it were. Taking into account this altered methodological approach in comparison to static phenomenology, Sachs concedes that the noesis-noema correlation as a mythical Given pertains only to static phenomenology, it is not clear whether genetic phenomenology also faces a similar myth-allegation (Sachs 2020: 292).

Now, it seems that the approach of microphenomenology aspires not only for a kind of transcendental phenomenology (as argued in §21 above), but also for a kind of genetic phenomenology. The proponents of microphenomenology seem to have something like genetic phenomenology in view (with an adjusted methodology that incorporates 'second-person' methods). Namely, they suggest that it is possible to detect the 'processes through which these structures arise, and eventually vanish' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §1). In other words, this program

'aims at investigating the very process of separation of the objective and subjective poles [...] within lived experience' (Petitmengin 2017b: §22).

In this way, microphenomenology diverges in its theoretical background from static phenomenology. More precisely, the proponents of microphenomenology try to take the subject-object duality not as primitive, but as being

'created and sustained from moment to moment by a micro-activity [...which] can neither be considered as a subjective process nor as an objective process, since it is from it that the very distinction between subject and object arises' (Petitmengin 2017b: §53).

This places microphenomenology in the context of genetic phenomenology, applied in the context of empirical phenomenology. In this line, Bitbol and Petitmengin express the expectation (or hypothesis) that 'introspection' in the mode of evocation (see §22 above), '[i]f properly carried out', should be able to

'give us renewed contact with the dense and still undifferenciated continuum of experience from which the subject/objet [sic] polarity is ready to reemerge at any moment.' (Bitbol and Petitmengin 2011b:

4)

So, in rejection of the picture traced out above (§35-§37), the microphenomenologists hypothesize that it will be possible to describe experiential processes in which 'the subject/object divide is a secondary byproduct [...], rather than a primary *given*' (Bitbol and Petitmengin 2011b: 126).

But this combination of empirical and genetic phenomenology by itself does not allow us an easy escape from the phenomenological myth of the Given. Note that the high hopes of getting a microphenomenological grip on processes through which 'the very distinction between subject and object arises' (Petitmengin 2017b: §53, see full quote above) rest on substantial assumptions. Namely, the assumption is that microphenomenology is actually applicable to describe such fine-grained 'micro-activities' through which subject and object are 'co-constituted'. At the current stage of its development, it is not at all clear whether this will ever be possible in a sufficiently validated manner.

More generally, we may say that genetic phenomenology does not only open a certain level of description, but also formulates a substantive hypothesis: that there are detectable processes in lived experience through which the subject and the object pole arise. It should be uncontentious that experience is indeed processual and dynamic and that, accordingly, the experienced subject-object duality must also be understood in dynamic terms. But it is not clear that talk of the duality as 'arising', 'being sustained' and 'vanishing' is actually the adequate way of framing this. This methodological assumption already rests on a thesis making a substantive claim on the subject-object duality, namely, that it is dynamically arising (in contrast to just being an underlying structure for the dynamic unfolding of lived experience).

To avoid an interpretation of this thesis as a yet another mythical Given, this time in dynamic terms, we may interpret it as a rival abductive hypothesis to the idea of a statically pre-given subject-object duality in lived experience (see §37 above). But in this way, the 'genetic hypothesis' may of course no longer serve as a descriptive framework, since such a framework would be biased in rendering one of the rival theses (the static one) inexpressible.

Thus, to take over *only* the methodological aspect of genetic phenomenology, the term 'genetic' should not be understood in terms of a *temporal* 'process of genesis' (although we may eventually arrive at such an interpretation), but more generally as pointing to the 'genesis' in the sense of the *origin* of the subject-object duality in the field of experience. And this original field is precisely what is going to be developed in the following as 'pure experience'.

4.2 Pure Experience as a 'Neutral' Descriptive Framework in Empirical Phenomenology

The need for a conceptual framework in empirical phenomenology is described in §40 and pure experience is suggested as such a framework. The pure-experiential approach is further laid out in §41 as a way to make sense of the subject-object duality. The context of the formulation of the pure-experiential approach, the program of 'radical empiricism' is reconstructed as a methodological approach in §42. According to this interpretation, pure experience may be applied in the setting of empirical phenomenology (§43). The challenge of a putative 'mysticism of the imminent' in pure experience is rejected in §44 and an understanding of pure experience as a analogical modeling of experience is sketched.

§40 Pure Experience as a Categorial Framework for Empirical Phenomenology

So far, we have seen how the presupposition of the subject-object duality installs a phenomenological version of the mythical Given (§38) and that genetic phenomenology, though opening a way to move beyond this duality, ultimately also makes substantial presuppositions about it (§39).

Now, to be sure, rejecting the subject-object duality as a categorial Given (as an ineluctable categorial framework for the description of lived experience) does not mean that it is rejected as such. But precisely because the subject-object duality cannot simply be apprehended through some kind of 'eidetic intuition', there are many different ways of understanding it that are, on the face of it, on an equal footing. The natural way to avoid any of these understandings being presupposed as a categorial Given is already sketched by the constructivist approach of empirical phenomenology (see §17-§19 above), which is, as has been argued, best understood as an abductive approach (see §31-§34 above): we may simply take the various subject-object frameworks as abductive hypotheses. But to make different understandings of the subject-object duality comparable as abductive hypotheses in the first place, a common 'neutral ground', a common conceptual framework excluding none of them, is required. If we want to avoid mythical presuppositions, on the one hand, the question accrues what we can assume as a basic categorial framework. Some framework is needed, if we also want to avoid arbitrariness, on the other hand. In short, we need a descriptive framework that avoids the presupposition of a static subject-object duality as well as the illusion of an absolutely presuppositionless description and analysis of lived experience.

Thus, empirical phenomenology in general and microphenomenology in specific face the desideratum of a conceptual framework in which analyses and 'meta-categories' (Petitmengin, Remillieux, and Valenzuela-Moguillansky 2019: §4.2.5) can be expressed. Kordeš notes that there is not yet a stable conceptual basis on which empirical phenomenology may build on. There is no

'coordinated division of the area of research - [...] the units and parameters according to which different researchers compartmentalise experiential space still vary widely today.' (Kordeš 2016: §33)

And to expect a widely accepted conceptual ordering of the area of research may still be premature. As already discussed, empirical phenomenology can be seen as being still on a stage that is comparable to that of early natural scientists 'gathering samples everywhere they went without knowing for certain if they would ever be able to produce a system, i.e., capture the general idea' (Kordeš 2016: §52, see full quote in §34 above). So, what empirical phenomenologists do is collecting experiential data like early modern zoologists collected butterflies. But, to stay with the analogy, even for butterfly collection, some systematicity is needed. And this systematicity requires adequate tools: a way of catching butterflies without damaging them in the process, some device to order and preserve them, and a taxonomy to describe their kinds with similarities and differences. With the microphenomenological interview and analysis method, we already have something like a butterfly net and a frame for putting up the specimens. But we are still lacking taxonomic methodology.

An early proposal in modern philosophy of a neutral conceptualization of experience that has the potential to serve as a taxonomic framework was made by William James under the label *pure experience* in the context of his mature philosophical approach he called

'radical empiricism' (more on this in §42 below). Radical empiricism revolves around a methodological 'postulate' saying

'that the only things that shall be debatable among philosophers shall be things definable in terms drawn from experience. (Things of an unexperienceable nature may exist ad libitum, but they form no part of the material for philosophic debate.)' (James 1909/1975: 6-7)

This may be interpreted as an expression avant la lettre of the phenomenological attitude of epoché and reduction (see §13 above). Firstly, the expression that '[t]hings of an unexperienceable nature [...] form no part of the material for philosophic debate', although they 'may exist ad libitum' seems to express exactly the neutrality of the epoché: the demand to bracket philosophical assumptions on such transexperiential things. But, secondly, they are of course not eliminated from discourse, as long as they are 'definable in terms drawn from experience'. This may be understood as an expression of the notion of reduction, the tracing-back of things to their mode of appearance. So, we may say that pure experience is 'pure' in the basic sense that it is taken from the perspective of the epoché. And indeed, by chance or by intention, Husserl also applied the term 'pure experience' or 'pure consciousness' in this sense (Husserl 1913/1982: §33,§50). But above that, the expression 'pure experience', as James employs it, also indicates what has been called 'enhanced epoché' in the context of microphenomenology above (§21). Namely, what is bracketed in the framework of pure experience are not only assumptions on the relation of experience to transcendent things, but also assumptions on the subject-object structure of experience itself:

'By the adjective "pure" prefixed to the word "experience," I mean to denote a form of being which is as yet neutral or ambiguous, and prior to the object and the subject distinction.' (James n.d./1988: 26-27)

The Jamesian perspective of 'pure experience' exerts the epoché not only beyond, but also within experience, as it were, with regards to the subject-object duality. This is echoed in the notion of

'microphenomenology [...as] a possible overhaul of Husserlian phenomenology, and this through an epoché carried out on the subject herself.' (Depraz 2020: 508)

As in the parallel case of the 'basic' phenomenological epoché towards the world of things (see §14 above), this 'enhanced epoché' does not mean that reference to a subject- and an object-pole in the description of lived experience is *erased*, but only that it is *bracketed*, it is not taken to indicate a fundamental structural level of experience (although this possibility is also not rejected). That means, especially, that the subject-object duality is not taken as a necessary 'ground level' that any descriptive framework of lived experience has to include (in some form or other) – although of course it may be still be expected to accrue at some higher level of description (and maybe necessarily so). Now, as we are going to see below (§43), the proponents of microphenomenology have indeed made reference to the notion of 'pure experience' as being able to express such an enhanced epoché.

§41 Explication of Subject and Object as Structures of Experienced Relations

It has to be stressed again that the aim of the pure-experiential approach is not to reject the subject-object duality, but to remain *neutral* towards it (and towards the many ways it may be understood). In developing this neutral perspective, James proceeds from what he calls a 'statement of fact' (James 1909/1975: 7), holding that

^IThe notion of 'pure experience' was mentioned by James in his published works only in his *Essays in Radical Empiricism* (James 1912/1976), which appeared mainly between September 1904 and April 1905 and were posthumously published in a collection in 1912, and, above that, in the unfinished book *The Many and the One* (James n.d./1988), which was not published before 1988.

'the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as "real" as any thing else in the system.' (James 1912/1976: 22, emphasis deleted)¹

Thus, the framework of pure experience also proceeds from the distinction between hyle (matter) and morphé (form, structure) in a sense, in distinguishing relations (morphé) and relata (hyle) in experience. But the form-matter distinction is detached from the subject-object duality, the relations in experience do not necessarily have to be relations between a subjective and an objective pole (though they may be). Nonetheless, since some relations have to be assumed as primitive (not as 'givens', but as hypotheses affording descriptive resources), this framework safeguards us from the arbitrariness of a 'presuppositionless description'.

To be conceivable from a phenomenological perspective, the opposition of relation and relata in experience must itself be an experienced one. Thus, the assumption of relations in experience can also be understood as the assumption that the distinction between relational and non-relational experiences is just as immediate as experiential qualities (such as colors, say). James also endorsed this assumption of experienced relationality:

'Radical empiricism insists that conjunctions between them [experiences] are just as immediately given as disjunctions are, and that relations, whether disjunctive or conjunctive, are in their original sensible givenness just as fleeting and momentary [...], and just as "particular," as terms are. Later, both terms and relations get universalized by being conceptualized and named. But all the thickness, concreteness, and individuality of experience exist in the immediate and relatively unnamed stages of it'. (James 1909/1977: 126-127)

One must read closely here not to pass over the central point: Although 'both terms and relations get universalized by being conceptualized and named', they must already be experienced as different 'in the immediate and relatively unnamed stages of [experience]'.

This is admittedly itself an assumption on the nature of experience, but arguably a less restrictive one than the postulation of a subject-object duality (of some kind or other). And with the assumption of relations-in-experience, that is the central idea of pure experience, the subject-object structure

'can easily be explained as a particular sort of relation towards one another into which portions of pure experience may enter. The relation itself is a part of pure experience, one of its "terms" becomes the subject or bearer of knowledge, the knower, the other becomes the object known.' (James 1912/1976: 4-5)

In the framework of pure experience, subject and object (noesis and noema) are seen as relational configurations within a basic field of pure experience. The picture of a subject standing in an intentional relation to an object is not denied but 'reinterpreted' (James 1912/1976: 7) in terms of a neutral domain, namely, pure experience. The subject-object duality, the opposition of

"thought" and "thing"[...], is still preserved in this account, but reinterpreted, so that, instead of being mysterious and elusive, it becomes verifiable and concrete. It is an affair of relations, it falls outside,

In fact, the assumption of relationality as an immediate aspect of experience is what prompted James to dub this kind of empiricism 'radical'. James contrasts his radical version of empiricism to

^{&#}x27;the bugaboo empiricism of the traditional rationalist critics, which (rightly or wrongly) is accused of chopping up experience into atomistic sensations, incapable of union with one another until a purely intellectual principle has swooped down upon them from on high and folded them in its own conjunctive categories' (James 1909/1977: 147).

By admitting relations as part of experience, a fragmentary, atomistic understanding of experience and the consequent problems (how are the atoms integrated?) are avoided from the start.

not inside, the single experience considered' (James 1912/1976: 7). I

Example. James gives the following illustration of subject and object as relational structures in experience:

'As I pause my writing I perceive the rustling of the leaves of a breeze-swept maple hard-by. That rustling has gone on for many minutes, yet I only just notice it. It probably gave me a sensation, but the sensation lapsed immediately, for my Self of subsequent moments ignored & dropped it. What shall we call it? Was it "rustling," or was it "sense of rustling"? Was it a mysterious two headed entity, both in one? What was it? Obviously what we mean by objective "rustling" is just that pure experience; and that pure experience is also what we mean by sense of rustling [...] and if anyone asked us of what kind of stuff [...it] consisted, we should say of just that stuff, of rustle, if you need and appellation. It surely never would occur to us to say that it was composed of two stuffs [...]: of Inhalt and Bewusstheit, namely or of space-filling physical sound, and of non-spatial hearing sensibility. [...] We call the rustling physical when we come to connect it with other features of the tree and with the wind; we call it mental when we connect it with our listening and with the stream of our thinking which it interrupts.

Now the immediately present moment in everyone's experience, however complex the content of it may be, has this same absolute character. It rustles, so to speak. The vastest "field of consciousness," when there, does not yet figure as a field of consciousness or as a reality outside. It figures as just that.' (James n.d./1988: 29-30) \Box

James expresses the idea of understanding subject and object as relational structures in experience also as follows:

'Let us assume that consciousness – *Bewusstheit*, conceived of as stuff, entity, activity, as irreducible half of every experience – is suppressed, that the fundamental [...] dualism [of subject and object] is abolished, and that that which we suppose to exist is only that which until now has been called the *content*, the *Inhalt*, of consciousness.' (James 1912/1976: 267).

What is meant in the passage just quoted with 'content of consciousness', to be sure, are *not* (intentional) 'objects of consciousness'. The content of consciousness or experience is understood more broadly as whatever we may happen to describe as experiential relations and relata.

^IUnfortunately, James tends to express the idea of explicating subject and object as relational structures in experience in a somewhat misleading way. A passage that is representative of this is the following: 'Just so [by standing in certain relations], I maintain, does a given undivided portion of experience, taken in one context of associates, play the part of a knower, of a state of mind, of "consciousness"; while in a different context the same undivided bit of experience plays the part of a thing known, of an objective "content". In a word, in one group it figures as a thought, in another group as a thing. And, since it can figure in both groups simultaneously we have every right to speak of it as subjective and objective both at once' (James 1912/1976: 7, compare James 1912/1976: 12-13).

This formulation is an unlucky one in two respects: Firstly, the expression that experiences can 'play the part of' or 'figure as' things might suggest that we take the experiences to be the things. But that is not the case. Experiences can 'play the part of'/'figure as' things precisely in the sense of being experiences of things. When seeing a fruit, we do not take our visual impression as the fruit, but as a visual impression of the fruit. Secondly, the expression 'a given undivided portion of experience [...] can figure in both groups simultaneously' might be interpreted (as James himself suggests) in the sense that '[t]he self-same piece of experience [is] taken twice over in different contexts' (James 1912/1976: 27). But this can only be meant figuratively. The portion of experience of course occurs once, and thus cannot be 'taken twice over' in actuality, but only in reflection (retrospective or imaginative). In actuality, it either figures in a group of other experiences such that constitutes an object of experience – or it does not, period. Thus, it cannot be 'subjective and objective both at once'. Only if it occurs in conjunction with a certain group of other experiences, it may be experienced as presenting an object, thus being 'objective'. And in conjunction with another group, it may not be experienced this way, thus being merely 'subjective'. But the experience cannot in actuality 'figure in both groups simultaneously'.

^{II}At another instance, James is even cautious of the seemingly innocuous expression 'content', since it may already be suggestive of a subject-object structure, and he thus prefers the expression 'quality'. Discussing the expression that a specific 'feeling' (i.e., an experience) has a specific content, he asks: 'But does it not seem more proper to call this the feeling's quality than its content? Does not the word "content" suggest that the feeling has already dirempted itself as an act from its content as an object?' (James 1909/1975: 15)

The advantage pure experience has as descriptive framework over the subject-object duality (in one of its guises) is that it does not presume any specific aspect of experience as given (which any concrete formulation of the subject-object duality has to do). Something has to be assumed as given, to be sure, but pure experience is much more open than the subject-object framework in this. All it assumes on a general level is, firstly, the distinction between relations and relata in experience, and, secondly, that the relata can be characterized through the relations – which relations and which relata, this is left open for further inquiry.

The framework of pure experience is thus highly permissive concerning the concrete basic assumptions (i.e., which basic relations in experience) to start from. On one occasion, James admits as

'integral members of the sensational flux [...] relations of every sort, of time, space, difference, likeness, change, rate, cause, or what not' (James 1909/1977: 126).

Of course, in any concrete case, we cannot simply proceed on the basis of a permissive '... or what not'. To actually put the idea of pure experience to use, we have propose a system of relations that constitute our concrete conceptual framework for the description and analysis of lived experience. But thanks to the flexibility of pure experiential approach (as opposed to subject-object duality), we do not, with such a proposition, commit us to a substantial account on the subject-object duality. Which set of assumed relations actually serves us best as a conceptual framework can then decided abductively, in close parallel to the procedures of theory appraisal through balancing the 'abductive virtues' (see §29,§33 above). In this way, pure experience may help to express not only the results of empirical phenomenology, but also the presuppositions, hypotheses, and 'meta-categories' that necessarily go into the research as 'factors in the construction of the phenomenon through an interactive process' (Kordeš 2016: §60, see full quote in §17 above). Especially, the relational framework of pure experience may function as a medium which can be molded to express any hypothesis on how the subject-object duality may either be 'given' or genetically constituted in experience.

To be sure, James *did* seem to have a substantive account of the subject-object duality going beyond the mere assumption of a framework of relations and relata. Namely, he may be interpreted (*avant la lettre*, again) as subscribing to the project of genetic phenomenology (see §39 above). This may be seen from his more detailed descriptions of what means with 'pure experience'. Namely, he says:

'The instant field of the present is at all times what I call the "pure" experience. It is only virtually or potentially either object or subject as yet. For the time being, it is plain, unqualified actuality, or existence, a simple *that*. In this *naïf* immediacy [...] it is *there*, we *act* upon it; and the doubling of it in retrospection into a state of mind and a reality intended thereby, is just one of the acts.' (James 1912/1976: 13, see also James n.d./1988: 29, which reads very much like a gloss of the idea of genetic phenomenology)

So, the 'instant field of the present' has for James no inherent or primitive differentiation into subject and object.

Example. In line with this this non-dual notion of the experienced present, Joel Krueger gives in his interpretation of 'pure experience' the following examples of 'the prereflective phenomenological unity of subject and object within the myriad activity situations constitutive of everyday life: gingerly sipping hot coffee, maneuvering our car through traffic, erupting into laughter at a friend's wry comment, intensely practicing our guitar scales, lunging for the bumped wine bottle as it teeters off the table, gently stroking an infant's forehead as we sing a quiet lullaby, and so on. For James, these experiences are "pure" in that, as we enact them, dualistic distinctions such as subject-object or mental-physical are not operative.' (Krueger 2017: 291)

Only through subsequent (experienced) processes ('acts'), a subject-object differentiation is brought about – 'in retrospection', as James puts it. Accordingly, he maintains that

'no dualism of being represented and representing resides in the experience per se. In its pure state, [...] there is no self-splitting of it into consciousness and what the consciousness is 'of.' Its subjectivity and objectivity are functional attributes solely, realized only when the experience is 'taken' [...] by a new retrospective experience, of which that whole past complication now forms the fresh content.' (James 1912/1976: 13)

This clearly resembles the genetic-(micro)phenomenological idea of the subject-object duality being 'created and sustained from moment to moment by a micro-activity' (Petitmengin 2017b: §53, see full quote in §39 above). So, genetic phenomenology may form a bridge to integrate pure experience into a phenomenological perspective. Building this bridge from both sides, Pace Gianotta observes that

'in the light of the genetic inquiry in phenomenology, Husserl seems to admit a "neutral" dimension of experience, which precedes the functional distinction into subject and object. The flow of impressions can be conceived of as a primal dimension of experience that precedes the subject-object duality, as in James' concept of "pure experience". In this way, by comparing Husserl's genetic phenomenology with James' doctrine of pure experience, we see that both lead to the deconstruction of the subject-object duality, finding at its heart a process of co-emergence of the subject and the object of experience.' (Pace Gianotta 2018: 37-38)

Nonetheless, this migration of pure experience into phenomenology via the link of genetic phenomenology must not lead into a genetic version of the myth of the Given. Namely, we still need to avoid the assumption of detectable processes that actually bring about the 'co-emergence of the subject and the object' as being built into the framework of description (compare §39 above). This is not to say that we may not be able to find such a co-emergence, but only that we must not define beforehand what we are going to find.

Luckily, the basic idea of pure experience developed so far (except for the excursion into James' 'genetic account') does not compel us to any assumptions of this kind. Thus, what may be called James' brand of genetic phenomenology is independent of what constitutes the core of the notion of pure experience, namely, the duality of relation and relata in experience. With this distinction, we can make sense of the notion that 'subjectivity and objectivity are functional attributes solely' (James 1912/1976: 13, see full quote above) – they are constituted by functional (experiential) relations among (experiential) relata. No reference to a process of arising is necessary here. And taken in this generality, the framework of pure experience makes it possible to express (and examine) accounts of the subject-object duality as 'genetically arising' and accounts of it as 'primitively given' likewise.

§42 Radical Empiricism and Neutral Monism

As already mentioned (§40), the context of the formulation of the perspective of pure experience is the approach of 'radical empiricism'. James introduces radical empiricism as a philosophical 'Weltanschauung' (worldview) adopted by him. He declares that, '[r]ightly or wrongly, I have got to the point where I can hardly see things in any other pattern' (James 1912/1976: 22). The main tenets of radical empiricism that are of relevance for the present discussion are the methodological 'postulate' (see §40 above) and the 'statement of fact' (see §41 above).

Unfortunately, James' exposition of radical empiricism and the notion of pure experience are fraught with ambiguous formulations. Thus, some of James' descriptions of his approach seem to suggest that he meant it as an ontological position (and 'pure experience', accordingly, as a kind of ontological entity). For example, he introduces radical empiricism as the idea that

'we start with the supposition that there is only one primal stuff or material in the world, a stuff of which everything is composed, and [...] we call that stuff "pure experience" (James 1912/1976: 4).

Formulations like these led commentators to the conclusion that James was proposing his 'world of pure experience' (James 1912/1976: 21-44) as an ontological explication of the 'world of things' (compare §2 above): namely, as positing pure experience – without any substantive qualification as subjective or objective, as mental or material, hence 'neutral' - as the one basic kind of entities in the world (see Höffken and Schrenk forthcoming). This interpretation takes radical empiricism as the claim that all mental and material entities are literally composed out of entities of this neutral kind. Most prominently, Bertrand Russell developed this interpretation into his own 'neutral monism' (see Russell 1921, 1927a, 1927b). Note that in his neutral monism, Russell shifts the focus from the subject-object opposition to the mental-material distinction. According to this 'objectivist' understanding of experience (compare §4 above), he takes a third-person perspective from the start. This is at odds with the way that James develops his version of 'neutral monism' through the deployment of examples in the participatory first-person perspective (compare the quote from James n.d./1988: 29-30 in §41 above). Above that, in the way we have proposed it here (see §2 above), the subject/object-distinction is more basic than the mind/matter-distinction, with 'minds' being ascribed to things that are able to figure as subjects of experience (note also that James speaks of the separate distinctions 'of Inhalt and Bewusstheit' (subject/object) and 'of space-filling physical sound, and of non-spatial hearing sensibility' (material/mental) in the example quoted in §41 above, James n.d./1988: 29-30).

Now, while James already applied the expressions 'neutral' and 'monism' in his writings on radical empiricism (James 1912/1976: 14,269), it is far from clear that he wanted to suggest pure experience as an ontological category in the conventional sense: as a concept picking out entities in a 'world of things' – to which we may then assign a fundamental status of some kind. Casting doubt on this reading, Joel Krueger points out that

'James was at best a halfhearted metaphysician; he ultimately rejects the epistemic possibility of an Archimedean point beyond experience from which we might construct an objective, reality-encompassing system.' (Krueger 2017: 291)

Accordingly, James characterized radical empiricism as a methodological approach with the aim 'to restrict our universe of philosophic discourse to what is experienced or, at least, experienceable' (James 1912/1976: 125, which was interpreted as a kind of epoché in §40 above). Thus, already in the methodological 'postulate' of radical empiricism, James makes the ontologically liberal concession that '[t]hings of an unexperienceable nature may exist ad libitum' (James 1909/1975: 6-7, see full quote in §40 above).

In line with these observations, an ontological understanding of pure experience apparently also contradicts the characterization developed so far: it is no 'stuff', no 'substance', but the fleeting and dynamic present as lived through ('the instant field of the present', James 1912/1976: 13, see full quote in §41 above). Calling it the material or the building blocks for the 'composition' of worldly entities is thus a misleading manner of speaking. Accordingly, James corrects his own 'stuff'-phrasing as being merely figurative:

'Although for fluency's sake I myself spoke early in this article of a stuff of pure experience, I have now to say that there is no *general* stuff of which experience at large is made. There are as many stuffs as there are "natures" in the things experienced. If you ask what any one bit of pure experience is made of, the answer is always the same: "It is made up of *that*, of just what appears, of space, of intensity, of flatness, brownness, heaviness, or what not." [...] Experience is only a collective name for all these sensible natures' (James 1912/1976: 14-15).

The understanding of pure experience as a 'collective name' for any 'sensible natures' indicates already a phenomenological, instead of an ontological, understanding of pure experience. More unambiguous still is the formulation that pure experience 'is made up of that, of just what appears'. This 'just what appears' is exactly not a thing in the

world (compare §2 above), but the field of lived experience (note that James mentions in this context also a *relative* notion, 'intensity', in keeping with the 'statement of fact' that relations in experience are also part of 'just what appears', compare §41 above).

Thus, in contrast to the ontological reading, 'see[ing] pure experience as a *phenomenological* thesis' (Krueger 2017: 291) seems to be a viable interpretation (compare also Pace Gianotta 2018: 41). Moreover, and most importantly for the present discussion, pure experience may be taken as a methodological approach within phenomenology, positing a basic *descriptive* instead of a basic *ontological* category.

The phenomenological understanding of pure experience affords the following straightforward interpretation of the talk of 'a stuff of which everything is composed' (James 1912/1976: 4, see full quote above): That everything, whether subjective or objective, is composed of one neutral 'stuff' simply means that as objects and subjects of experience are constituted in lived experience (which is by itself considered as being neither subjective or objective), in the sense of 'phenomenological constitution' introduced above (§14).

This interpretation suggests that radical empiricism may be understood as a parallel development of 'transcendental phenomenology' (in the expounded wide sense, see §13 above). In this line, Richard Cobb-Stevens maintains that

'James's decision in the Essays in Radical Empiricism to limit all investigation to the realm of pure experience, which he defines as "the world experienced, otherwise called the field of consciousness," [James 1912/1976: 86] is basically the same as Husserl's decision to bracket the natural attitude and replace it with the phenomenological attitude. [...] By focusing on the world as experienced, that is, as appearance, James adopted a properly phenomenological approach [...].

According to both James and Husserl, we have only one world, which can be considered in two ways: either in the way that we understand it in the natural attitude of everyday life and in the physical sciences built on that attitude or in what Husserl calls the "transcendental" attitude, which first pays attention to the ways in which the world presents itself and then reflects on these modes of its appearance. James does not develop an explicitly transcendental methodology. Like Husserl, however, he insists that the properly philosophical attitude for the study of cognition is to focus first and foremost on the experience or manifestation of things.' (Cobb-Stevens 2014: 248)

So, proceeding from the perspective of transcendental phenomenology, it is clear that what is meant with a 'world of pure experience' (in which the difference between subject and object and between materiality and mentality arise as functional/relational ones) is the world as experienced and not the world as such, which ontology aims at.

§43 Pure Experience and Empirical Phenomenology

Having developed and defended a phenomenological interpretation of pure experience, we can now bring this to bear on the project of empirical phenomenology, especially, microphenomenology. In this context, we may note that the proponents of microphenomenology refer to the pure-experiential perspective as an adequate conceptual framework (Bitbol 2016: 232) for the enactive perspective. In line with the transcendental-methodological interpretation developed above (§42), they also refer to it as a 'methodological neutral monism' (Bitbol and Petitmengin 2011b: 2), taking experience as a 'neutral field' that is in itself neither subjective nor objective, but 'simultaneously proto-subjective and proto-objective' (Bitbol and Petitmengin 2011b: 4).

Of course, such assumptions of a 'simultaneously proto-subjective and proto-objective' neutral field are not already established *results* of empirical phenomenology, they are only abstract *presuppositions* (in line with the point made above that empirical (micro)phenomenology cannot start without any presuppositions, see §26 above). Likewise, the possible findings of empirical phenomenology formulated in the pure-experiential framework also acquire this abstract status, because the very intelligibility of such formulations

depends on the background assumptions already made.

But the process leading to these abstractions does not (solely) consist in first-person armchair musings, but (ultimately also) in second-person research that is aimed at being repeatable and intersubjectively evaluable. As argued above (§32-§34), the process of intersubjectively evaluation is best understood as *abductive*. Accordingly, as already suggested (§41), any concrete set of relations assumed in pure experience has to be justified abductively.

Above that, also the *general* framework of pure experience, like any other meta-category or background assumption in empirical phenomenology, ultimately rests on abductive justification – as a fallible hypothesis that has to prove itself in practice. Accordingly, James characterizes his 'neutral monism' in the context of radical empiricism:

'I say "empiricism," because it is contented to regard its most assured conclusions concerning matters of fact as hypotheses liable to modification in the course of future experience; and I say "radical," because it treats the doctrine of monism itself as an hypothesis, and [...] it does not dogmatically affirm monism as something with which all experience has got to square.' (James 1912/1976: 22)

Now, the abductive justification for such general background assumptions as the ones constituting the framework of pure experience is of course more indirect than the justification for more concrete models and hypotheses developed to accommodate certain assemblages of evidence (as, for example, in the case of specific and generic structures in microphenomenology, developed to accommodate the descriptions produced from a certain set of interviews, see §23,§32,§33 above). The framework of pure experience lies on a higher level of abstraction, it rather has the role of a unifying background theory for the concrete empirical-phenomenological results (enabling an integration with other areas of research, as suggested in §34 above). And it still has to prove whether it can fulfill this function with adequate 'consilience', balanced off against its 'simplicity'. Thus, it will have to stand the test of time, in comparison to other possible frameworks for lived experience.

An obvious example for such a comparison may be the subject-object framework. As has been argued above (§41), the straightforward way to interpret the various understandings of the subject-object duality without succumbing to the categorial Myth of the Given is to take them as abductive hypotheses. The argumentation developed above (§40-§41) may be taken to show that pure experience is more consilient than the subject-object duality, making a comparison of the different construals of this duality feasible in the first place.

Conversely, the threat for pure experience is that it may wind up as having a stronger ad hoc character than the subject-object duality: Of course, it does not directly accommodate the 'natural' mode of experiencing oneself as a subject relating to objects. And it may turn out that to accommodate this natural mode of experiencing, a framework of pure-experiential relations may have to make artificial ad hoc assumptions.

Be this as it may, above such comparative 'theory appraisal', for a given concrete set of assumed relations, we may also employ more direct evidence. This does not necessarily have to be evidence as the one produced by microphenomenological studies, which may not be available or adequate in this context. Above that, microphenomenological evidence is, as already said, rather expected to be accommodated only indirectly through the framework of lived experience. Rather, the direct evidence for abductive hypotheses on pure-experiential relations may be expected to be of a more 'anecdotal' nature, as was admitted in the context of broadening abductive paradigm beyond microphenomenology (see §34 above).

§44 Description of Pure Experience

Now, for the sketched integration of pure experience as a descriptive framework into the overall approach of empirical phenomenology to be applicable, we still have to point out

how this description is actually going to be carried out. And in this context, we still have face two challenges, the first of which seems to flow from yet another ambiguity in the characterization of pure experience, while the second is more substantial.

The first challenge is already indicated in the formulation used by James in rejecting a literal understanding of the description of pure experience as a 'stuff', by maintaining 'there is no *general* stuff of which experience at large is made'. In this context, he speaks of pure experience being 'made up of *that*, of just what appears' (James 1912/1976: 14-15, see full quote in §41 above). A parallel formulation is the description of pure experience as 'plain, unqualified actuality, or existence, a simple *that*' (James 1912/1976: 13, see full quote in §41 above).

This 'ostensive' characterization of pure experience may create the impression that the framework of pure experience only allows for non-conceptualized access to experience. And indeed, as Ignas Skrupskelis points out, James seems to use the expression 'pure experience' in two different senses (Skrupskelis 1988: xxi-xxiii), one of which may give rise to this interpretation.

The first sense corresponds to the way in which the notion of 'pure experience' has been developed here so far (§40-§41), namely as independent of the subject-object distinction. Accordingly, Skrupskelis takes pure experience in this sense to be 'defined as experience prior to the subject-object distinction, [...] accept[ing] all predicates except those that would characterize it as subjective or objective' (Skrupskelis 1988: xxii).

The second sense of 'pure experience' takes issue with the characterization as 'a simple that' and goes beyond the first sense. Namely, it takes pure experience to be 'pure' in the sense of being prior to any reflection on it or conceptualization of it. Some of James' formulations do indeed seem to point in this direction. Thus, in one of his later essays on radical empiricism, he gave the following characterization of pure experience:

"Pure experience" is the name which I gave to the immediate flux of life which furnishes the material to our later reflection with its conceptual categories. Only new-born babes, or men in semi-coma from sleep, drugs, illnesses, or blows, may be assumed to have an experience pure in the literal sense of a that which is not yet any definite what, tho ready to be all sorts of whats; full both of oneness and of manyness, but in respects that don't appear; changing throughout, yet so confusedly that its phases interpenetrate and no points, either of distinction or of identity, can be caught. Pure experience in this state is but another name for feeling or sensation. But the flux of it no sooner comes than it tends to fill itself with emphases, and these salient parts become identified and fixed and abstracted; so that experience now flows as if shot through with adjectives and nouns and prepositions and conjunctions. Its purity is only a relative term, meaning the proportional amount of unverbalized sensation which it still embodies.' (James 1912/1976: 46)

This seems to suggest that there is some kind of 'degree of purity' in lived experience, depending on how far it remains pre-reflective and unconceptualized. And only those aspects of experience that are not conceptualized at all are 'pure' in the full sense of the term. On this interpretation, 'pure experience appears to accept no predicates at all' (Skrupskelis 1988: xxii).

Proceeding from this understanding of pure experience, Wesley Cooper argues that the putative 'sub-symbolic ineffability of pure experience' (Cooper 2002: 152) ultimately leads to a 'mysticism of the imminent' (Cooper 2002: 158), making pure experience an item of metaphysical speculation at best. Taking up James' answer to the question 'what any one bit of pure experience is made of' ('It is made up of *that*, of just what appears, of space, of intensity, of flatness, brownness, heaviness, or what not' James 1912/1976: 14-15, see full quote in §42 above), Cooper maintains:

'The way James chose to respond to this question is not entirely satisfactory, leaning too hard on the word that to do what might be called, skeptically, magical reference [...]. The problem is that the conceptualizations having to do with space, intensity, flatness, brownness, heaviness, or whatnot do not

belong to "just what appears" but are rather our conceptual artifacts, leaving the demonstrative that with too much work to do. One is invited to answer the question, "What are you referring to?" a request for a concept, and to answer the question is to falsify pure experience, which is preconceptual.' (Cooper 2002: 176)

On this reading, it seems that pure experience can only be signified by ostension. This seems to leave us with every concrete instance of pure experience as utterly undetermined: '[i]f you ask "what" it is, the only answer is "that" (James n.d./1988: 31) – every (non-ostensive) word more would already be too much. This rules out the possibility to refer with anything more than ostensive signs ('that'), since any further qualifications ('that x')

'do not belong to "just what appears" but are rather our conceptual artifacts, leaving the demonstrative that with too much work to do. One is invited to answer the question, "What are you referring to?" a request for a concept, and to answer the question is to falsify pure experience, which is preconceptual.' (Cooper 2002: 176).

Cooper concludes that James' characterization

'invites a sort of mysticism about pure experience, a Wittgensteinian "What we cannot speak about we must pass over in silence". (Cooper 2002: 157)

This conclusion is of course not acceptable for the application of the perspective of pure experience suggested here. Namely, if no way is found to actually express this perspective verbally and conceptually, then it is practically of no use for any the description of lived experience, which has to make use of concepts.

But from the perspective of the methodological approach developed here so far, the allegation of a 'mysticism of the imminent' depends on an interpretation of the notion of pure experience that is needlessly strong (and most likely also a too strong interpretation of James). Namely, note that the second, stronger sense of 'pure experience' ('accepts no predicates at all') implies the first sense ('accepts no predicates that would characterize it as subjective or objective'): Experience independent of any conceptualization is especially independent of conceptualization into subjectivity and objectivity. But the reverse does not hold. Thus, for the approach taken here, we may safely assume the first sense of 'pure experience', while not subscribing to the second.

Above that, this second sense of pure experience also does not fit the approach taken by James in actually developing his philosophy of pure experience. Namely, he did not refrain from any conceptualization, but he *did* give concrete descriptions of what he meant with pure experience (compare the example from James n.d./1988: 29-30 given above in §41 and also similar 'genetic' descriptions, for example, James 1912/1976: 28-34). And through such descriptions, he hoped to make the subject-object distinction in experience 'verifiable and concrete' (James 1912/1976: 7, see full quote in §41 above). This speaks against the mysticism-thesis. Thus, James seems to have discussed utterly unconceptualized experience as an extreme special case of his general understanding of pure experience in the first sense. Accordingly, he calls this second sense 'experience pure in the [strongest] *literal* sense' (James 1912/1976: 46, emphasis added, see full quote above).

So, the pure-experiential framework does not succumb to a 'mysticism of the imminent' by taking pure experience as absolutely unconceptualized. But it still faces another, similar, and more serious challenge. Namely, the possibility of proceeding from the perspective of pure experience and its implementation in (empirical) phenomenology depend on whether this stance is actually feasible to us, who are accustomed to rely on a subject-object duality not only in a philosophical, but also in an everyday perspective. With these considerations the background, providing a description of pure experience without any 'predicates [...] that would characterize it as subjective or objective' (Skrupskelis 1988: xxii, see full quote above) still appears as a major challenge.

This challenge has already been noticed in the context of empirical phenomenology: As

said above (§42), the microphenomenologists approve of the pure-experiential perspective in the sense of a 'methodological neutral monism' (Bitbol and Petitmengin 2011b: 2) as a viable conceptual framework. But they also note in this context that

'any variety of neutral monism stumbles on a major difficulty which apparently bears on vocabulary but might reveal a deeper epistemological problem. The difficulty is in finding a proper denomination for the neutral domain out of which dualities are supposed to arise. In fact, virtually all such denominations are themselves caught into the dualistic polarity they purport to avoid.' (Bitbol and Petitmengin 2011b: 4).^I

And this entanglement with the subject-object duality is not surprising, since,

'as it has repeatedly been pointed out after Wittgenstein, discourse on experiences cannot be primitive. It is one of the most elaborate kinds of discourse, because it is based on a background acceptance of ordinary language and reference to public objects.' (Bitbol 2002: 216)

Thus, while experience has practical primacy (in an immersive, accessive, and foundational sense, see §6-§16 above), 'it remains discursively secondary' (Bitbol 2002: 216). Our commonsensical, natural attitude is directed towards things, not experiences (compare §2 above). Accordingly, it is no surprise that our natural language is not made to talk about experiences, but about things 'behind' the experiences – or, as James puts it: 'the concepts we talk with are made for purposes of practice and not for purposes of insight' (James 1909/1977: 131). And, as has been argued above (§2), the common way to understand the interrelations of things is as subjects and objects.

This means, more generally, that we cannot attend to or reflect upon experience independently of its being experience of objects and for subjects. Also Husserl makes it clear, employing his noesis-noema-terminology, that

'we can designate all these noetic components [of an experience] only by appealing to the noematic object and its features; thus saying, for example: consciousness, more particularly, perceptual consciousness, of a tree trunk, of the color of the trunk, etc.' (Husserl 1913/1976: $\S97$, pp.227-228, own translation following Husserl 1913/1982: 238)^{II}

So, even when developing a phenomenological perspective and manner of speaking that goes beyond the natural attitude, the basis we have to rely on is still the ordinary, thing-oriented natural language employed in that attitude. Especially, the order of discursive primacy (that goes exactly in the reverse direction of immersive primacy) holds also for the conceptual framework of pure experience, which is aiming at the description of (structures of) experience independently of the subject-object duality. Thus, the only methodological option to 'get into' talking about pure experience is to use expressions that are originally geared towards things, and not experiences.

The discursive primacy of thing-talk leads to an inevitable objectification of experience in phenomenological description and reflection. Again, this is already noticed in the methodological considerations of Husserl: He points out that in phenomenological reflection, we talk and think about experiences as we talk and think about things,

'whereby we treat the experience as an object like any other, inquiring about its pieces or non-selfsufficient moments'. (Husserl 1913/1976: $\S88$, p.202, own translation following Husserl 1913/1982: 213) III

¹Compare: 'Subsequent commentators considering [...] James' [discussions] of "pure experience" have found it extraordinarily difficult to say just how it is that we can deploy these descriptions of immediate and primary experience without specifying them in terms of the outworn dualisms of mind and reality or subject and object that [...they are] supposed to help us overcome.' (Koopman 2007: 698)

^{II}Original: 'All diese noetischen Komponenten können wir auch nur so bezeichnen, daß wir auf das noematische Objekt und seine Momente rekurrieren; also etwa sagen: Bewußtsein, näher Wahrnehmungsbewußtsein *von* einem Baumstamme, von der Farbe des Stammes usw.'

^{III}Original: 'wobei wir das Erlebnis als Gegenstand behandeln wie irgendeinen anderen, nach seinen Stücken oder unselbständigen [...] Momenten fragend.'

And also, as already pointed out above (§17), the constructivist second-person approach to phenomenology includes such an (inevitable) objectification of experience. It is not left in some kind of 'pristine', non-conceptualized and non-objectified form, but described in terms we are also used to apply to things.

Especially, microphenomenology is forced to observe the discursive primacy of thing-talk over experience-talk, since it starts with descriptemes that include 'ordinary language and reference to public objects' (Bitbol 2002: 216, see full quote above). Moreover, the microphenomenologists suggest that the definition of experiential structures may be the basis for 'a disciplined and collective use of metaphor' in the description of experience, as opposed to 'free metaphors as in poetic expression' (Petitmengin and Bitbol 2009: 388). Bitbol describes this as building on the 'standard strategy' for talking about lived experience, which proceeds by

'using ordinary language enriched by "folk-psychological" vocabulary, and then deflecting it from its standard use by way of evocative metaphors [...]. When others feel that they have recognized a similar lived episode in themselves, simply by listening to our metaphors [...], the intersubjective understanding can be considered a success. This standard strategy of using the [...] subject-to-object lexicon as an oblique tool to enable an experiential subject-to-subject communication, is then amplified and systematized by phenomenology' (Bitbol 2021: 146)

This use of metaphor transfers terms from manners of speaking about *things* to the domain of speaking about *experience*. And, as already argued above (§33), this (inevitable) metaphorical way of presentation may be interpreted as analogical modeling of experience with things as the 'source' of the model.

Now, these consideration pertaining to the discursive primacy of thing-talk and the inevitability of metaphorical speech (or 'analogical modeling') of course also have to apply to the framework of pure experience. More specifically, in the setting of pure experience, the categories of *relata* ('portions of pure experience', James 1912/1976: 4-5, see full quote in §41 above) and *relations* (among 'portions of pure experience') can of course only be modeled on relations between things (taken in the 'natural attitude') as the 'source' of the model.

We may even say, more generally, that the concepts of 'relation' and 'relatum' in a philosophical application (phenomenological or other) arguably always have to be motivated and developed in their application to everyday things with such concrete examples.

Example. 'The relata grape and table (material things) stand in the relation of lying on', 'The relata Othello and Desdemona ('things with a mind') stand in the relation of being in love with', 'The relata falling of the glass and breaking of the glass (events) stand in the relation of being earlier than', and so on.

This holds especially for the subject-(experience-)object-relation: we talk of it commonsensically, and only these ways of talking can form the basis for more abstract philosophical conceptions of subject and object.

Example. One grape may stand in the relation to another grape of being spatially situated next to it, being of roughly the same color, of tasting sweeter, and what not. And in the same way, it is natural to say that I, as a subject, may stand in the relation to one of these grapes of knowing it, seeing it, tasting it, and so on. \Box

And via analogy to relations between things (and only in this way, due to the discursive primacy of thing-talk), we can conceive of relations between experiences.

Example. As an example of experiential relations, think of two green patches in the visual field (yes, it's the visual impression of our grapes) having a certain relation of (experienced) spatial proximity and a certain (experienced) relation of resemblance. We can only point out what 'relationality' is by such ostensive examples.

Now, as described above (§28,§32,§33), an analogical model typically includes some degree of abstraction/idealization. This is also to be expected in the modeling of relations

between experiences in analogy to relations between things. In this direction, already James has pointed out that the framework of pure experience has to contain a degree of abstraction. We cannot take into consideration any feature of experience that may possibly be characterized as a relation:

'Experiences come on an enormous scale, and if we take them all together, they come in a chaos of incommensurable relations that we can not straighten out. We have to abstract different groups of them, and handle these separately if we are to talk of them at all.' (James 1912/1976: 65-66)

Above that, the analogical modeling in pure experience plausibly also has to include a degree of *idealization* with regards to the 'source' of the model, namely, experiences among things. Thus, as argued so far, we have to start with talking about experiences in the way that we talk about things. But then, it may turn out that we have to deviate from the rules governing thing-talk in order to be able to adequately describe experience. Experiences are not things, after all.

Worldly things are only the source for the pure-experiential analogical models. And as analogical models usually include a degree of idealization, it is to be expected that to develop the descriptive framework of pure experience, we may have to deviate from the way we talk of relations and relata that is 'normal' for things standing in certain relations to each other (such deviations may possibly pertain to relations and relata in general or to specific ones). As James puts it, an '[a]busive use of language' (James 1909/1977: 4) may be required to express statements about lived experience. That is, the framework of pure experience comprising experiential relations and relata may make it necessary to include certain characterizations of these relations that would lead into incompatibilities in the 'source' domain of relations among things (see §49,§54,§59 below for examples).

Now, the sketched approach of modeling relations and relata in experience on the 'source' of relations among things taken in the 'natural attitude' contains the key to a 'neutral denomination' that is needed for an implementation of the pure-experiential perspective. Namely, the relations among the 'portions of pure experiences', though modeled on relations among things, do not depend on the specific content of experience, thus not on the specific subject and object(s) that may figure in a specific experience. They are in this way independent of the subject-object duality – provided that no primitive subject-object relation is itself assumed as an experiential relation (as, for example, Husserl's noesis-noema correlation, compare §36 above). Such neutrality is possible in a straightforward way by modeling the most basic experiential relations on relations between things which are not ones between subjects and objects.

Example. The relation of similarity mentioned above would be an example of a relation that does not 're-introduce' a subject-object duality into the domain of pure experience. \Box

Thus, the relation-relata 'meta-model' (or 'meta-metaphor') may serve as a framework to systematize more concrete first-order descriptions of experience in a way that is independent of the subject-object duality – although the concrete descriptions themselves may of course be oriented towards subjects and objects.

And interpreting this analogical modeling as part of an overall abductive approach to empirical phenomenology allows us to make use of the wide evidence base (as already suggested in §43 above). Especially, to motivate the assumption of certain experiential relations in our relation-relata 'model', we may point to 'anecdotal' evidence 'not necessarily intersubjectively validated' (Kordeš 2016: §39, see full quote in §34 above); that is, imagined or real life-world examples – and in fact, when developing such a general model, it is to be expected that we have to rely on such evidence.

Example. As in the motivation of an experiential relation of resemblance in the example with the two grapes above. \Box

That such examples are 'contaminated' with reference to subjects and/or objects (thus, not describing 'pure' experience) does not pose a problem to the implementation of the pure-experiential perspective, as long as the subject/object-reference is abstracted from in the subsequent characterization of the experiential relations (for more the implementation of this procedure, see §57 below).^I

Now, understanding the pure-experiential descriptive framework as a relation-relata 'meta-model' entails two questions concerning the implementation of this model. Firstly, how can we conceive of relata and relations in experience in general? This question concerns what we might call the 'metaphysics' of experiential relations and relata (modeled on relations among things). Secondly, which specific relations can we assume and which descriptive tools can we apply? This question is again more on the methodological level of the pure-experiential approach. In the two ultimate chapters, respectively, tentative answers to these two questions of implementation are going to be discussed.

^IIn parallel, also the inevitable fact that the evidence of empirical phenomenology (descriptemes in the case of microphenomenology) is 'contaminated' does not exclude the pure-experiential perspective, as long as the authenticity of the descriptions is validated (in the constructivist sense, see §24 above) and the subject/object-reference is abstracted from in interpreting the analysis results (and the pure-experiential relation-relata model may show a way how precisely this is possible).

5 Metaphysics of Pure Experience

As developed in the previous chapter, the descriptive framework of pure experience is meant to be independent of presuppositions on 'things of an unexperienceable nature' (James 1909/1975: 6-7, see full quote in §40 above), but it has to proceed on some assumptions on the nature of lived experience.

The most central of such 'metaphysical' assumption of the pure-experiential framework is constituted by the notion of an all-encompassing relationality of experience. This notion engenders the distinction between relational and non-relational, individual 'bits' of experience. As a basis for the descriptive framework, in section 5.1, the possible ways of understanding this assumption, that is, of construing experiential individuals and relations and their interplay, are sketched and compared.

Above that, the pure-experiential approach has to take the present experienced moment as point of departure. Temporal (and possibly continuous) structure is a central feature of experience. To get a clear account of (pure) experience, an overview of the feasible accounts of the temporal structure of experience is provided in section 5.2.

§45 Radical Empiricism and Metaphysics

Before starting with the discussion, some comments on the notion of a 'metaphysics of pure experience' may be due. It may seem strange to bring up 'metaphysics' in the overall methodological approach pursued here. After all, in trying to exert epoché, phenomenology is trying to put metaphysical statements in brackets (see §14 above), and radical empiricism was interpreted above (§42) to follow the same path.

But in a wide sense of the term 'metaphysical', also the radical-empiricist (or phenomenological) framework of pure experience has to rest on certain metaphysical commitments. Namely, any suggested manner of speaking about experiences also amounts to some statement on the very nature of experience. Methodology has to rest on certain assumptions on the nature of that which is taken as methodological point of departure (lived experience, in this case). And such assumptions may be called 'metaphysical'.

Within the framework of pure experience, James made room for exactly that, as David Lamberth observes:

'James capitalizes on a certain ambiguity - even an ambidextrousness - of the term "experience." On the one hand, experience can be treated conceptually, and ultimately, *metaphysically*. In this case it can be dealt with objectively, as a complex "thing" or an environment, composed of an irreducible complex of certain genera of contents and including within it various kinds of relations. [...] This does not exhaust the meaning of experience, however, for it can also be taken *phenomenologically*, indicating a subjective state brimming with particularity, intimacy, and concreteness, be it conceptual or sensory.' (Lamberth 1999: 26)

The 'subjective state brimming with particularity, intimacy, and concreteness' is what has been called the immersive field of lived experience (see §12 above). As a practice that enables authentic accounts of immersion, in the context of empirical phenomenology, the microphenomenological interview enabling a state of 'evocation' has been proposed (see §22 above). Treating experience 'objectively, as a complex "thing" or an environment', on the other hand, can be seen in the modeling of experience in the structures abstracted through the analysis process (see §23,§44 above). As has been suggested in this context, the pure-experiential perspective affords something like the most general model for phenomenological descriptions. It constitutes a 'metaphysical' background model for less general ones (generic structures of certain types of experience produced in certain studies, for example). In this sense, we may understand the expression that in the pure-experiential framework, experience may be treated 'ultimately metaphysically'. So, the evocation of singular expe-

riences in interviews and the 'metaphysics of pure experience' form two extreme poles in the practice of empirical phenomenological research, the first being the most concrete, the second the most abstract.

And on the 'metaphysical' level, we can ask the question: what is the general nature of (pure) experience? If we understand metaphysics to be the locus for questions of general nature, then an answer to this question amounts to a 'metaphysics of pure experience'. This is a minimal sense of 'metaphysics of pure experience'. Even a critic of the term, such as Charlene Haddock Seigfried (2001), would have to accept it as legitimate. She admits that '[b]esides being only a methodology, [...] radical empiricism also includes some assumptions' (Haddock Seigfried 1990: 319) — assumptions on the nature of pure experience, that is. Thus, to establish pure experience as a descriptive framework, it is necessary 'to raise to a metaphysical level the implications of [the] methodological thesis of radical empiricism' (Lamberth 1999: 25) — to indicate which 'metaphysical' assumptions a pure-experiential perspective is committed to.

Since a metaphysics of pure experience is concerned with the nature of experience, and only with that, it does not appeal to any transexperiential entities (and insofar remains within the boundaries of the epoché). Such an appeal is of course common in usual metaphysical reasoning (and a constant stumbling block for many pragmatically, empirically, or phenomenologically minded philosophers). To be sure, if metaphysics is understood in such a way that its area of investigation is the nature of just any entity, experiential or transexperiential, or even only of the nature of 'reality' as opposed to 'appearances', then 'metaphysics of pure experience' cannot count as metaphysics proper (compare Haddock Seigfried 1990: 325-326,329,348-350).

The phenomenological treatment of (pure) experience, in turn, may gain descriptive power and clarity from making the 'metaphysical' assumptions of the pure-experiential perspective explicit. Conversely, the phenomenological perspective provides the ultimate 'evidence' for metaphysical modeling of experience:

'The naive, phenomenal level of concrete experience not only is a pre-condition of formalizations but it [...] ought to have the final veto on theoretical explanations both to keep them from going into business for themselves and to prevent them from being life-denying.' (Haddock Seigfried 1990: 329)

This is another sense in which the approach of pure experience is radical empiricism: It eventually has to treat its own 'formalizations', its metaphysical characterizations of pure experience, as mere fallible hypotheses liable to the 'naive, phenomenal level of concrete experience'. In effect, this approach is striving for 'holistic metaphysical systematicness', but 'in a fallibilistic, functional mode' (Lamberth 1999: 226). In other words, in the radical-empiricist approach to pure experience, which we may also call a phenomenological approach (see §42 above), 'metaphysics gets invoked as just one among many of the tools we postulate in describing and developing experience' (Koopman 2007: 700). And in this sense, we are going to sketch the options for a 'metaphysics of pure experience' in the following.

5.1 Relations and Relata in Experience

The most fundamental 'metaphysical' distinction of the framework of pure experience is constituted by the notion of an all-encompassing relationality of experience. This notion engenders the distinction between relational and non-relational, individual 'bits' or 'portions' of experience. We are first going to consider the possible ways how to conceive of the individual experiences in §46, and then examine different construals of relational experiences in §47.

§46 Individual Experiences

The most basic metaphysical questions concerning the individual 'bits' of experience are: Are there finitely or infinitely many individual experiences in a given experiential present? Can one individual experience be included in another one (as a part, as an element, or maybe even in some other way)? And are two individual experiences always strictly differentiated from one another, or may they (synchronically and/or diachronically) 'run into each other continuously' (James 1912/1976: 42)? James is more or less explicit on these questions, and it is far from clear whether his answers are sufficient or even unambiguous. But independent from this, our main concern is not whether James in person actually gave adequate answers, but whether there possibly are adequate answers.

Principally, we may conceive of three possible ways of how the individual experiences within a given experiential present are structured:

- 1. *Unitist*: A basically undifferentiated totality of experience with only *one* individual experience.
- 2. Finitist: Finitely many mutually differentiated individual experiences. In this case, if there is any inclusion-relation between individual experiences, it has to be well-founded, since a non-wellfounded structure has to be infinite.
- 3. *Infinitist*: An infinitude of mutually differentiated individual experiences, possibly in a non-wellfounded structure with (infinitely many) nested differentiations.

A naive interpretation of the unitist option would consist in taking the putative unity of the present at face value. But such an interpretation we can safely exclude as phenomenologically and methodologically inadequate. For a position denying any structure in experience, even 'white noise' would be too much already. Apart from the phenomenal untenability of such a contention, it would lead into a performative self-contradiction. Since, especially, uttering linguistic signs (in thought or speech) has to be an experience. And it has to be an experience that is in some way differentiated from other experiences. If it wasn't, the sentence 'There are no differentiations in experience' could not even be uttered. In some way or another, experience has to be 'many', it cannot be just 'one' in a most literal and naive sense.

With this on the background, the 'unitist' may concede that experience is in fact 'many', but only in a derivative way, while in the first instance, it comes as 'one'. Basically, this can be argued for in two ways:

- a) by the notion of differentiation by acts of consciousness,
- b) by the notion of differentiation in a mereological whole.

Interpretation a) amounts to the idea that the differentiations we are compelled to assume in experience are only *imposed* onto an originally *un*differentiated experience-whole. The entity that 'does' the imposing is the consciousness having the experience. Now, it is a central idea of the pure-experiential approach that such a notion of a consciousness acting upon 'raw' experiential data is in fact an unwarranted assumption. In short, the basic problem with such a consciousness 'acting upon' experience is that it has to be assumed as some kind of transcendental subject – and thus, inconceivable within the framework of pure experience, because this would re-introduce the subject-object duality.

To be sure, in his presentation of radical empiricism, James is more concerned with another application of the idea of a transexperiential consciousness; namely, consciousness being invoked as a 'trans-experiential agent [...] of unification' (James 1912/1976: 23) for

an experience-manifold that is assumed to come as originally disunified (the converse case to interpretation a), in short). But this preoccupation is rather due to historical than to systematic reasons: James took the 'tendency to do away with the connections of things, and to insist most on the disjunctions' (James 1912/1976: 23) to be the decisive weakness of classical empiricism that he sought to overcome with his 'radical' variant. But, in the context of discussing the classical-empiricist, 'disjunctive' way of conceiving of experience, James also touches upon the idea under discussion here (under the label a)). He argues that, once some transcendental consciousness as 'agent of unification' is admitted, one should be ready to allow for a transcendental agent of disunification kind as well:

'[I]f we insist on treating things as really separate when they are given as continuously joined, invoking, when union is required, transcendental principles to overcome the separateness we have assumed, then we ought to stand ready to perform the converse act. We ought to invoke higher principles of *disunion* also, to make our merely experienced *disjunctions* more truly real.' (James 1912/1976: 26-27)

To be sure, James' point is *not* that a transcendental 'higher principle of disunion' is just as plausible as a 'principle of unification', but that both are equally *implausible*. In the pure-experiential framework, both have to count as 'fictitious agencies' (James 1912/1976: 26). Thus, the option of some kind of transcendental consciousness imposing differentiations upon experience (from 'behind the scenes', as it were) is not feasible.

In contrast, interpretation b) does not have to operate with transcendental or transexperiential agencies. On this understanding, the differentiations within the whole of present experience are only derivative, obtaining only among the parts of the whole. The idea is then that a whole as unity may have many parts, but is more basic than the parts. Reasoning about parts and wholes falls within the competence of mereology. Now, mereology is typically motivated by the question whether and how experience-transcendent things may be considered as having parts or constituting wholes. Nonetheless, we may examine how well the part-whole notion may be translated into the experiential sphere, as kind of analogical modeling in the sense proposed above (§44). Achille Varzi explains in his presentation of mereology that

'the very notion of "part" that mereology is about [...] does not have an exact counterpart in ordinary language. Broadly speaking, in English we can use "part" to indicate any portion of a given entity. The portion [...]may be cognitively or functionally salient, as in (1)-(2), or arbitrarily demarcated, as in (3)[...].

- (1) The handle is part of the mug.
- (2) The remote control is part of the stereo system.
- (3) The left half is your part of the cake.' (Varzi 2003: §1)

For present purposes, the two relevant senses of parthood to be discussed are: parts being 'cognitively or functionally salient' or 'arbitrarily demarcated'. And, as it turns out, neither of these can accommodate interpretation b) of derivative differentiation of experience.

First, consider the understanding of parts being 'cognitively or functionally salient'. This is an understanding of 'part' that is already too strong for *derivative* differentiation within experience. Since, if the parts are *cognitively* salient, then there are two options: *Either* the differentiation into parts must be immediately and originally (and not derivatively) given in experience – but this defies the whole unitist cause. Or, to block the immediacy of the differentiation while retaining its *cognitive* status, it must be assumed to be imposed by some cognitive consciousness-agency – but this only puts us back into interpretation a) that we have already excluded.

Second, the construal of parts being 'arbitrarily demarcated' implies that the differentiation of the parts is *not* immediately given as salient. But this goes against the grain of the pure-experiential approach: The 'arbitrary demarcation' is only a *possible* demarcation, and not one that is *actually* given in experience. To be sure, an 'arbitrary demarcation' could of course be *imagined* and in this way occur in actual experience. But this would

already take the mereological unitist beyond merely derivative differentiation: Once you actually imagine a division of the cake in two halfs, your cake-experience is already differentiated. Through imagination, the division of the cake is already experienced (in other words, the division has become 'cognitively salient'). And from the perspective of pure experience, it does not make a difference that this division is 'merely' an imagined one, since imagination-experiences are just as much actual experiences as any others.

All of these considerations come down to the following conclusion: *Actual* differentiation of experience into individuals either comes immediately (and not by some abstract transcendental or mereological principle), or it doesn't come at all. But if this was be the case, how could we even talk about it (or write and read texts about it, for that matter)? In sum, the unitist option cannot be sustained.

It has been argued so far that the pure-experiential framework has to assume a manifold of individual experiences. The subsequent question is whether this manifold is a finite or an infinite one in a given experiential present. In the following, it will be argued that regarding this question, we can basically remain neutral when taking pure experience as a methodological vantage point.

Nonetheless, a substantive account of the nature of experience should opt for either the 'finitist' or the 'infinitist' option. Moreover, a preliminary evaluation of these options is necessary to make clear what the overall possibilities of framing pure experience consist in. A comparison of their respective theoretical virtues is a useful first step in that direction.

To begin with, a proponent of the finitist position option may argue that her position is more parsimonious than the infinitist proposition of an infinity of experiences in every present of one's life.

The infinitist may hold against this that his view is more demanding, but maybe just the only way to go: We always can, at least hypothetically, describe ever-finer differentiations in specific experiences we have. But this is not a compelling phenomenological reason for infinitism: Similar to the mereological unitist option already discussed above, it conflates the (hypothetical) potential to describe arbitrarily fine-grained differentiations of experiences with there actually being ever-more fine grained differentiations. Description is always finite, therefore this proves nothing regarding the existence of a putative description-transcendent infinity of individual experiences.

Further, the infinitist may get into trouble when trying to reconcile his phenomenological position with scientific practice. For, a plausible adequacy condition pertaining to the phenomenological assumptions on the nature of experience is that they must not block the road for an explanatory scientific account of experience (in accordance with the idea of integrating a phenomenological account of experience into a larger abductive scientific project, see §34 above). Thus, a characterization of experience contradicting the basics of cognitive science would be inoperable. And precisely this is the case for the assumption of an infinite experiential present: a finite brain being able to produce infinitely many experiential states at once (or at all) would be hard to account for, to say the least.

Nonetheless, finitism also has to face challenges, as we shall see when trying to 'put' the relations between the individual experiences (see §47 below). At least, the finitst option seems to be in agreement with the spirit that James claims for his pure-experiential approach. He construes empiricism in general (not only his own radical version) as a movement of thought ascending from the particular to the general rather than descending in the opposite direction:

'Empiricism is known as the opposite of rationalism. Rationalism tends to emphasize universals and to make wholes prior to parts in the order of logic as well as in that of being. Empiricism, on the contrary, lays the explanatory stress upon the part, the element, the individual, and treats the whole as a collection and the universal as an abstraction. My description of things, accordingly, starts with

the parts and makes of the whole a being of the second order. It is essentially a mosaic philosophy, a philosophy of plural facts' (James 1912/1976: 22).

Such a 'mosaic philosophy' giving precedence to the particular 'plural facts' of experience is amenable to the assumption that the plurality of experiences is well-founded, in other words: that there are *atomic* experiences. These atoms are not further differentiated into parts, elements or aspects. So, by definition, atomic experiences, granted they exist, do not have any intrinsic differentiation. Especially, atomic experiences cannot be such that they have certain phenomenal qualities as aspects. Rather, they *are* the aspects, the phenomenal qualities. These atomic qualities combine to form the most basic elements, parts or aspects of *conglomerate* experiences (plausibly in some non-arbitrary way). If there weren't such experiential atoms, then there just wouldn't be any ultimate bits to make up the mosaic, as it were.

To be sure, atomism does not lead automatically to finitism. Atomism, in the sense of there being aspects of experience which are themselves not further differentiated into aspects, is compatible with the view that there are infinitely many experiential atoms in a given moment, thus, atomism does not imply finitism (though the converse holds, since finitism is not compatible with the existence of infinitely descending chains of experiential parts/elements/aspects). Nonetheless, an atomic structure of experience is most coherently conceived as a finite manifold: as noted above, finitism has higher initial plausibility than infinitism. This means, plausibly, that one should only go for infinitism if one is compelled to this by specific reasons. A non-wellfounded structure of experience would constitute such a reason (the negation of atomism implies infinitism). Now, in an atomistic setting, precisely such a non-wellfounded structure is excluded. Thus, having already opted for atomism, it makes sense to go for the finitist option.

To be fair, we can only give examples of what atomic experiences are *not*. Even when we posit that there have to be atomic experiences, we cannot point to any portion of experience of which we can *actually* say with certainty that it is atomic. We can never know whether we have actually reached that level with our descriptive capacities (and it is not to be expected, given the richness of our experience in every instant of our lives). This agnosticism towards the atomic

'sets James's neutral monism apart from others which have scientific analysis, e.g. chemical analysis, as a model for their metaphysics. Arguably Russell's and Mach's neutral monism were of this form. James would not have aspired, as Russell did to use analysis to get down in theory, if not in practice, to the ultimate simples of which the world is built.' (Cooper 2002: 158)

To this extent, there is indeed a 'mysticism of the imminent' (see §44 above) in the perspective of pure experience – and on a putatively atomic level of experience, this is only plausible.

§47 Relations of Experience

Now that we have a rough outline of the nature of individual, non-relational experiences, we can turn to the explicit subject matter of the radical-empiricist 'statement of fact' (see §41 above): the *relations* between the individual experiences.

Like many other aspects of radical empiricism, the idea that relations between experiences must themselves be experienced was prefigured in James' earlier work. Already in an essay from 1884 ('On Some Omissions of Introspective Psychology'), he asserts that we have to admit relations as full members of the experiential cast, even if this may possibly mean that we go against the grain of our habitual ways of thinking or speaking:

'We ought to say a feeling of and, a feeling of if, a feeling of but, and a feeling of by, quite as readily as we say a feeling of blue or a feeling of cold. Yet we do not: so inveterate has our habit become of

recognizing the existence of the substantive parts alone that language almost refuses to lend itself to any other use. [...T]he analogy of speech misleads us [...]. The [classical] Empiricists have always dwelt on its influence in making us suppose that where we have a separate name, a separate thing must needs be there to correspond with it; and they have rightly denied the existence of the mob of abstract entities, principles and forces, in whose favor no other evidence than this could be brought up. But they have said nothing of the obverse error, [...] namely, of supposing that where there is no name no entity can exist. [...] Thus the greater and greater accentuation and isolation of the substantive [non-relational] parts [of experience] have continually gone on.' (James 1884/1983: 146-147)

In trying to avoid misguidance by 'the analogy of speech', James in his *radical* empiricism wants to give full right to experiential relations and take them at face value. Now, as with the individual experiences, this brings up the question which place the relations may take in a 'world of pure experience'. There seem to be generally two options:

- 1. A one-kind-world: The relations are individual experiences just as much as the relata.
- 2. A two-kind-world: The relations and individuals are experiences each of an own kind.

As will turn out, these two options are closely connected to the finitism versus infinitism issue regarding individual experiences. And just as in the case of individual experiences, we may remain, on a *methodological* level, neutral towards the two takings of experiential relations. The applicability of the radical-empiricist methodology does not hinge on a decision on these matters.

The first option follows the idea that if the relations are to be taken as primitives of pure experience, then they have to be of the same kind as any other primitives, namely, the individual experiences. Lamberth, for example, seems to embrace this interpretation, when asserting that

'[i]n taking relations as givens – or, more aptly, as ground-level elements – within his system, James commits himself to the notion that relations are in fact themselves *experiences*, members of the collective of pure experience, and even *discrete bits* of pure experience.' (Lamberth 1999: 34, emphasis added)

We may directly deny plausibility to the one-kind-view, since individual experiences just cannot be relating (they are already 'saturated', as itwere). All experiential individuals would come out as unconnected particulars, which is untenable. But at this point, we may still grant more charity to the one-kind-picture to explore all the possible options of framing experiential relations. Thus, the one-kind-proponent may hold that a certain experiential relation holding between some individual bits of experience $a_1, ..., a_n$ may simply consist in another individual experience a_{n+1} that as its content that the relation holds (this seems to be what Lamberth means when he says that relations are themselves 'discrete bits of experience').

The obvious upshot of this position is a Bradley-style regress of relations-as-individuals: Consider some relation R holding between some individual experiences, among them an experience a. Now assume that all relations between experiences themselves were individual experiences. So R has to be taken to be an individual experience distinct from its relata. Nonetheless, it is linking them, so it must itself stand in some relation to them. For instance, assume a relation r_1 to hold between R and a that accounts for R being a relation with the relatum a (among others, possibly). But then, on the assumption that all relations are individual experiences, the same that holds for R and a must also apply to r_1 and a: There has to be some relation r_2 holding between r_1 and a and ensuring their linkage. And so on ad infinitum. In effect, if we take the relations between individual experiences to be individuals themselves, we also must allow for infinitely many individuals in one experiential present. Thus, the one-kind-view implies the infinist option with regards to individual experiences.

In contrast to this, the second option conceives of relations as experiences *sui generis*. This seems to be suggested by the following interpretation of experiential relationality by Marian and Edward Madden who imply a conclusion quite opposite to Lamberth's presented above in §47:

'James strongly endorsed the view that relations are introspectively and ontologically irreducible.' (Madden and Madden 1978: 242, emphasis added)

This means especially that the relations are 'ontologically irreducible' to individual experiences. So, on this reading, relational experiences have to be of their own relational kind.

As already mentioned above (§46), James saw the upside of including relations into experience in the possibility to avoid reference to any transcendental or transexperiential 'agents of unification' for the individual experiences. The relations *sui generis* that by their nature relate the individuals are precisely such agents of unification. They are not transexperiential entities, to be sure, but neither are they individual bits of experience.

The two-kinds-view has the advantage that the relations do not need any further 'glue' in order to hold together with the relata, as it were. They relate, because they are of the 'relating kind'. No further support by any other bit of experience is needed. Thus, the Bradley regress that leads the one-kind picture to infinitism is avoided. In sum, while the proponent of the one-kind-view only has to point to different experiences that are of the same kind, but of which there are infinitely many (due to the Bradley regress), the proponent of the two-kinds-view has to point to experiences of different kinds, of which only finitely many can be assumed.

§48 The Combination of Individuals and Relations

Now, the possible options how we can conceive of individual and relational experiences, respectively, have been sketched. But a complete account of the metaphysics of pure experience has to consist in a combination of these two sketches into one picture. As the discussion has shown, three of such combinations are logically feasible: a finite two-kindworld, an infinite one-kind-world, and an infinite two-kind-world (a finite one-kind-world is not feasible, as argued by the regress-argument in §47 above).

Of these options, an infinite two-kind-world is of little sense, since it is needlessly copious. Since, once one has assumed infinitism in accepting the regress of the one-kind-option, why would one then introduce an additional relational kind of experiences? And conversely, if one has introduced two kinds of experience and attained the opportunity to remain finite, why then assume an unnecessary infinity of experiences?

This means that we are left with two metaphysical 'packages' to choose from: a finite two-kind-world and an infinite one-kind-world. But although there certainly has to be a decision at some point or another to get a complete picture of the 'a world of pure experience', the applicability of it as a descriptive framework does not hinge on this. In both world-pictures, there are individuals, and there are relations, and this is all that is needed for the methodological approach of pure experience. Thus, for the time being, we can remain neutral whether an experiential present comprises finitely many experiences of two kinds or infinitely many of one kind.

^ITo be fair, an *in principle* Bradley regress may also be constructed for the two-kinds picture, in holding that even relations of a *sui generis* kind need relational support. But since this kind of argument can be mounted against *any* application of the relation-relata distinction (which is arguably unavoidable in any context), it does not make any substantive contribution to the case at hand and is consequently set to the side.

And anyway, the relevant question for the pure-experiential methodological program seems to be chiefly what difference each of the two 'packages' has *within* its specific applications. Thus, the decision is best be made on these grounds and not on the preliminary stage of exploring possible pure-experiential world-pictures.

But there is also an assumption on the nature of experiential relations that is generally indispensable for the methodological program of pure experience. It aims at providing a descriptive framework of the whole field of present experience in terms of (experienced) relations among non-relational individual bits of experience. For such a description of experience to be realizable, the relations have to be universal, in the sense of pertaining to all individual experiences of the present moment (to some degree, at least). The existence of such universal relations is a metaphysical commitment radical empiricism necessarily has to make. Of course, it makes little sense to understand such universal relations as holding in the same way between all present individual experiences. This would simply trivialize the relation and render it useless for the distinctive characterization of any individual experience. Rather, what is meant with 'universal relation' here is a relation that holds between all individual experiences in differing degrees.

Example. Take resemblance between experiences, arguably a universal relation among bits of experience (see §60 below). If we simply asserted 'All experiences resemble each other', it would only be a trivial relation. Rather, resemblance has to come in a specific degree for a given set individual experiences (relative to other sets of experiences).

Moreover, a relation that holds between all experiences in a given present (to some degree) also has to be understood as 'universal' in the common philosophical sense of universal properties or relations in that it is *the same*, no matter which different individual experiences are combined by it in specific instances.

Example. Resemblance is the same, no matter whether it is resemblance between a grape and an apple (or, more precisely, between a grape-experience and an apple-experience) or between an orange(experience) and a lemon(experience) and independent of the different degrees of intensity it may come in.

5.2 Temporality and Continuity of Experience

A central feature of experience is its temporal (and possibly continuous) structure. To get a clear account of (pure) experience, it is vital to have an overview of the feasible accounts on these matters. Especially, exploring models of temporal experience may help to clarify the perspective of pure experience (which is a perspective of the experienced present – thus, an account of what is meant with 'the present' surely helps in evaluating this argumentation).

The notions of temporality and continuity of experience are motivated in §49, before different models of experiential temporality are discussed in §50-§54. Arguing for one specific model of temporal experience may not even be necessary, it may already be sufficient to have the relevant alternatives on the table (§55). This opens the possibility to explore the consequences of adopting one account of temporality or another, when actually formulating experiential descriptions in the framework of pure experience.

§49 Temporal Continuity and the Specious Present

When introducing the notion of pure experience above, we have come across a specification by James of what he means with the term: 'The instant field of the present is at all times what I call the "pure" experience' (James 1912/1976: 13, see full quote in §41 above). So, the field of pure experience, into which subject and object are immersed, is *present*

experience. We may say that immersion simply is nothing else than presence. As Michael Silberstein and Anthony Chemero aptly put it:

'Presence can be thought of as temporality or "nowness" itself; there is nothing phenomenologically more basic than the nowness or presence of experience. Perceiver (subject) and perceived (object) are co-dependent aspects of presence.' (Silberstein and Chemero 2015: 193)

There may be other experiential presents before and after the one presently experienced, forming a 'stream of pure experience' (James 1912/1976: 47). And indeed it is common sense to believe there are, but this is of course not itself experienced in the mode of presence. Rather, it is the memory or anticipation of past or future experiences (or, more elaborately, the belief in the existence of past or future experiences) that form aspects of present experience.

Now, as already indicated in the 'stream'-metaphor, what is widely taken as a specific trait of the experiential present is its *continuous* or 'flowing' nature. In the following, we are going to consider different accounts (or rejections) of this dynamic continuity and evaluate in how far they have a bearing on the methodological approach of pure experience.

The continuous and temporal nature of experience was a central topic in James' philosophy of pure experience. 'Continuity' in experience can come in two different ways: qualitatively, as fusing of different synchronic experiences; or temporally, as smooth temporal flow of experience as a whole. James was a proponent of both notions of continuity and his writings are crucial for their introduction into philosophy and psychology. He kept pressing this point with particular vigor within the context of developing his approach of pure experience. Although his presentation remained largely programmatic, it seems a fitting starting point to examine James' understanding of the temporal continuity of experience (for more discussion of 'qualitative continuity', see §59 below). But it has to be noted that his account of continuous experience is not a necessary part of the approach of pure experience. Rather, it is a specific substantive thesis formulated as an implementation of the radical-empiricist program. And as such, it is only one option among others, as we shall see.

James conceived of the continuity of experience by way of what he called 'disjunctive' and 'conjunctive' relations in experience. Already above, we have encountered his statement that '[r]adical empiricism insists that conjunctions between [...experiences] are just as immediately given as disjunctions are' (James 1909/1977: 126-127, see full quote in §41 above). In other words, James insists that disjunctive and conjunctive relations 'present themselves as being fully co-ordinate parts of experience' (James 1912/1976: 22-23). Building on this notion, James understands continuity between two experiences as there being not only a relation of disjunction between them (which is necessary for them being two experiences, arguably), but also a specific relation of conjunction – 'that most intimate of all conjunctive relations, the passing of one experience into another' (James 1912/1976: 23-24, emphasis added), to be precise.

The paradigm case for James of the 'passing of one experience into another' is *temporal* continuity:

'Personal histories are processes of change in time, and the change itself is one of the things immediately experienced. "Change" in this case means continuous as opposed to discontinuous transition. But continuous transition is one sort of a conjunctive relation; and to be a radical empiricist means to hold fast to this conjunctive relation of all others [...]. What I do feel simply when a later moment of my

 $^{^{\}rm I}$ This is how James came to call his notion of a 'stream of consciousness' (James 1890/1981: 219-278) in his presentation of pure experience.

^{II} James understood this equal status of disjunctive and conjunctive relations in experience as a 'generalized conclusion' (James 1909/1975: 7) from the 'postulate', and the 'statement of fact' of radical empiricism (see §40-§41 above), and as the third major aspect of this program.

experience succeeds an earlier one is that though they are two moments, the transition from the one to the other is continuous.' (James 1912/1976: 25)

To adequately describe the continuous change that 'itself is one of the things immediately experienced', James deems necessary some revisionary moves, deviating from the common sense use of language and concepts. As already indicated in the discussion so far, this 'abusive use of language' (see §44 above) consists in an application of the concepts of disjunction and conjunction together: If standing in continuous transition, an individual experience 'hangs together with its very next neighbors in inextricable interfusion' (James 1909/1977: 146), although being separated from them in the same instant. This is 'abusive' with regards to the common sense conceptualization of things being '[t]he same or different' (James 1907/1975: 85): Two things that are differentiated cannot also be undifferentiated. But, what may be plain contradiction when applied to static things may be the only adequate expression when applied to dynamic experiences. Thus, James goes on to assert:

'Of course this *sounds* self-contradictory, but as the immediate facts don't sound at all, but simply *are*, until we conceptualize and name them vocally, the contradiction results only from the conceptual or discursive form being substituted for the real form.' (James 1909/1977: 121)^I

In short, this approach takes continuity to be describable precisely in breaking with the 'normal' application of discriminative concepts that aim at *dis*continuity.

Concerning the account of temporal continuity discussed so far, there is still one important point to consider: As noted above, the perspective of pure experience is that of present experience. Relations that are immediately experienced have to be relations between copresent experiences. As a consequence, the Jamesian account of temporal continuity by means of disjunctive and conjunctive relations has to go against common sense intuitions in yet another way. Namely, the disjunction- and the conjunction-relation that (in concert) constitute the continuous temporal transition have to hold between two experiences in one and the same present. But because there is a temporal transition between these experiences, we also have to assume one of them as 'sooner' and one as 'later'. It follows that, on this account, the present has to be understood as comprised of temporally successive moments.

To be sure, James defended precisely such an understanding of the experiential present. He appropriated this idea under the designation 'the specious present' already in the *Principles of Psychology*:

'[T]he practically cognized present is no knife-edge, but a saddle-back, with a certain breadth of its own on which we sit perched, and from which we look in two directions into time. The unit of composition of our perception of time is a duration, with a bow and a stern, as it were – a rearward- and a forward-looking end. It is only as parts of this duration-block that the relation of succession of one end to the other is perceived. We do not first feel one end and then feel the other after it, and from the perception of the succession infer an interval of time between, but we seem to feel the interval of time as a whole, with its two ends embedded in it.' (James 1890/1981: 574)

James goes on to assert that 'the original paragon and prototype of all conceived times is the specious present, the short duration of which we are immediately and incessantly sensible' (James 1890/1981: 594, emphasis deleted). And in the context of developing pure experience, more than ever, James takes the specious present as central for the un-

^ICompare also: 'We are so inveterately wedded to the conceptual decomposition of life that I know that this will seem to you like putting muddiest confusion in place of clearest thought, and relapsing into a molluscoid state of mind. [...] What makes you call real life confusion is that it presents, as if they were dissolved in one another, a lot of differents which retrospective conception breaks life's flow by keeping apart. But are not differents actually dissolved in one another? Hasn't every bit of experience its quality, its duration, its extension, its intensity, its urgency, its clearness, and many aspects besides, no one of which can exist in the isolation in which our verbalized logic keeps it? They exist only durcheinander.' (James 1909/1977: 114)

derstanding of experience, its dynamic and continuous character:

'The tiniest feeling that we can possibly have comes with an earlier and a later part and with a sense of their continuous procession. [...] [T]here is literally no such object as the present moment except as an unreal postulate of abstract thought. The 'passing' moment is [...] the minimal fact, with the 'apparition of difference' inside of it as well as outside. If we do not feel both past and present in one field of feeling, we feel them not at all.' (James 1909/1977: 128)

James held this account of time-experience to be vital to his account of pure experience. But he provided only a rough sketch on how temporal continuity can be understood by way of disjunctive and conjunctive relations. Furthermore, there are of course alternative accounts of the temporal structure of experience, some of them greatly at odds with the Jamesian picture. And, as shall be argued, the methodological approach of pure experience is actually not committed to any of these accounts.

§50 Models of the Temporality of Experience

For an overview of the current debate, including both positions proposing a continuous specious present and those opposing it, we can may follow Barry Daintons article on 'Temporal Consciousness' from the *Stanford Encyclopedia of Philosophy* (2010). Here, three main types of models for the temporal structure of experience are distinguished, the 'cinematic', the 'retentional', and the 'extensional' model.¹ Dainton sketches them as follows:

'Cinematic Model: our immediate awareness lacks any (or any significant) temporal extension, and the same applies to the contents of which we are directly aware – they are akin to static, motion-free "snapshots" or "stills". Our streams of consciousness are composed of continuous successions of these momentary states of consciousness. In this respect they are analogous to movies, which (as displayed) consist of rapid sequences of still images.' (Dainton 2010: §1.1)

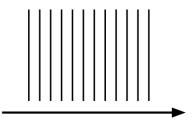


Figure 12: The cinematic model (Figure 1 in Dainton 2010)

'Retentional Model: our experiencing of change and succession occurs within episodes of consciousness which themselves lack temporal extension, but whose contents present (or represent) temporally extended intervals and phenomena. These episodes thus have a complex structure, comprising momentary phases of immediate experience, along with representations (or retentions) of the recent past. Our streams of consciousness are composed of successions of these momentary states.' (Dainton 2010: §1.1)

^IDainton remarks on his typology of models of temporal experience: 'These labels are not standard – in this field there is little by way of terminological uniformity – but for present purposes they will serve' (Dainton 2010: §1.1). And they will also do for the present purposes pursued here.

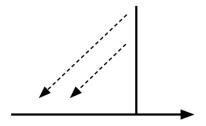


Figure 13: The retentional model (Figure 1 in Dainton 2010)

'Extensional Model: our episodes of experiencing are themselves temporally extended, and are thus able to incorporate change and persistence in a quite straightforward way. Our streams of consciousness are composed of successions of these extended "chunks" of experience.' (Dainton 2010: §1.1)

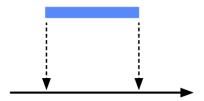


Figure 14: The extensional model (Figure 1 in Dainton 2010)

Dainton furnishes this overview with the remark that '[i]n each of the diagrams the horizontal line represents ordinary clock-time' (Dainton 2010: §1.1). But the appeal to objective 'ordinary clock-time' is of course not warranted in the context of phenomenology. Objectively measurable clock-time is a feature of the thing-world on which the phenomenological attitude exerts epoché (Husserl 1913/1976: §81, pp.180-181). Nonetheless, the structural features of the time-models presented by Dainton can still be interpreted in the mode of epoché, and thus, especially, in the sphere of pure experience (making abusive use language, where necessary). Thus, we can basically ignore the 'ordinary clock-time'-line at the bottom of the figures and interpret the 'subjective' upper part of them in an absolute, pure-experiential way (from a radical-empiricist perspective, it is even misleading to call an aspect of the whole figure 'subjective', since this suggest a subjectivity that is defined in contrast to objectivity – but in pure experience, neither subjectivity nor objectivity are primitively assumed). In accordance with this reading of figures 12-14, the vertical lines in the cinematic and retentional model stand for the contention that the pure-experiential presents do not have any internal temporal differentiation and the horizontal expand in the extensional model stands for the reverse: the pure-experiential present is temporally differentiated into later and earlier moments. We can now turn to a discussion of each of these models, respectively, plus a fourth one (the 'point-extension model'), which is not discussed by Dainton and defies depiction in a static figure.

§51 The Cinematic Model

In the cinematic model, change and persistence are taken not to be directly experienced. Rather, they are considered as a mere epiphenomenon of the fact that 'a typical stream of consciousness consists of a close-packed, gap-free continuum of momentary (or very brief) phases' (Dainton 2010: §4.1). This position denying the immediacy of any dynamic features in our experience is labeled by Dainton as

'Phenomeno-temporal Antirealism^I (*PT-antirealism* [...]): change, succession^{II} and persistence cannot be directly perceived or apprehended.' (Dainton 2010: §1.2)

Conversely, if we assume that experience is in fact immediately given as dynamic, this amounts to

'Phenomeno-temporal Realism (*PT-realism* [...]): change, succession and persistence can be directly perceived or apprehended.' (Dainton 2010: §1.2)

On the one hand, PT-antirealism has less to show than PT-realism: the antirealist does not have to give any account of the experience of change and persistence – it is just this experience that is denied by antirealism. On the other hand, the antirealist has to make plausible why we find it so natural to speak of immediate experiences of change and persistence, if in fact, they do not exist at all (Dainton 2010: §1.2). We are not going to discuss reasons for or against PT-realism and -antirealism here. All that we record so far is that PT-realism, that James considered as imperative (see §49 above), is actually not without alternatives.

Now, as already indicated, within the realism-antirealism dichotomy, the cinematic model quite inevitably falls on the side of antirealism. Dainton discusses the possibility of a cinematic realism, but makes clear from the start that such a position 'does not feature prominently in the literature [...] – and with good reason' (Dainton 2010: §4.1). Since, a putative cinematic realism would have to give an account on 'how sequences of static "snapshots" can give rise to experiences which seem to possess dynamic contents' (Dainton 2010: §4.1). A possible answer in the cinematic model may look as follows:

'[E]ven if our awareness lacks any significant temporal depth, as it does on the proposed model, might it not be that the *continuous* advance of a point-like ray of awareness will generate episodes of experiencing which can encompass change and succession?' (Dainton 2010: §4.1)

But as it turns out, this is not enough:

'For realists it is important to distinguish the experience of succession from a mere succession of experiencings. III An experience of succession involves a temporal spread of contents being presented $together^{IV}$ in consciousness, albeit in the form of a perceived succession rather than simultaneously. [...] Contents which are apprehended as unified in this way belong to a single specious present.' (Dainton 2010: §1.2)

The cinematic model cannot fulfill this requirement, '[s]ince ex hypothesi our awareness does not extend beyond or between momentary episodes of experiencing, there is no scope at all for adjoining phases to be experienced together in the way required.' (Dainton 2010: §4.1) And mere appeal to the fact that the succession of cinematic presents is to be understood as a continuum, in the mathematical sense, does not suffice to make the cinematic model a viable PT-realism. Since,

'as [Henri] Bergson was fond of pointing out, numbers make no difference here: the points in the orthodox mathematical continuum are always entirely distinct from one another, no matter how close together they may be: indeed, since these points are densely ordered, between any two points there is always a further point.' (Dainton 2010: $\S4$)^{VI}

^ITalk of realism or antirealism in this context is of course a bit unlucky, since what the PT-'(anti)realist' is (anti)realist about are not *things* (res), but appearances.

^{II}Dainton uses the expressions 'successive' and 'dynamic' synonymously. For example, in Figure 3 of Dainton 2010, he puts *in* the figure the label 'successive experiential contents' and *below* the figure the label 'dynamic experiential contents'.

^{III}Compare: 'A succession of feelings, in and of itself, is not a feeling of succession.' (James 1890/1981: 591, emphasis deleted)

^{IV}Dainton explicates being experienced 'together' as being experienced 'in just the same way as contents which appear to occur simultaneously, at least within the confines of the specious present' (2010: §4.1).

^VThis is labelled the 'Diachronic Unity Thesis' by Dainton (2010: §1.2).

^{VI}Compare: 'calculus, in substituting for certain perceptual continuities its peculiar symbols, lets us follow changes point by point, and is thus [...]not their *sensible* equivalent. It cannot *reveal* any change to one who never felt it'. (James 1911/1979: 47, footnote 19)

So, the 'orthodox' (set theoretic) mathematical continuum cannot be the adequate model for what we take to be *temporal* continuity (we will come back to this point in the following §52-§54). But this understanding of continuity is the only one available in the cinematic model (qua its reliance on non-extended, pointlike moments). Consequently, the experience of change and persistence (which are inherently temporal) cannot be explicated via this utterly atemporal notion of continuity.

Thus, the natural choice for anyone whom the cinematic account of time-experience strikes as convincing seems to lie in taking the experience of temporal dynamic and continuity as reducible to (or even eliminable in) a non-dynamic phenomenology. Indeed, the cinematic model seems to be the most consequent form of such a PT-antirealism. Accordingly, taking the cinematic metaphor seriously would amount to some picture as the following by Christof Koch:

'Perception might well take place in discrete processing epochs, perceptual moments, frames, or snapshots. Your subjective life could be a ceaseless sequence of such frames [...]. Within one such moment, the perception of brightness, colour, depth and motion would be constant. Think of motion painted onto each snapshot' (Koch 2004: 264).

Thus, the experiential 'snapshots' do not only include the contents of brightness, color, emotional quality, and so on, but *also* the special experiential content 'motion' – which is in itself *just as static* as the color-experiences, say. The (inherently static) 'motion painted onto each snapshot' means in no way that the dynamic aspect of experience is *immediately* given. This position can be taken to the extreme point to deny that we even experience change and persistence at all and that we only have the false belief that we do (as Koch in fact does, see Koch 2004: 265-267).

Furthermore, taking the Bergsonian argument (see the quote from Dainton 2010: §4 above) against a mathematical interpretation of temporal continuity into consideration, it might be the most consistent way for the cinematic PT-antirealist to hold that time-experience is simply discontinuous and fragmented. On this view, experience is continuous neither in a mathematical, nor in some other (phenomenological) way. The timeline of experiences is not structured like the real numbers, but rather like the integers (the rational numbers would already be 'too much', since they are densely ordered like the reals, thus being subject to the Bergson-objection as well).

Such a discontinuous understanding of experience is possible for the case of simultaneous experiences as well. In fact, the notion of discontinuous time experience was introduced by Philippe Chuard (2011) based on Daniel Dennett's proposal to understand *visual* experience as fragmented (Dennett 1991, compare Dainton 2010: §4.5). Thus, it becomes apparent that continuity is not perceived as a must-have by all sides in the debate on temporal experience. Accordingly, Dainton distinguishes three different positions concerning continuity:

'The Discontinuity Thesis: although consciousness is commonly described as continuous, this is wrong: in fact our consciousness is highly disjointed, far more so than most people suppose.

The Modest Continuity Thesis: our typical streams of consciousness are indeed continuous, and this involves (i) freedom from gaps [...] and/or (ii) a significant degree of moment-to-moment qualitative similarity.

The Strong Continuity Thesis: in addition to the relationships encapsulated in the Modest Thesis, the successive brief phases of our typical streams of consciousness are experientially connected.' (Dainton 2010: §3)

The Modest and the Strong Continuity Thesis can be understood as putting forth two different understandings of continuity, one less and one more demanding (with the former being comprised in the latter). Moreover, the specific position towards continuity one may hold also has a direct influence on one's notion of temporal dynamic, of change and persis-

tence. If one is opposed to continuity whatsoever, then change and persistence also turn out as discontinuous (and as merely illusory, most likely). On the basis of Modest Continuity, smooth change and stable persistence can be distinguished from abrupt breaks by the presence or absence of 'moment-to-moment qualitative similarity'. Going beyond that, Strong Continuity prompts the most comprehensive notion of temporal dynamic, which has to include 'experiential connections'. In fact, Dainton asserts that these experiential connections figuring in the Strong Continuity Thesis 'can plausibly be regarded as experienced changes (or successions)' (Dainton 2010: §3). Moreover, these relations can be understood as the continuous 'conjunctions' in the Jamesian sense (see §49 above). And in fact, Dainton cites James as the main source for the development of Strong as well as for Modest^I Continuity.

PT-antirealism (which is basically eponymous with the cinematic model) has to reject the Strong Continuity Thesis: In this framework, there is no room for transitional relations actually being experienced. Such relations would already reach beyond the cinematic present (Dainton 2010: §3).

§52 The Retentional Model

The retentional model is basically an enhanced version of the cinematic model: its operation base is still a continuous line of unextended temporal moments, but these moments now come with special contents of temporal experience that are to account for the perception of temporal continuity and dynamics. These are, namely, the eponymous *rententions*.

These retentions are experiences akin to memory and refer to other experiences that are just past. Rententions differ from memories proper a) in that they cannot be volitionally influenced in principle and b) in that 'they must be more vivid than ordinary memories' (Dainton 2010: §6.2). Above that, c) they have the peculiar quality of pastness, sensibly differing in a range from 'just past' to 'very past' (Dainton 2010: §6.2).

The existence of retentions can of course be granted independently from the specific model of temporal experience that is maintained. What is characteristic of the retentional model is the contention that retentions are necessary and sufficient for the direct experience of change and persistence. Decisive for this claim are properties b) and c). Property b) is 'responsible' for direct experience of temporal dynamic, property c) for the experience of temporal extension. Note that this experience of temporal spread is housed within a non-extended present on the retentional view, making this present a 'specious' one in the sense introduced above. Thus, Dainton goes as far as asserting that '[r]etentional models offer an appealing reduction of diachronic unity to synchronic unity' (Dainton 2010: §6.4, emphasis added). In contrast, the extensional model (see §53 below) takes the 'diachronic unity' of successive contents in a specious present to be primitively given. In sum, we can say that '[t]he Retentional and Extensional approaches can each be seen as implementing James' proposal [of a specious present], albeit in very different ways' (Dainton 2010: §1.1). It may be noted in this context that Husserl was a main proponent of the retentional model. However, his views changed considerably over time and included some variety of the subject-object duality at a constitutive level: either some kind of primitive intentionality (in the earlier view, see Husserl 1893-1917/2009), or a transcendental ego (in the later view, see Husserl 1929-1934/2006). So, the complex Husserlian versions of the retentional model do not fit well with the pure-experiential framework and are consequently not going to be discussed further here.

¹ The transition between the thought of one object and the thought of another is no more a break in the thought than a joint in a bamboo is a break in the wood.' (James 1890/1981: 233-234)

A concrete example of the retentional model is given in figure 15. It depicts the experience of a moving watch hand (fast enough so that the movement can be perceived) in three idealized experiential presents (with sufficiently many presents between them that the movement can be experienced as continuous). In the last of the three presents ('Specious Present = S') the current retentions are depicted. The uppermost retention is experienced as 'more past' than the one below. These retentions are supposed to do the job of creating an experience of a temporally extended, continuous movement.

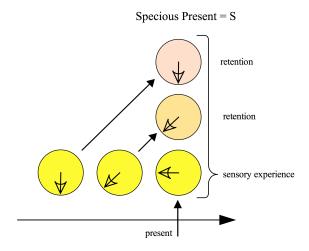


Figure 15: Application of the retentional model (Figure 14 in Dainton 2010)

There is a strong appeal to the notion that what is present is happening 'all-at-once', 'in a moment', and thus is experienced 'together' in 'phenomenal unity' (Dainton 2010: §3). This is easily accommodated by the retentional model, which takes the present to be non-extended. Thus, everything is indeed 'happening at once' here. The temporal extension of experience comes into the picture rather indirectly by way of the retentions.

But this advantage of the retentional model is also its greatest weakness. Since, if the retentional model is to instantiate PT-realism, it has to make room for change and persistence to be directly experienced. But change and succession *are* temporally extended. Thus, if temporal extension is experienced only indirectly 'by way of the retentions', change and persistence quite inevitably have to be taken as experienced indirectly as well. Concerning the example given in figure 15, Dainton observes that 'it was stipulated that you *see* the pointer moving smoothly from half-past to quarter-to', and then poses the rhetorical question: 'Where is the *movement* in S?' (2010: §6.2) In short, this all boils down to what Dainton calls the

'Retentional Simultaneity Problem: how is it possible for a collection of contents which occur simultaneously to seem successive [i.e., temporally extended]?' (2010: §3)

Besides its problem to integrate temporal extension, the retentional model does not seem to be in a good position to meet the requirements of the Strong Continuity Thesis which 'requires [...] experiential or phenomenal connections between neighbouring streamphases' (Dainton 2010: §6.4). To accommodate this requirement poses a challenge to the retentional model, since it has to make sense of the continuous transitions between specious presents and not just within them. In contrast to this, the retentional model is

^IDainton calls this the 'Principle of Simultaneous Awareness [...]: to be experienced as unified, contents must be presented simultaneously to a single momentary awareness' (2010: §3).

'built upon' a basic structure that is the same as in the cinematic model, without any experienced transition between specious presents. This is, in effect, 'tantamount to the denial that phenomenal continuity can connect earlier and later stream-phases' (Dainton 2010: §6.4).

Above that, due to its cinematic substructure, the retentional model is susceptible to the Bergsonian argument against the mathematical understanding of temporal continuity (see §51 above). Dainton discusses this basic objection only the context of the cinematic model. But since the retentional model is based on a cinematic structure, the objection still holds. Moments of time are understood as pointlike, the transition between them still remains mysterious, no matter how much retentional content you feed into them.

§53 The Extensional Model

In contrast to the cinematic and the retentional model, the extensional model takes the temporal spread of the contents within the specious present at face value. By positing the experiential present to be extended, it is perfectly feasible that '[t]he contents of specious presents are often *dynamic* temporal patterns' (Dainton 2010: §5.1, emphasis added). Thus, the extensional model turns out quite naturally as a PT-realism.

The extensional model surely comes closest to an implementation of James' somewhat sketchy ideas of temporal continuity and dynamics (in a modern context, and in a more systematic way than James', it has been advocated by John Foster, for example, in Foster 1991: 247-250, and by Dainton himself, for example, in Dainton 2006: 162-182 and 2009). James' proposal to understand 'the passing of one experience into another' (James 1912/1976: 23-24, see full quote in §49 above) via coterminous disjunction- and conjunction-relations seems to presuppose an extended present: On the one hand, the disjunction- and conjunction-relations generate a temporal extension; on the other hand, they have hold in *one* present – between several 'sub-present' (as we might call it) experiences 'passing [...] into another'.

The extensional model lays the emphasis on the temporal spread of the contents within a specious present. This enables this model to avoid the retentional simultaneity problem (see §52 above), but gives rise to the complementary

'Extensional Simultaneity Problem: how is it possible for contents which are (i) experienced together, and (ii) experienced as present, to be experienced as anything other than simultaneous?' (Dainton 2010: §3)

Of course, extensionalists have to come up with suggestions to solve this problem. But we are not going to discuss them any further. Rather, the more interesting answer to this challenge seems to lie in the point-extension model (see §54 below) that seems to be able to circumvent the pitfalls of both the retentional and the extensional model without great effort.

An advantage of the the extensional model is that it can accommodate the Strong Continuity Thesis in a quite straightforward manner. Extended presents may *overlap*, precisely in virtue of being extended. Consider an extended present P_1 passing into a follow-up P_2 . Now, because P_1 and P_2 overlap, it is possible that 'new' experiential contents come up in the stream of experience, while 'old' ones are still retained (until they eventually pass out). Prolonged with further extended presents P_3 and P_4 , ..., this evolving overlap gives rise to a continuous stream of experiences; or so the story goes:

'By holding that specious presents can overlap by sharing common parts, phenomenal continuity can be secured in an economical manner.' (Dainton 2010: $\S5.4$, compare $\S5.5$)

Figure 16 illustrates this idea by the example of a visual experience of a bouncing ball. The double-headed arrows represent extended presents, respectively, 'each differing from

its immediate neighbours by a just-noticeable difference' (Dainton 2010: §5.4). As in figure

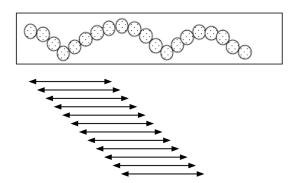


Figure 16: Application of the extensional model (Figure 12 in Dainton 2010)

15 above, this is again conceived as a simplification. In fact, there are to be sufficiently many extended (and overlapping) presents to make for a continuous dynamic.

But with this, the problem of mathematical continuity (see §51 above) crops up again: how do we get from one *extended* present to the next (represented by two neighboring double-headed arrows in figure 16), if there are arbitrarily many between them? It simply shifted by one level to the transition from one extensional present to 'its immediate neighbor': Between each two presents depicted in figure 16, there are, according to the mathematical conception of continuity, infinitely many more presents. Thus, none of them actually has an unambiguously determined 'immediate neighbor'. Actually reaching the 'next' present is just as unclear as in the cinematic and the retentional case.

§54 The Point-Extension Model

A fourth model, which is not discussed by Dainton, departs quite substantively from the way temporal experience is characterized in the models discussed so far. This 'point-extension model' (as presented by Cord Friebe in Friebe 2012: 108-119, based on the account of Gerold Prauss, most recently in Prauss 2015) has been proposed with a broader application than phenomenology. More specifically, this model has been developed in the context of a transcendental approach in broadly Kantian terms (compare §13 above) to motivate an 'objective', metaphysical account of time. In Prauss' and Friebe's approach, this account is to be gained by objectifying the phenomenological, 'subjective' consciousness of time (Prauss 2015: 68-71, 95-98). Nonetheless, this approach starts with an account of the temporal structure of experience, this 'subjective' level is methodologically prior to the 'objective' level (in parallel to the indispensability of phenomenology described above in §16). Accordingly, we may concentrate only on this aspect and interpret it as a model of temporal experience.

The basic idea of the point-extension model is that we are mistaken if we consider temporal dynamics as subsequent moments 'fusing into another' (as the retentional and extensional model are bound to do, see §52,§53 above). There is only *one* present moment with none other beyond into which it could fuse. Temporal dynamic consists in something different than transitions from one to next; namely, it is better described along the following lines: Within the experiential present, any given experiential content does temporally *expand* to something new, but in the same instant, it does also *shrink*, 'inpand', as we might call it. As it is becoming, it is already vanishing. In this way, the experiential

present is like a point^I and like an extension all at once. More precisely, it is constantly in the process of expanding to a extension and inpanding 'back' to a point. In this way, it is equally legitimate to say of the experiential present that it is both a point and an extension, as to say that it is neither of these.

Again, to anyone to whom this might sound contradictory it may be answered that we are talking about *time*-points and *time*-extensions here. And in this sphere, different ways of speaking may have to be employed than in the sphere of *space*-points and *space*-extensions. Some rules pertaining to these may have to be broken pointedly to express temporal dynamics. Spatial points or expanses are not changing, after all. The present, in contrast, does. It is a point *and* and an extension, not in the sense of *being* extended/pointlike, but in the sense of *becoming* extended/pointlike – and in this sense, it *is* actually neither point nor extension, but incessantly in the process of becoming the one as much as the other. This all comes down to yet another a case of 'abusive use of language' (see §44 above), but in another way than the one suggested by James, which includes conterminous disjunctive and conjunctive relations (see §49 above) in an extensional 'specious' present (see §53 above).

As a result, the 'flow of time' is not understood, in the point-extension context, as a relation between different experiences from distinct presents (or from phases of a specious present), transitioning from one to the next. There are no distinct presents (or present-phases), but only one (comprising all experiential relations and relata there may be within itself). And where there are no distinct relata (not even in posse), it makes little sense to speak of a relation. Rather, the present has the nonrelational, absolute feature of being self-expanding and -inpanding.

This also gives rise to an understanding of continuity that deviates from all the accounts discussed so far. Surely, time experience has to be understood as continuous on the point-extension model. But neither the Modest nor the Strong Continuity Thesis do seem to grasp the way that the self-expanding (and 'inpanding') present is continuous in and with itself. Concerning Modest Continuity: The question of gaps vs. no gaps between 'stream phases' does not even arise on the point-extension model, since, again, 'gapping' and 'non-gapping' are relations between distinct relata. Analogously, the Strong Continuity Thesis, by view of the point-extension model, cannot express an adequate construal of temporal continuity, since Strong Continuity is also couched in terms of a transitional relation ('experiential connection') from one 'stream phase' to the next.

Indeed, in opposition to notions of Modest and Strong Continuity, the proponents of point-extension hold that their *nonrelational* model engenders the only adequate understanding of *temporal* continuity. And because the notions of temporal continuity and temporal dynamic are closely intertwined, this means that point-extension also constitutes a special understanding of change and persistence. The proponents of the point-extension model insist that only a conception of continuity that is adequate to time can give rise to an adequate understanding of temporal dynamic.

Accordingly, they do not illustrate their model with diagrams in style of the ones above depicting the cinematic, retentional, and extensional model. Rather, the expanding and 'inpanding' present is modeled in a *dynamic* way (Friebe 2012: 115-117): Think of drawing a line on a blackboard with a piece of chalk. The chalk-piece advancing the amount of

^IA remark on the notion of the present as a 'point' may be in place here: In the point-extension model, the experiential present may not be understood as a point in the sense that it has 'zero', i.e. minimal (and additively neutral) extension. Since the experiential present has no extension 'outside itself' that would be of the same nature, it cannot be compared to any such extension. Correspondingly, the attribution of 'extension of degree zero' cannot be made on the basis a comparison. Rather, what the present has in common with a point in the point-extension model is *indivisibility*.

chalk on the blackboard stands for the expanding of temporal contents. But now, take a sponge and erase the line drawn immediately after the piece of chalk. This stands for the temporal contents 'inpanding' in the very instant they expand. This way of depicting a model for time-experience may seem a bit eccentric at first sight. Why draw a line that is erased immediately afterwards? But as the proponents of the point-extension model may point out, this can also be seen as the only adequate way to envision time: with something changing. What the handling of chalk and sponge is about, is not the line that is drawn or not drawn, but what is happening when it is drawn and erased at the same time. In contrast, in the diagrams of the other models, nothing is happening at all. In this light, the expanding-inpanding-presentist may criticize the depictions of the other models in turn: if you can draw a static picture of what is to be temporal dynamic, you have already distorted what you actually wanted to model. From the perspective of the point-extension model, the other approaches are proceeding from an inadequate 'source' to model the temporality of experience.

Last but not least, the point-extension model seems to be in the position to circumvent the Retentional and the Extensional Simultaneity Problem (see §52,§53 above). What these problems are about, is fitting the experience of temporally expanded contents into a non-extended present. Now, as the presentation of this model has shown, the present is understood as pointlike and extended at once, not as being, but as becoming point and extension (Friebe 2012: 160-161,163). Thus, in this dynamic way, extension and non-extension can be reconciled. And nothing seems to be more appropriate for a model of temporal experience.

§55 Neutrality on the Temporal Structure of Experience

As the discussion so far shows, there are strong intuitions on temporal experience that are hard to reconcile. The situation may be presented as follows: on the one hand,

[i]n our ordinary experience, over brief intervals, we seem to be directly aware of temporally extended phenomena such as change, persistence and succession.' (Dainton 2010: $\S1.1$)

But, on the other hand,

'[w]hile this may seem obvious, it can also seem problematic. We can remember the past and anticipate the future, but we are only directly aware of what is present – or so it is natural to say and suppose. But the present, strictly speaking, is momentary. So if our awareness is confined to the present, our awareness must itself lack temporal depth.' (Dainton 2010: §1.1)

Accordingly, Dainton also speaks of a 'paradox of temporal awareness [...]: it seems our awareness must extend over time, but it seems it can't' (Dainton 2010: §1.1).

This paradox seems to stand behind the inverse challenges retentional model (see §52 above) and the extensional model (see §53 above) face. The retentional model emphasizes the (momentary) phenomenal unity of the specious present, the extensional model its extendedness. But apparently, each of these models *over* emphasizes the respective aspect of the specious present it puts to the fore, thus not being able to accommodate the other one adequately: the retentional model has a unified present, but problems getting temporally extended experiences (change, persistence) into it (this is the 'Retentional Simultaneity Problem', see §52 above); the extensional model has an extended present, but problems to have it unified (this is the 'Extensional Simultaneity Problem', see §53 above). This is exactly the dilemma that the complementary Retentional and Extensional Simultaneity Problems convey.

Above that, both the retentional and the extensional model have to face the Bergsonian objection against a mathematical understanding of temporal continuity (see the quote from Dainton 2010: §4 in §51 above) in the sense of the 'Strong Continuity Thesis' (see

§51 above). And, taking the close interconnection of temporal phenomena such as change and persistence to temporal continuity into consideration, this objection also challenges the possibility of the retentional and the extensional model to account for the experience of such phenomena in a 'PT-realistic' (see §51 above) way.

The cinematic model (see §51 above) may be understood as a consequent way of dealing with this paradoxical situation of conflicting and hard-to-fulfill intuitive requirements by simply *rejecting* them (exactly because they give rise to a paradoxical situation, arguably). It comes out most coherently as a PT-antirealism, discarding the notion that 'our awareness must extend over time' (Dainton 2010: §1.1, see full quote above) and consequently also rejecting temporal continuity in the sense of the Strong Continuity Thesis.

Departing from the sketched dialectic of extendedness vs. momentariness, PT-realism vs. PT-antirealism, and continuity vs. discontinuity, the proponents of the point-extension model (see §54 above) say: You can have extendedness and momentary unity all at once. How? By taking them as one. After all, what we are talking about here is time, and not everything that holds for space has to hold here as well. So, this model goes for yet another way to use language abusively in order to make it applicable to time(-experience). Accordingly, from the perspective of the point-extension model, the 'paradox of temporal awareness' only stands if the mathematical, space-analogous conception of temporal continuity and extension is followed. It is exactly this conception with which the point-extension model breaks. The alternative conception of this model also makes it possible to accommodate temporal continuity and PT-realism in an adjusted, dynamic way. This adjusted understanding shows itself in the fact that the point-extension model cannot be illustrated in a static picture, but only through a dynamic metaphor (with chalk and sponge on the blackboard, for instance). The other models, in contrast, remain fundamentally static and accordingly cannot develop an adequate visual model for a genuinely temporal, dynamic notion of continuity.

In sum, we may characterize the different models as follows: The point-extension model makes the most sustained effort of 'saving the phenomena' of experienced temporality. For this, it pays the cost of the most extreme 'abuse' of common sense language of all the discussed models. At the opposite extreme of this approach lies the cinematic model. Conversely to the point-extension model, it characterizes temporally subsequent experiences in a way that is akin to the way we normally talk about things, but at the cost of PT-antirealism and the rejection of temporal continuity. The retentional and the extensional model, respectively, strike a middle ground between these two extremes, but face also serious challenges in trying to live up to the intuitive requirements they were developed to fulfill. So, the most coherent positions seem to be either a consequent cinematic PT-antirealism or an adjusted dynamic form of PT-realism as developed by the point-extension model.

Now, as said above (§44), we have to start with talking about experiences proceeding from the way in which we normally talk about things. And this manner of speaking we can then break at certain, hopefully well-chosen points, if necessary. What seems to make such a move warranted is the continuity and dynamic of temporal experience – as is exemplified most consequently in the point-extension model. Of course, we can also refrain from such 'abusive use of language'. But this seems only possible at the background of renouncing the idea of continuous experiential dynamics, thus deviating from common sense notions of temporality. The way to go here is a cinematic framework, possibly with some retentional makeup. Being confronted with such a trade-off, it seems advisable to remain neutral on the temporal structure of experience on the general level of the pure-experiential framework. Just as much as we may remain agnostic towards the atomic level

of experience (see §46 above), we may remain agnostic towards the moment-to-moment dynamic in experience. We surely do not need such a fine-grained account to build models of types of experiences in the form of microphenomenological structures (see §23,§33 above), for example. Nonetheless, it may turn out that the account of experiential temporality one adopts has substantive repercussions on the way one may characterize certain types of experience. In such a case, the options expressed by the different models of experiential temporality may be compared concerning the effects they have in the specific application one wants to make of the framework of pure experience.

Accordingly, all that we assume here is the following: there is an experiential present, the actual manifold of experience. Earlier and later presents may exist, of course, as it is common sense to believe. And every present may have a peculiar internal structure that explains the experience of temporally extended processes such as change or persistence in a continuous manner. But on these matters, we can adopt a neutral position. So we restrict ourselves, for methodological reasons, to the perspective of a phenomenal presentism with an agnosticism towards temporal continuity, as we might call it.

6 A Proposition for Relational Description of Pure Experience

Building on the sketch of the 'metaphysical' options for a world of pure experience, in this last chapter, a proposition for basic methods and features of a relational pure-experiential descriptive framework is made.

As an adequate way to develop this descriptive framework, in section 6.1, Rudolf Carnap's idea of a formal 'relational description' for experience is discussed. This descriptive approach may be combined with the approach of pure experience and the Jamesian notion of relations in experiences.

In section 6.2, an illustration of how the resulting 'pure-experiential relational description' may be applied (especially in the context of empirical phenomenology) is given. Five relations (mutual differentiation, relative resemblance, relative directedness, relative cohesion, relative salience) are assumed and it is described how they can be characterized formally.

6.1 Relational Description

The notion of relational description as developed by Carnap is introduced in §56 and contrasted to structural description, which he envisioned as the ultimate method for his Aufbau-project. While structural description is rejected as too idealized for an application in the present context, it is opted for a combination of relational description with reference to concrete examples of lived experience. The possibility to apply relation descriptions to implement the pure-experiential relation-relata model as a descriptive framework is discussed in §57.

§56 Relational and Structural Description

Carnap developed the notion of relational description in the context of his explicatory program of elucidating 'the logical structure of the world' (Der logische Aufbau der Welt, Carnap 2003). Under the title 'rational reconstruction', Carnap proposes a notion of explication that gives clear directives of how to proceed when defining one concept in terms of another (Carnap 2003: vi). More specifically, Carnap sought to realize the 'rational reconstruction' by means of 'logical construction' (Carnap 2003: §2), formally reducing 'all concepts to the immediately given' (Carnap 2003: vi). He chose this explication basis due to its 'epistemological primacy' (Carnap 2003: §64). This may be read as pointing in the direction of immersive, foundational and/or accessive primacy (see §6-§16 above), but Carnap does not enhance on how he understands 'epistemological primacy'. It has been pointed out that Carnap was influenced by Husserl's phenomenology in his Aufbau program (see Mayer 1991, 2016, Ryckman 2007). But Carnap's approach seems to be ambiguous between phenomenological and empiricist-'phenomenalist' motivations (Ryckman 2007: 95-96), so we are not going to pursue this lead any further (since it does not add anything of systematic import to the proposed application of relational description in the pureexperiential framework).

Only one further comment concerning the relationship of the Aufbau to phenomenology seems to be in order. Namely, Carnap seems to have understood his method of 'logical construction' in parallel to 'phenomenological constitution' (see §14 above), as Husserl introduced the term (Mayer 1991). Carnap understood 'logical construction' as follows: some entity a is constructible out of other entities b and c, if

'all statements about a can be transformed into statements about b and c. To reduce a to b, c or to construct a out of b, c means to produce a general rule that indicates for each individual case how a statement about a must be transformed in order to yield a statement about b, c. This rule of translation

we call a construction rule or constructional definition [...]. By a constructional system we mean a step-by-step ordering of objects in such a way that the objects of each level are constructed from those of the lower levels.' (Carnap 2003: §2)

Now, in contrast to this approach, it is plausible to assume that pointing out a relation of constitution includes more than just providing a constructive definition or a conceptual analysis (Dasgupta 2017: 77-78). This holds of course especially for the domain of phenomenology. Thus, logical construction is *not* analogous to phenomenological constitution. In this line, Thomas Ryckman points out:

'Despite the often very striking similarities and analogies between Aufbau and phenomenology, [...] Aufbau is a de-transcendentalized surrogate, substituting chains of definitions within an extensional logical system for the progressive steps of [...] phenomenological constitution.' (Ryckman 2007: 98)

In sum, we may say that if Carnap wanted to track something like constitutive relations through the method of logical construction, then this was based on mistaking 'construction' for 'constitution' (or 'constitutive explanation' in a wide sense, if you will, compare §34 above).

In contrast to this purely logical-constructional approach, the approach of pure experience suggested here does not equate 'constitution' with 'construction'. To see certain aspects of experience as being constitutive for others, it does not suffice to define the latter in terms of the former, there also has to be phenomenological evidence for a relation of constitution between them (which may then abductively justify the logically constructed putative 'constitution'-relation, compare §34 above).

With this delimitation from Carnap's Aufbau-program in the background, all that is going to be discussed here with regard to the Aufbau is the notion of relational description. Carnap contrasts relational description of relata, via indication of n-ary relations (with n > 1), against property description, via indication of 1-ary properties:

'A property description indicates the properties which the individual objects of a given domain have, while a relation description indicates the relations which hold between these objects, but does not make any assertion about the objects as individuals.' (Carnap 2003: §10)

He discards property-descriptions of experience, since they can only point to

'the *material* of the individual streams of experience [which] is completely different, or rather altogether incomparable, since a comparison of two sensations or two feelings of different subjects, as far as their immediately given qualities are concerned, is absurd' (Carnap 2003: §66).

This is in line with the (micro)phenomenological orientation towards (intersubjectively and intersituationally) invariant structures of experience:

'[E]ven though [...] contact with[...] one's lived experience does not constitute by itself anything like objective knowledge, it is possible to extract intersubjectively valid structures out of the reports that arise from this [...] contact. Here [...], knowledge does not occur at the first level of phenomenal acquaintance [...], but at the second level of elaboration of a network of relations between the various expressions of this acquaintance. It is [...] mediated knowledge for a community of researchers.' (Bitbol and Petitmengin 2011c: 32)

Because of the methodological centrality of relational description, the distinction between relation and relata is a fundamental distinction for the *Aufbau*-program, just as much as for the framework of pure experience. Without an idea of what it means that several 'terms' stand in a relation to each other (and how this opposes to them having non-relational properties), the vital notion of relation description would be incomprehensible.

The way that Carnap conceives in the Aufbau of the relation-relata distinction is not going to be discussed here, since it leads back to the questions of the general methodological program behind the Aufbau, which we have set aside. All that has to be pointed out is that

^IIt is an ironic twist in this context that the term 'construction' is only created as an artefact through the English translation of Carnap's original German term 'Konstitution'.

the pure-experiential approach has the means to introduce the relation-relata distinction in the sense of an analogical for experience through reference to concrete experiences of relations between things as the 'source' for the model (see §44 above).

Now, one last difference to the approach in the *Aufbau* has to be discussed before turning to a possible application of relational description in the framework of pure experience. Namely, Carnap did actually *not* stop at relational descriptions, they were only the preparatory step for what he really wanted to get to: namely, a *special* kind of relational description, the *structural* description (Carnap 2003: §12):

'There is a certain type of relation description which we shall call structure description. Unlike relation descriptions, these not only leave the properties of the individual elements of the range unmentioned, they do not even specify the relations themselves which hold between these elements.' (Carnap 2003: §11)

Structural description is part of what Carnap calls the 'extensional method' (Carnap 2003: §43). This method comprises two aspects: The first is that relations are characterized solely by structural description, which practically means by listing its extension, that is, 'all pairs for which the given relation holds, without, however, using any descriptions which have meaning outside of this list' (Carnap 2003: §12). The second aspect consists in the definition of two relations to have the same extension only by the substitutability salva veritate in all sentences in which they may occur (Carnap 2003: §32). With this definition of coextensionality, two relations can be compared without any reference to any concrete 'substance' partaking in it (neither the relations themselves nor any of their relata) – and, thanks to structural description, they can also be defined in such a non-concrete fashion by their structural features (such as arity, reflexivity, symmetry, logical connections to other relations, etc., Carnap 2003: §11).

Structural description, under the name of 'implicit definition', and the extensional method have been applied with great success in modern, 'logified' mathematics. Carnap wanted to transfer this success story to the description of experience. He draws a close connection between his method of structural description and implicit definition:

'The purely structural definite descriptions [...] are closely related to the *implicit definitions* [...]. An implicit definition or definition through axioms consists in the following: one or more concepts are precisely determined by laying down that certain axioms are to hold for them. Of the axioms we require nothing but consistency, a formal-logical property which can be ascertained through purely logical considerations. Statements which can then be made about an object that has in this way been implicitly defined follow deductively from the axioms, i.e., through another purely logical procedure.' (Carnap 2003: §15)

In mathematics, relations are defined (although never handled) extensionally with the help of sets. Sets, in turn, are defined implicitly with the axioms of set theory. But, as every prudent mathematician would immediately admit, in the actual process of defining the set-concept, ostensive examples play a substantive role, both for understanding what is actually meant with the formal symbols and for justifying the specific choice of axioms (arguably, even to give the symbol ' \in ' the designation 'being included in' is already an ostensive clue – towards the imagination(-experience) of something being included in something else). On this basis, the mathematicians then can of course abstract from all ostensive associations of the symbols (Muller 2004). If the question arises for which entities the variables applied in set theory stand, they can answer: 'Any domain of objects that fulfill precisely what is demanded by the axioms, meaning: there is a 2-placed relation on that domain that is isomorphic to \in .'

This procedure may work fine in mathematics, but the extensional method is applicable to experience only under highly idealized conditions, because the experiential relation under scrutiny actually would have to be given in its full extension. This may pose no problem

in mathematics, where the extensions of relations are assumed to be only theoretically (not to say: fictitiously – as Carnap actually does, Carnap 2003: §102) given and all that is evaluated is coextensionality of the relations. But in phenomenology, the extensional method simply amounts to a fiction: Carnap is forced to make the assumption of a subject having for the first half of her life only perceptions (building up the extension of the relation) and for the second half only apperceptions (evaluating the extension, Carnap 2003: §101-§102). So, if we we understand the extensional method as an approach to modeling experiential relations, then it comes out as a *too* idealized in comparison to simply taking everyday examples of relations as the 'source' for the relational model.

Further, we may ask whether the purging of any ostensive association or 'content' is even warranted in phenomenology (and, by extension, in any empirical inquiry). What is the use to go structural-extensional in phenomenology and to aspire for mathematic's 'purely logical, formal character to which it owes its independence from the contingencies of the real world' (Carnap 2003: vi)? Carnap thought that this would secure intersubjective validity for a description of experience that can live up to 'scientific' standards (Carnap 2003: §66). But, with the enactive understanding of intersubjective validity on the background (see §19 above), and for the purposes of phenomenology, this understanding of intersubjectivity is too artificial and the corresponding notion of structural description too abstract and insubstantial. Contrary to the idea of structural description, an account of structures of experience cannot do without ostension to concrete experience: 'in every case, referring to singular situated experiences [...] is the proper ground of any intersubjective agreement on the structure of experience' (Bitbol and Petitmengin 2011c: 35).

§57 Relational Description of Pure Experience

So, all that is to be suggested here for an application in the pure-experiential framework is the notion of relational description, and not the more abstract one of structural description. The decisive aspect of relational description for the present purposes is that it proceeds by way of assumptions on experience that do not simply state the logical interconnections of certain one-placed properties (which would render the description 'impure'); rather, it comprises assumptions with regards to certain many-placed relations in experience.

The descriptive program of pure experience is not tied to the assumption of a specific set of such many-placed relations; stating such a set constitutes one specific implementation of the program. But this does not amount to a neutrality as in Carnaps 'construction theory' towards the choice of 'basic relations' (Carnap 2003: §61), that is to be decided 'by dealing with the question as to how and in what sequence the objects of the lower levels can be constructed, and what basic relations are required for the purpose' (Carnap 2003: §7).

In contrast to this, note, on the one hand, that from the rejection of logical construction to track relations of constitution (see §56 above), it follows that the development of a descriptive framework of pure experience is not bound to hierarchical construction. It can proceed through the definition of categories of experience at any level of constitution and does not have to from the putatively most basic or most fine-grained level of experience (if there is anything like this).

But note also, on the other hand, that due to the divergence in methodologies, pure-experiential relational description is also restricted in a way that constructive structural description is not. Namely, there is a (twofold) adequacy condition that any relation assumed for descriptive purposes has to fulfill in the present framework: Firstly, it has to be a relation that is *experienced* concretely in the experiential present (see §40 above). Secondly, it has to possible to make plausible that the relation is experienced *universally*, among all 'bits of pure experience' in the experiential present (too some degree or other –

see §48 above).

That these conditions can be met by a specific proposed relation can only be made plausible by the use of examples formulated in 'impure' subject- and object-oriented talk – just as much as the relation itself can be only introduced in this way (see §44 above). Only when proceeding to the level of characterizing the relations, which have been introduced and motivated in this 'impure' way, is a perspective of 'pure experience' feasible. This motivates a two-step procedure for pure-experiential relational description:

Firstly, the prevalence and universality of a certain experiential relation is motivated through 'impure' examples including reference to subjects and objects of experience.

Example. Let's say I assume that there is a universal relation of resemblance in experience: All 'portions of pure experience' in a given present stand in a relation of resemblance to one another to a greater or lesser degree. Now, I want to give you an ostensive example of this presumably universal relation. I utter 'That (1) has a higher resemblance to this (2) than to this (3).', pointing first to a grape (1), then to another grape (2), and last to an orange (3) in the vicinity. From an experiential perspective, what I'm pointing to are of course not grapes and oranges, but certain portions of pure experience. Presumably they are patches in my visual field (this is of course already an impure qualification). What I am hoping or counting on in my ostensive act is that there is another stream of experiences (yours) that houses similar visual experiences with a resemblance relation instantiated in a similar way between them. In my natural attitude, what I take these experiences to be are grapes and oranges or, which comes to the same thing as far as the purity of the experience is concerned, experiences of grapes and oranges. Even more certainly than something qualified as 'visual patches', these are definitely not pure experiences. And the situation isn't any better if I take the experiences, in a more phenomenological attitude, as 'visual patches' or as 'experiences of green/orange'. In all cases, the 'that' has been qualified as a 'what' in relation to some subject or object.

Examples in written form, which (hopefully) induce an imagined example-situation, may be more prone to failure (and less exciting) than examples in real life or other media, but they are not *principally* unemployable.

Secondly, in abstracting from these examples, an implicit characterization of (hypothetically) universal relations is given, which avoids reference to subjects and objects and thus remains 'pure'.

Example. What is decisive in the example given above is the relation of resemblance, and not the specific nature of the relata: whether the 'thats' are experiences of grapes and oranges, visual patches with a certain color, hue, shape, etc.; or something that is not adequately identified by these qualifications and that we do not even have an idea of. Nor does their mutual differentiation have to be conceptualizable, they just have to be sufficiently disparate to be differentiated in several 'thisses' and 'thats' at all. It only has to be *experienced* that the are mutually differentiated, the differences themselves do not have to be clearly drawn conceptually (we do not have to give an account *what* differentiates them; we just have to notice *that* they are differentiated).

In short, what is suggested is, instead of *structural* description in combination with the extensional method (see §56 above), a *relational* description in combination with reference to 'impure' examples. What renders the relational description pure is the fact that any reference to concrete relata (and thus to subjects and objects of experience) is dropped and that the relations are only 'implicitly' characterized through formal attributes that they are assumed to exhibit.

Note that this is no 'implicit definition', since the step of giving examples is included in the process of defining the relation. The formal characterization is not a full definition of the relation in question. It is this characterization which is 'pure', but not the definition, which necessarily includes 'impure' examples. This means that we cannot *define* a self-standing domain of pure experience, we can only *characterize* already impurely defined experiences in a 'pure' way. Nonetheless, what we can do with the relations characterized in this

^IThis means that Carnap's condition of *structural* description cannot be met, but this has been rejected as too idealized above (§56) anyway.

way, is developing 'models' (in these sense suggested in §44 above) of lived experience. In this way, we gain pure-experiential categories for the 'neutral' description of experience on the hypothesis of certain relations being universally prevalent in the present field of lived experience.

Taking into consideration the necessarily hypothetical nature of the relational description, this program can of course only be realized in a hypothetical and fallibilistic way. As for the framework of pure experience in general (see §43 above), any concrete suggestion of assumed relations can only be expected to be justified abductively – in the specific constructive or enactive understanding developed above (§34). Thus, the relevant question to ask in 'validating' a proposed set of experienced relations is not whether the assumed relations are 'really' universally experienced, but whether they afford an applicable model for lived experience. And we cannot expect the intersubjective practice of giving examples of the instantiations of the (presumably) universal experiential relations to be successful all the time. As any system of descriptive signs, they may only be learned by long series of trial and error and mutual correction and remain always prone to error:

'The function of a description is not to portray a content of experience with all its nuances - words are indeed incapable of that - but to work out an intersubjective consensus about a term or a group of terms that will only play the role of "pointers". This occurs as soon as several subjects agree on using such terms to single out a special aspect of the flux of experience; and the agreement is obtained by establishing a stable feedback loop between the experience whose aknowledgment [sic] is caused by the chosen terms in one subject, and their circumstance of use by other subjects. [...]

Reading the description of an experience gives rise to our recognition of this experience, provided we fuel this process [...] by referring to some of our own singular experiences. Sometimes we immediately recognize an aspect of our experience of which we were reflectively conscious. Sometimes we must call up more precisely one or more experiences before we recognize it. Sometimes also, we do not recognize anything, for many possible reasons.' (Bitbol and Petitmengin 2011c: 34-35)

But this fallibility is plausibly a feature of *any* attempt to speak about experience, which may only be brought out even more clearly through the approach proposed here.

The idea of relational description of pure experience makes it feasible to clarify the notion of (micro)phenomenological description of 'invariant structures of experience' (see §16,§26 above) in a straightforward way. Namely, what gets described as 'invariant' are relational structures (explicating the notion of 'structure' as 'independent from specific content' as independent of specific relata). With this, we have an explication of what is actually 'structural' in 'structural statements' drawn from the interview verbatim, and in the 'specific' and 'generic structures' abstracted from them (see §23 above). Moreover, structural description opens new possibilities to express (micro)phenomenological results. As has been pointed out, the organization of the findings in semantic networks is not considered obligatory in microphenomenology (see §23 above). Relational description in the framework of pure experience may open a space to develop ways of organizing the findings of microphenomenological studies beyond semantic networks.

6.2 An Example of Relational Description of Lived Experience

The idea of relational description of lived experience is now going to be illustrated is through the exemplary introduction of five relations of experience that are assumed as universal.

As a first preparatory result, it is developed how relations can be described formally and how their status as pertaining *universally* and to a certain relative degree to all 'portions of pure experience' in the experiential present can be characterized (§58).

The most basic (and least interesting) relation to be assumed is differentiation (§59), which holds between all individual experiences (except, of course, for the case x = x for

any experience x). The relation of similarity or resemblance between individual experiences (§60) is the most crucial relation for descriptive purposes. Namely, it enables us to form categories of experiences by way of classes of experiences having a higher mutual resemblance than to any other experiences. Further, the relations of directedness (§61) of experiences towards and of cohesion (§62) of experiences with one another are assumed. The latter, especially, will allow us to give an account of how individual experiences are 'added together' to conglomerates. Finally, we are going to assume salience as a universal relation to represent the attentional structure of the field of experience.

Motivating these relations with extensive reference to the phenomenological literature would go beyond the scope of this thesis. But this is not necessary for an illustration of the potential of the pure-experiential framework as suggested here. The system of relations affords a certain perspective on lived experience, the aspiration in this chapter can only be to demonstrate how such a perspective is possible in principle.

§58 Universality and Graduality of Relations

As in relational description proposed by Carnap (Carnap 2003: $\S 3$, see $\S 56$ above), in the following, we are going apply a formal language (first-order logic and set theory). The application of this formalism may be justified at the background of the discursive primacy of thing-talk in comparison to experience-talk (see $\S 44$ above). Namely, due this discursive primacy, we have to start with talking about experiences in the way that we talk about things anyway. And since we are able to group things into sets and to let them figure in logical inferences, so why not experiences? This application of logic and set theory to experience may be understood as an application of the idea of analogical modeling of experience with 'things' as the source domain (see $\S 44$ above). As the basic set on which the universal relations are defined (through implicit definition), we consider the set of all present individual experiences P. This is of course a 'generic' experiential present, that constitutes itself a model for the magnitude of specific experiential present that form our streams of lived experience. In the following, individual experiences in P figuring as relata are also be just called 'experiences' for short.

Of the universal experiential relations to be introduced, only differentiation is actually a relation holding between individual experiences; between *all* non-identical individual experiences, to be precise. Thus, differentiation is universal in a *trivial* manner. It is not of much use for the relational description of experience (compare §48 above).

In contrast to differentiation, the relations resemblance, salience, and cohesion are not going to be assumed as holding between individual experiences, but *in* some given subset X of the present P with $\#X \geq 2$. Since resemblance, salience, and cohesion form *mutual* relations between the elements of the experience-sets, they are symmetrical relations, and do not have to be characterized by ordered tuples, the (non-ordered) sets themselves suffice.

Example. As in saying 'the experiences in $X \subset P$ resemble each other' (to a certain degree). \Box And finally, other than all relations mentioned so far, the relation of directedness is holding between sets of experiences (they are directed towards each other), it is thus a 2-placed relation between sets of experiences (including the singletons, this case may be interpreted as one individual experience being directed towards another). Directedness is not a symmetrical relation (it is directedness from one set to another), thus, it has to be characterized

Note that the assumption of relations in sets of individuals means that if there are any 'atomic' individual experiences (see in §46), they do have to be mentioned explicitly in the definition of the relations. We are not trying 'to get down in theory, if not in practice, to the ultimate simples' (Cooper 2002: 158, see full quote in §46 above), if there are any. This makes it possible to remain neutral on the existence of atoms.

by ordered pairs of experience-sets.

Now, as already said, the relations relevant to description of experience have to be manifest universally in the experiential present P, in (or between) all subsets of P for which this makes sense (plausibly, internal resemblance can only be given in a set of at least two elements to resemble $each\ other$, and directedness can only hold between non-identical sets of experiences and cannot be experienced to come from or go to the empty set, since the empty set is not experienced).

And, as pointed out above (§48), these experiential relations are going to be interpreted here not as being given in an 'all or nothing'-manner – either obtaining or not obtaining in a given subset X of P (or between two subsets X and Y of P, in the case of directedness) –, but in a relative and gradual manner.

Example. As in saying 'the experiences in $X \subset P$ resemble each other *more* than the experiences in $Y \subset P$ '.

Thus, we model the *relative intensity* of the relations between different sets. Since they come in degrees, it is possible for the gradual relations to be universal in a non-trivial way.

But how can we define the universality of our relations resemblance, salience, cohesion, and directedness via their relative intensities? Obviously, we cannot simply assign numerical values to all (pairs of) subsets of P standing for the respective relative intensities of the experiential relations. We do not experience this way, thus we cannot include some explicit numerical measure (ordinally or cardinally scaled) like this into the axiomatic system of experience. Rather, what we can model for each universal relation R, are pairwise orderings of relative R-intensities. These are 2-placed relations between sets of experiences X and Y (or between pairs of sets (X_1, X_2) and (Y_1, Y_2) , in the case of directedness).

Now, if R in fact is universal, then every relevant (pair of) subset(s) of P has some degree of R-intensity. Thus, every pair of relevant (pairs of) subset(s) of P has some relative ordering of R-intensities: either the first set has a higher R-intensity than the second, or the other way around.

Thus, the relative R-intensities of a universal relation R form something like a (strict) total order. A strict total order is a family of 2-placed relations $\{>,<\}^I$ on a domain D with two defining properties: first, > and < are transitive (which qualifies an order relation and which is an assumption that is in fact plausible to make for the relative R-intensities), and second, $\{>,<\}$ is trichotomous on D, meaning:

$$\forall x, y \in D[x > y \ \dot{\lor} \ x < y \ \dot{\lor} \ x = y)]^{\mathrm{II}}$$

The problem with trichotomy for our present cause is that, when transferred to relative R-intensities, it excludes an important case: It may well be possible for non-identical (pairs of) sets of experiences to have the same R-intensity. Or at least, that case must not be excluded beforehand.

Example. Some $X \subset P$ with $\#X \geq 2$ and some $Y \subset P$ with $\#Y \geq 2$ and $X \neq Y$ may have the exact same intensity of internal resemblance.

But trichotomy allows only for non-equal manifestations of relative R-intensity for non-identical (pairs of) sets of experiences. Thus, to give a frame that is rich enough for experience-description, we have to include equality of R-intensities into our case distinction. This yields not a trichotomous, but a tetra-chotomous family of three relations $\{R \bullet > \}$

Actually, it is not necessary to consider a family of two relations $\{>,<\}$, since x < y can simply be defined as an abbreviation of y > x which is an instance of the relation >. But considering a family of relations makes a natural pathway for the generalization of trichotomy proposed further below.

^{II}We use $\varphi \stackrel{.}{\vee} \psi$ for 'either φ or ψ ': $(\varphi \vee \psi) \wedge \neg (\varphi \wedge \psi)$.

$$R \bullet, R \bullet < R \bullet, R \bullet = R \bullet \}.^{\mathrm{I}}$$

This then gives us the definition of the universality of an experience-relations along their relative intensity: An experiential relation R is UNIVERSAL, iff the family of relative intensities of R, $\{R \bullet > R \bullet, R \bullet < R \bullet, R \bullet = R \bullet\}$, is a tetrachotomous family of relations on $\mathcal{P}(P)/\{X | \#X < 2\}$:

$$\forall X,Y \subset P, \#X \geq 2, \#Y \geq 2 \\ [R(X) > R(Y) \stackrel{.}{\vee} R(X) < R(Y) \stackrel{.}{\vee} R(X) = R(Y) \stackrel{.}{\vee} X = Y]$$

And a relation R between sets of experiences (such as directedness) is a UNIVERSAL relation iff the family of relative intensities of R a tetrachotomous family of relations on $(\mathcal{P}(P)/\{\emptyset\})^2$:

$$\forall X_1, X_2, Y_1, Y_2 \subset P, X_1 \neq \emptyset \neq X_2, Y_1 \neq \emptyset \neq Y_2 [R(X_1, X_2) > R(Y_1, Y_2) \dot{\vee} R(X_1, X_2) < R(Y_1, Y_2) \dot{\vee} R(X_1, X_2) = R(Y_1, Y_2) \dot{\vee} (X_1, X_2) = (Y_1, Y_2)]$$

This means that each $X \subset P$ with $\#X \geq 2$ has a certain internal degree of R that is either relatively greater, less or equal in comparison to the internal degree of R of any $Y \subset P$ with $\#Y \geq 2$, or X and Y are equal (and, for directedness: each pair (X_1, X_2) with $X_1, X_2 \subset P$, $X_1 \neq X_2$ and $X_1 \neq \emptyset \neq X_2$ has a certain degree of R that is either relatively greater, less or equal in comparison to the degree of R of any pair (Y_1, Y_2) with $Y_1, Y_2 \subset P$, $Y_1 \neq Y_2$ and $Y_1 \neq \emptyset \neq Y_2$, or (X_1, X_2) and (Y_1, Y_2) are equal).

Note that this definition seems to carry an awkward artifact along the generalization step from trichotomy: The cases R(X) = R(Y) $R(X_1, X_2) = R(Y_1, Y_2)$) and X = Y $((X_1, X_2) = (Y_1, Y_2))$ come out as logically incompatible, if the case R(X) = R(Y) $(R(X_1, X_2) = R(Y_1, Y_2))$ is simply added with $\dot{\lor}$ to the definition of trichotomy. This incompatibility may strike as an oddity. Isn't it intuitive to assume that any (pair of) set(s) of experiences X $((X_1, X_2))$ has the same relative R-intensity as itself? Actually, no. Remember that the only relations to be assumed in a pure-experiential setting are experienced relations (see §57 above). And it seems unnecessarily lavish to assume that for every relevant (pair of) set(s) of experiences not only the relative R-intensities in comparison to any other relevant (pair of) experience-set(s) Y $((Y_1, Y_2))$ are immediately experienced, but also the relative R-intensity of X $((X_1, X_2))$ in comparison to itself – that is, in the reflexive case of X = Y $((X_1, X_2) = (Y_1, Y_2))$.

Example. It is experienced that some $X \subset P$ with $\#X \geq 2$ has a certain internal resemblance and that this resemblance is relatively greater, less, or equal in comparison to the internal resemblance of any $Y \subset P$ with $\#Y \geq 2$, but the intensity of X's internal resemblance in comparison to *itself* is *not* experienced.

Thus, not only $R \bullet > R \bullet$ and $R \bullet < R \bullet$ are irreflexive relations $(\nexists X[R(X) > R(X) \lor R(X) < R(X)])$, but also $R \bullet = R \bullet (\nexists X[R(X) = R(X)])$. In other words, relative R-intensity is simply not defined for the reflexive case.

In sum, a universal experiential relation may be said to be (at least in principle) 'decidable' in a certain way: It has a definite (if relative) value for every relevant (pair of)

$$\nexists X \subset P[R(X) > R(X) \lor R(X) < R(X) \lor R(X) = R(X)]$$

^IWe may even give a generalized definition, for a n 2-paced relations, of n+1-chotomy: A family of n 2-paced relations $R_1, ..., R_n$ on a domain D is n+1-chotomous, iff $\forall x, y \in D[xR_1y \lor ... \lor xR_ny \lor x = y]$. An example of dichotomy (n = 1) is the one-elementary family of relations $\{\neq\}$ on any domain without dialethic identity (which would allow for some x and y with $x = y \land x \neq y$), an example of trichotomy (n = 2) is the family of relations $\{>, <\}$ on the real numbers.

^{II}From tetrachotomy, it follows directly with Y = X that

subset(s) of P – although we may not know *about* it explicitly, and possibly be unable ever to know.

Example. The relation 'being larger than' is decidable with regards to patches in the visual field, but the relation 'being warmer than' is not (and vice versa with regards to experiences of temperature). Thus, for two visual patches X and Y being experienced, it is either the case that X is larger than Y, or that Y is larger than X, or that they are equally large. But X is neither warmer than Y, nor is Y warmer than X, nor are they equally warm. The relation 'being warmer than' does neither obtain nor does it *not* obtain for visual patches. Visual patches have, obviously, no relative temperature, the characteristic function for the respective relation is simply not defined for them.

Note that this 'decidability' also includes the possibility of a instantiation of the relation to degree zero. A universal relation may come in this degree, but it can never be 'absent' from a relevant (pair) subset(s) of P.

Example. At the example of resemblance, we can further illustrate the proposed understanding of a universal relation being 'of degree zero' in specific cases. The internal mutual resemblance in a set of experiences X can, arguably, simply be nil. But in that case, the internal resemblance in X can still be compared to the resemblance in other sets of experiences. To be sure, this is integral for establishing the resemblance in X to be zero. In this case, it forms a minimum in the relative resemblance order. Even no resemblance is a resemblance, as it were. Otherwise, it could not be delimited from actual cases of resemblance 'with degree greater zero'.

If a relation holds to the degree zero, the respective experience-set A (pair of experience-sets (A_1, A_2)) is a minimum in the relative order of R-intensities:

$$\forall X \subset P[R(X) > R(A) \lor R(X) = R(A)]$$

$$(\forall X_1, X_2 \subset P[R(X_1, X_2) > R(A_1, A_2) \lor R(X_1, X_2) = R(A_1, A_2)])$$

Thanks to the fact that the relations we are going to propose are defined on sets of experiences, we can characterize a further structural feature that uniquely distinguishes any manifestation of relative R-intensity with degree zero. Such a (pair of) set(s) of experiences is an 'additive neutral' under set-union \cup with regards to relative R-intensity:

$$\forall X \subset P[R(X \cup A) = R(X)]$$

$$(\forall X_1, X_2 \subset P[R((X_1 \cup A_1, X_2 \cup A_2)) = R(X_1, X_2)])$$

Example. If there is a set of experiences A with zero resemblance, it intuitively has to fulfill the following condition: If it is added to some set X, then the resemblance of the newly merged sets, $X \cup A$, must not differ in intensity from the original resemblance between the experiences in X.

Being a minimum and an 'additive neutral' with regards to R-intensity are the structural features defining an instance of a relation R with 'degree zero'. They are actually independent of whether we call such a minimum to be of degree zero, of degree 256, or of degree 'corn flakes with milk', for that matter – in other words: the relative degrees are of ordinal scale, but they may have an 'additive neutral' element.

With regards to the universal experience-relations proposed here, we are going to make an actual assumption of this kind only for the relation of directedness (see §61 below). With regards to the other relations, we neither assert nor deny the possible existence of a degree zero.

§59 Mutual Differentiation

As mentioned above (§49), James distinguished in his conception of pure experience between 'disjunctive and conjunctive relations' which 'present themselves as being fully coordinate parts of experience' (James 1912/1976: 22-23). He summarizes the interplay of disjunction and conjunction envisioned by him in the following passage:

'At the outset of my essay, I called it [radical empiricism] a mosaic philosophy. In actual mosaics the pieces are held together by their bedding, for which bedding the substances, transcendental egos, or absolutes of other philosophies may be taken to stand. In radical empiricism there is no bedding; it is as if the pieces clung together by their edges, the transitions experienced between them forming their cement. Of course, such a metaphor is misleading, for in actual experience the more substantive and the more transitive parts run into each other continuously, there is in general no separateness needing to be overcome by an external cement; and whatever separateness is actually experienced is not overcome, it stays and counts as separateness to the end.' (James 1912/1976: 42)

At first sight, James seems to be indecisive or even self-contradictory in this passage: On the one hand, he asserts that there is only a gradual differentiation between 'more substantive and [...] more transitive parts' of experience, that they even 'run into each other continuously', to the effect that 'there is in general no separateness needing to be overcome'. On the other hand, he concedes the possibility that some 'separateness is actually experienced'.

We have to read closely to see that there is actually no contradiction involved: The decisive point is that 'there is in general no separateness needing to be overcome'. There is no principled differentiation of experience into absolutely unrelated fragments (as in the 'the bugaboo empiricism of the traditional rationalist critics, which (rightly or wrongly) is accused of chopping up experience into atomistic sensations', James 1909/1977: 147, see full quote in §41 above). This does not exclude the possibility that on a specific level, some 'separateness is actually experienced'. And this non-principled separateness does not have to be overcome (especially not by some 'agent of unification', James 1912/1976: 23, see full quote in §46 above), on the contrary, phenomenological adequacy demands that 'it stays and counts as separateness to the end.'

It is precisely such a *primitive* separateness or differentiation between individual experiences (as the most basic 'disjunctive relation') through which experience is portioned in the first place. We might say that individual experiences ('portions of pure experience') exist 'at all' or 'initially' by being mutually differentiated. This is of course only a manner of speaking, as experiences do not have to come into being by some process (differentiation or other), they simply come as differentiated in the way they are. But the mutual differentiation pervades the experiential present in a universal and basic way: all individual experiences x and y are mutually differentiated (with the trivial exception of x = y), and only under this condition, other 'conjunctive' relations are conceivable to hold between x and y.

So, differentiation is a universal relation in a trivial sense, holding between all experiences, except for any experience in relation to itself. In this way, it is similar to identity of experience, of which it is the logical complement. But it is not actually not likely that identity is experienced, other than mutual differentiation. Rather, identity is stated in abstraction. Thus, differentiation is methodically primary to identity (for phenomenological, not for logical reasons – logically, they are interdefinable).

All being said, here comes our first official (and least exciting) assumption of a universal relation:

Assumption 1 (Mutual Differentiation of Experiences).

For copresent experiences x and y with $x \neq y$ holds: x and y are mutually differentiated. \Box

Above (§55), we have remained neutral with regards to temporal continuity. But, as already mentioned above in the context of motivating continuity in experience (see §49 above), it can come in not only in a temporal way, but also in a qualitative way as fusing of different synchronic aspects of experience.

James sees his understanding of continuity (in terms of conjunctive and the disjunctive

relations) to be applicable also in a *synchronic* sense, as 'qualitative continuity', as we may call it. Thus, experiences continuously blend into each other not only temporally, but also qualitatively:

'What is true here of successive states must also be true of simultaneous characters. [...] The collective [i.e., conjunctive] and the distributive [i.e., disjunctive] ways of being coexist here, for each part [i.e., individual experience] functions distinctly, [...] and yet the whole is somehow felt as one pulse of our life, – not conceived so, but felt so.' (PU: 130)

So, James holds that not only temporally distinct experiences can be continuous. Continuity is also possible for experiences that are temporally congruent but differentiated. They are not the same, yet they 'pass into another' qualitatively, to the effect that they are 'somehow felt as *one* pulse of our life'.

Example. Think of the gradual variation in qualities, such as colors.

To express this idea, it may be possible to hold of certain differentiated experiences that they are actually also *not* differentiated. This would constitute an 'abusive use language' (see §44,§49 above) that would actually comply us to go dialethic, allowing for true contradictions in the sphere of experience.

§60 Relative Resemblance

Resemblance between individual experiences has already been discussed in various examples, since it served as a model relation to demonstrate our methodological approach to relational description. Building on these examples as 'ostensive markers' of what is meant with experiential resemblance, we may characterize the relative, gradual (see §58 above) resemblance between sets of experiences through an 'implicit definition' laid down in the following

Assumption 2 (Relative Resemblance of Experiences).

- 1. $\forall X,Y \subset P, X \neq Y, \#X \geq 2, \#Y \geq 2[\rho X \succ \rho Y \lor \rho X \prec \rho Y \lor \rho X \sim \rho Y]$ For non-equal sets of copresent experiences X and Y with at least 2 elements holds: Either the elements of X resemble each other more than the elements of Y ($\rho X \succ \rho Y$), the elements of X resemble each other less than the elements of Y ($\rho X \prec \rho Y$), or the elements of X resemble each other as much as the elements of Y ($\rho X \sim \rho Y$).
- 2. $\forall X, Y \subset P[\rho X \prec \rho Y \leftrightarrow \rho Y \succ \rho X]$ For non-equal sets of copresent experiences X and Y holds: The elements of X resemble each other more than the elements of Y, iff the elements of Y resemble each other less than the elements of X.

3.
$$\forall X, Y, Z \subset P[(\rho X \succ \rho Y \land \rho Y \succ \rho Z) \rightarrow \rho X \succ \rho Z]$$

 $\rho \bullet \succ \rho \bullet \text{ is transitive.}$

Assumption 2.1 expresses the universality of resemblance through the criterion of 'tetra-chotomy' developed above (§58), assumptions 2.2 and 2.3 simply state the usual features we would expect for an order relation.

What may be stressed here again is that resemblance (like the other universal relations) holds between all (sets of) present experiences, may they be color-impression, thoughts, vague feelings, or something we do not even have a word for. Thus, as far as experience is concerned, there is no problem in comparing apples and oranges (and grapes, for that matter). There is of course always the possibility that resemblance between experience(set)s is zero (in the way proposed in §58 above).

It makes sense to introduce a 'greater/equal' and a 'less/equal' notation for relative resemblance:

$$\begin{array}{c} \textbf{Convention 1.} \\ 1. \ \forall X,Y \subset P[\rho X \succsim \rho Y : \leftrightarrow \ (\rho X \succ \rho Y \lor \rho X \sim \rho Y)] \end{array}$$

2.
$$\forall X, Y \subset P[\rho X \lesssim \rho Y : \leftrightarrow (\rho X \prec \rho Y \lor \rho X \sim \rho Y)]$$

It is plausible to assume that equality between sets of experience, $\rho \bullet \sim \rho \bullet$, is symmetrical and transitive. But remember that we placed the condition on the experiential relations that they may not be defined for the reflexive case. Now, if we simply assume symmetry and transitivity for a given relation R without further restrictions, it follows that if R has any instances at all, these are also reflexive instances (xRx). For, consider some individual a such that $\exists b[aRb]$. Then, with reflexivity $(\forall x, y[xRy \to yRx])$, it is the case that $aRb \land bRa$. From this, we get with transitivity $(\forall x, y, z[(xRy \land yRz) \rightarrow xRz]) \ aRa$, as well as bRb. Generalizing this implication yields

$$\forall x[\exists y[xRy \lor yRx] \to xRx]$$

Thus, when we take symmetry and transitivity at face value, (unwarranted) reflexivity abounds. To exclude this, we have to make the extra assumption that transitivity applies to non-reflexive cases $(x \neq z)$ only. Applying these considerations to the case of resemblance equality $\rho \bullet \sim \rho \bullet$, we may make the following

Assumption 3 (Resemblance Equality).

1.
$$\forall X, Y \subset P[\rho X \sim \rho Y \rightarrow \rho Y \sim \rho X]$$

2.
$$\forall X, Y, Z \subset P, X \neq Z[(\rho X \sim \rho Y \land \rho Y \sim \rho Z) \rightarrow \rho X \sim \rho Z]$$

The first part of the assumption expresses symmetry, second part the restricted, 'nonreflexive' sense of transitivity (with the extra condition $X \neq Z$).

Assumption 4.

1.
$$\forall \hat{X}, Y \subset P[\forall X' \subset X[\rho X \succ \rho X' \cup Y] \rightarrow \rho X \succ \rho X \cup Y]$$

2.
$$\forall X \subset P \forall y \in P[\forall x \in X[\rho X \succ \rho\{x,y\}] \rightarrow \rho X \succ \rho X \cup \{y\}]$$

Experiences do not resemble each other not in certain respects, but primitively. They do not have attributes or qualities that could manifest the respect in which they resemble each other. Rather, they are the attributes or qualities themselves.

But conversely, out of the primitively given structure of the resemblance-relation, respects in which the experiences resemble each other may be constituted. These are exactly the categories of experiences that are constituted by resemblance class partitions.

Example. Two visual experiences x and y resemble each other with regards to their color. The two color-experiences 'in' x and y (how we may understand this is going to be developed below in §62) resemble each other with regards to their brightness, etc.

As primitive, resemblance makes it possible to define how experiences the present individual experiences form certain 'classes'. Such classes, arguably form the minimal layer of the systematic description of experience.

Example. Sensual modalities (seeing, hearing, smelling, tasting, tactile feeling...) and submodalities (feeling: pressure, pain, temperature,...), feelings and emotions (non-tactile, for example the feeling of not being sure of something), verbalized thought, and so on.

The natural choice for a relation inducing such categories is resemblance. Experiences falling into one category should have a higher resemblance with each other than with any other experiences. In other words: Such a category forms a resemblance maximum in P. We will first introduce a notion of such a local maximum and then the notion of a global

After all, it is called transitivity, to the effect that R is transferred from x via y to some z that is different from the starting point and not just plain old x again.

one. The idea in proceeding from resemblance is to take that relation as the basis for our categorization of experiences in certain sensual or other modalities, and not the other way around.

Example. Take, for example, everything you see and everything you hear in a certain present. Most certainly, these two sets of experiences form resemblance classes. But they do not form resemblance classes in virtue of being visual versus auditory experiences, but in the contrary: because they have the resemblance structure they have, we can categorize them as two distinct sensual modalities. Again, resemblance is primitive. It is futile to ask why two experiences resemble each other in the way they do.

To determine whether a set of experiences X is a resemblance maximum, the relevant question to ask is: what happens when you add to X some experience-set Y other than X (and, without restriction of generally, disjunct with X)? Is the internal resemblance of $X \cup Y$ higher or lower than that of X?

Definition 1 (Resemblance Classes).

If the relation of X being a resemblance class with regards to Y goes also vice versa (which is not necessarily the case^I), we may speak of 'mutual resemblance classes':

Definition 2 (Mutual Resemblance Classes).

$$\forall X, Y \subset P, X \cap Y = \emptyset[`X \text{ and } Y \text{ are MUTUAL RESEMBLANCE CLASSES'} : \leftrightarrow \\ \forall X' \subseteq X, Y' \subseteq Y[\rho X' \succ \rho X' \cup Y'] \land \forall Y' \subseteq Y, X' \subseteq X[\rho Y' \succ \rho Y' \cup X']]$$

What signifies X and Y as two mutual resemblance classes is the fact that each of them is at its respective resemblance-maximum in direct comparison to the other set: Adding any subset of Y to X cannot raise the internal resemblance of X ($\forall X' \subseteq X, Y' \subseteq Y[\rho X' \succ \rho X' \cup Y']$), and vice versa ($\forall Y' \subseteq Y, X' \subseteq X[\rho Y' \succ \rho Y' \cup X')$.

Example. The most natural examples for resemblance classes are the sensual modalities such as seeing, hearing, etc., granted that we can form the corresponding sets. But of course, we cannot be sure that these actually constitute resemblance classes in our experience. Maybe there are actually resemblance classes that cut across sensual modalities, but they lie below an attention threshold that has to be surpassed for experiences to be described by verbalized thought. And of course, this possibility cannot be ruled out by checking the relative resemblance of all experience-sets. Thus, the declaration of sensual modalities as experience classes must always remain hypothetical (like all postulations of such classes). But the general point concerning examples for universal structures of experiences holds here as well: Even if the sensual modalities may only incorrectly be conceived of as resemblance classes, they are sufficient to make clear what is meant with this concept.

A subset X of P that forms a mutual resemblance class with $P \setminus X$ (thus, with all other subsets of P), we call a RESEMBLANCE CATEGORY. Thus, a resemblance category forms a 'resemblance maximum' with regards to all other subsets of P.

Example. The set of all visual experiences in a given experiential present arguably form a resemblance category. Adding any of the other copresent experiences to this set most likely does not increase its overall internal resemblance. \Box

Note that different resemblance categories may be nested into one another and may overlap.

Example. The set comprising the visual impressions of a uniform green patch falls into the set of all visual experiences falls into the set of all 'green-impression' (defined to a certain degree of resemblance), this, in turn, falls into the set of all visual experiences. \Box

Example. For an example of overlapping resemblance categories, consider the case of what we usually call two 'intersecting' color patches – say, a red one, call it r, and a yellow one, call it y. The 'intersection' of r and y actually forms a *third*, orange color patch, call it o. Arguably, r, y, and o alike form

^IAdding experiences from X may still lead to a higher resemblance in the newly formed set

resemblance categories. But then, also $r \cup o$ is plausibly also a resemblance category, as is $y \cup o$. o then is the intersection of the overlapping resemblance categories $r \cup o$ and $y \cup o$.

The descriptive terms we employ to signify certain 'types' of experience (although they may include references to subjects and objects) may be interpreted as pointing precisely to such resemblance categories. And what *constitutes* this resemblance category is only a pure-experiential relation, namely, primitive (relative) resemblance.

This means especially that we can understand the synchronic categories defined in microphenomenological analysis (see §23 above) in this way. According to this understanding, although the descriptemes and labels used to denote these categories may refer to subjects and objects of experience, what these categories purport to track are resemblance categories – either in the specific experiential present described in the interview or a hypothetical 'generic' experiential present that forms an abstracted model for the many specific ones (compare §32,§33 above). Thus, the categories defined in microphenomenological analysis through the application of abstraction operations attain a pure-experiential 'grounding'.

Moreover, this interpretation makes it possible to understand the specific and generic categories as tracking or representing the actually experienced and much more fine-grained resemblance structures in the lived experiences explored in the interviews. This opens another possibility to make sense of the notion of representation or correspondence as a 'regulative ideal' (compare §17,§32 above) within the constructivist setting of empirical phenomenology (especially, microphenomenology).

Finally, this interpretation makes it possible to transfer the abstraction relations which are defining of the categories in microphenomenological analysis (see §23 above) to the notion of resemblance categories. What is defined as relations among sets of 'descriptemes' in microphenomenology is now understood as representing a relation among individual experiences (that which the descriptemes ultimately describe). In this way, we may understand generalization/specialization and aggregation/fragmentation for resemblance categories (comprising experiences) $A, B_1, ..., B_n$ as follows: A generalizes $B_1, ..., B_n$, or, conversely, $B_1, ..., B_n$ specialize A, iff

$$B_1 \cup ... \cup B_n \subseteq A$$

and A aggregates $B_1, ..., B_n$ or, conversely, $B_1, ..., B_n$ fragment A, iff

$$A \subseteq B_1 \cap ... \cap B_n$$

Note that we actually do not have to make the difference of generalization vs. specialization and aggregation vs. fragmentation any more in this context, since these expressions stand for the 'bottom-up' vs. 'top-down' identification of the categories, which is only relevant in how they are represented (or arrived at), and not how they are (experienced).

§61 Relative Directedness

'Directedness' among individual experiences is a more abstract and possibly less intuitive relation than resemblance. That certain experiences are directed towards is other experiences is arguably present in many cognitive processes as they are lived through in the present.

Example. A verbalized, occurrent thought may said to be directed at a certain sensual impression, as, for example, in thinking: 'Ow, *that* hurts.'

Example. A volition, intention, or feeling being directed towards a certain intentional object (which of course also figures as an experience in experiential present), as in craving a piece of cake one may is seeing, or dreading a certain event one is anticipating.

Example. When one has some 'spontaneous association', as in the arising of a memory prompted through a sensorial experience (think of the 'Madeleine'-experience described by Marcel Proust), the arising memory and the sensorial 'trigger' do not simply come together in one present, they are *associated* with each other in the sense of being directed to one another. \Box

Arguably, such relations of directedness are also present on a subpersonal level of non-verbalized, fine-grained and only faintly noticed experiences. Such a primitive directedness among experiences may be constitutive of what James calls 'a feeling of and, a feeling of if, a feeling of but, and a feeling of by' (James 1983: 146-147, see full quote in §47 above), which of course do not have to verbalized. More generally, relations of inter-directedness among portions of pure experience (which are not intentional by themselves) may be involved in intentional experience, as a kind of 'micro-intentionality' which is, together with other pure-experiential relations, constitutive of intentionality proper.

In the sketched sense, James seems already have to have talked of relations of mutual directedness in pure experience: Thus, in the discussion of an objection to his approach, James appropriates the expression of one of his critics, Boyd H. Bode, in affirming that in the framework of pure experience it is 'claim[ed] that experiences point' (James 1912/1976: 119). What is denied in the pure-experiential framework, on the other hand, is 'that any experience that "points" must already have transcended itself, in the ordinary "epistemological" sense of the word transcend' (James 1912/1976: 120), that is, that this pointing already is already an intentional relation in the full sense of the term (see §6 above). Requiring such an experience-transcendent reference amounts to imposing on the

'conjunctive relations (of which the aforementioned "pointing" is only one) the usual [...] act of substitution – [taking] them not as they are given in their first intention, as parts constitutive of experience's living flow, but only as they appear in retrospect, each fixed as a determinate object of conception' (James 1912/1976: 120).

What we will adopt from these ideas is the notion that bits of experience can indeed be pointed or directed towards one another 'as parts constitutive of experience's living flow'.

With such a wide scope of possible applications, it may be turn out as necessary to differentiate different senses of 'directedness'. But for the time being, we will do with one basic relation of directedness. More detail and complexity can always be added into an existing system.

As said above (§58), the formal 'implicit definition' of relative directedness characterizes it as a relation between not between sets of experiences (as relative resemblance), but a relation between ordered pairs of sets of experiences. Thus, in relative directedness, what is 'compared' is the directedness of one set experiences X_1 to another set of experiences X_2 relative to the directedness of another set experiences Y_1 to some other set Y_2 (with $X_1 \neq X_2, Y_1 \neq Y_2$ and $X_1 \neq Y_1 \vee X_2 \neq Y_2$).

Assumption 5 (Relative Directedness of Experiences).

- 1. $\forall X_1, X_2, Y_1, Y_2 \subset P, X_1 \neq \emptyset \neq X_2, Y_1 \neq \emptyset \neq Y_2, X_1 \neq X_2, Y_1 \neq Y_2, X_1 \neq Y_1 \lor X_2 \neq Y_2$ $[\delta X_1, X_2 \succ \delta Y_1, Y_2 \lor \delta X_1, X_2 \prec \delta Y_1, Y_2 \lor \delta X_1, X_2 \sim \delta Y_1, Y_2]$ For non-empty sets of copresent experiences X_1, X_2, Y_1, Y_2 (with $X_1 \neq X_2, Y_1 \neq Y_2$ and $X_1 \neq Y_1 \lor X_2 \neq Y_2$) holds:
 - Either X_1 is DIRECTED MORE STRONGLY towards X_2 than Y_1 towards Y_2 ($\delta X_1, X_2 \succ \delta Y_1, Y_2$), X_1 is DIRECTED LESS STRONGLY towards X_2 than Y_1 towards Y_2 ($\delta X_1, X_2 \prec \delta Y_1, Y_2$), or X_1 is DIRECTED AS STRONGLY towards X_2 as Y_1 towards Y_2 ($\delta X_1, X_2 \sim \delta Y_1, Y_2$).
- 2. $\forall X_1, X_2, Y_1, Y_2 \subset P[\delta X_1, X_2 \prec \delta Y_1, Y_2 \leftrightarrow \delta Y_1, Y_2 \succ \delta X_1, X_2]$ For non-empty sets of copresent experiences X_1, X_2, Y_1, Y_2 holds: X_1 is directed less strongly towards X_2 than Y_1 towards Y_2 , iff Y_1 is directed more strongly towards Y_2 than X_1 towards X_2 .

3.
$$\forall X_1, X_2, Y_1, Y_2, Z_1, Z_2 \subset P$$

$$[\delta X_1, X_2 \succ \delta Y_1, Y_2 \land \delta Y_1, Y_2 \succ \delta Z_1, Z_2 \rightarrow \delta X_1, X_2 \succ \delta Z_1, Z_2]$$
 $\delta \bullet, \bullet \succ \delta \bullet, \bullet \text{ is transitive.}$

Note that the condition $X_1 \neq Y_1 \vee X_2 \neq Y_2$) in assumption 5.1 leaves room for the cases of either $X_1 = Y_1 \wedge X_2 \neq Y_2$ or $X_1 \neq Y_1 \wedge X_2 = Y_2$. The first case comprises the relative directedness of *one* experience, $X_1 = Y_1$, towards *two* different experiences, $X_2 \neq Y_2$. The second case comprises the relative directedness of *two* different experiences, $X_1 \neq Y_1$, towards *one* experience, $X_2 = Y_2$.

Assumption 5.3 means that directedness, like resemblance, is transitive: Assume that some X_1 is directed more strongly towards some X_2 than some Y_1 is directed more strongly towards some Y_2 , and further, that Y_1 is directed more strongly towards Y_2 than some Z_1 is towards some Z_2 . This does plausibly imply that X_1 is also directed more strongly towards X_2 than Z_1 is towards Z_2 .

As in the case of resemblance, it is useful to define a 'greater/equal' and a 'less/equal' notation for relative directedness:

Convention 2.

1.
$$\forall X_1, X_2, Y_1, Y_2 \subset P[\delta X_1, X_2 \succsim \delta Y_1, Y_2 : \leftrightarrow (\delta X_1, X_2 \succ \delta Y_1, Y_2 \lor \delta X_1, X_2 \sim \delta Y_1, Y_2)]$$

2.
$$\forall X_1, X_2, Y_1, Y_2 \subset P[\delta X_1, X_2 \lesssim \delta Y_1, Y_2 : \leftrightarrow (\delta X_1, X_2 \prec \delta Y_1, Y_2 \lor \delta X_1, X_2 \sim \delta Y_1, Y_2)]$$

It makes sense to say that sets of experiences can also not be related at all towards one another. This may be expressed by defining a(n ordinal) 'degree zero' for this relative relation, following the suggestion made above (§58):

Assumption 6 (Relative Directedness of Degree Zero).

1.
$$\forall Z_1, Z_2 \subset P[\delta Z_1, Z_2 \sim 0 : \leftrightarrow (\forall X_1, X_2[(X_1 \neq Z_1 \lor X_2 \neq Z_2) \to \delta Z_1, Z_2 \lesssim \delta X_1, X_2] \land \forall X_1, X_2 \subset P[\delta X_1 \cup Z_1, X_2 \cup Z_2 \sim \delta X_1, X_2])]$$

2.
$$\exists Z_1, Z_2 \subset P[\delta Z_1, Z_2 \sim 0]$$

In assumption 6.2, we make the strong assumption that in every present, there actually are directedness-relations of degree zero: not everything is directed to everything (to some degree) in the experiential present.^I

^IContrast this to the absence of reflexive self-directedness for all sets of experiences for another illustration of the difference between a relation being of degree zero and being absent.

We give this assumption further notational credit in the following

Convention 3.

$$\forall X, Y \subset P[\neg \delta X, Y \sim 0 \iff \delta X, Y \succ 0]$$

Thus, with $\delta X, Y \succ 0$, we have a shorthand for saying that some X is directed towards some Y with a degree other (or 'greater') than zero. We may also just say, for short: 'X is directed towards Y'.

Directedness makes it possible to define a difference between 'proper', actually experienced, relations (such as the ones introduced here) and 'improper' relations, which are actually individual experiences linked to each other by directedness. The distinction between proper and improper relations makes it possible to give a clear characterization of the 'metaphysical' opposition between the one-type- and the two-kinds-picture of pure experience (compare §47 above). If we go for the one-kind-ontology of experience assuming *only* individual experiences (at the price of an infinity of them), then we can actually model all relations as improper relations via differentiation and resemblance (and this includes, especially, differentiation and resemblance themselves, which are then improper relations). The difference between the one-kind- and the two-kinds-ontology can then also be stated thus: In the one-kind-world, all relations are improper, in the two-kinds-world, some relations are proper (which blocks the Bradley-regress discussed in §47 above).

Above this 'metaphysical' application, the assumption of the universal relation of relative directedness also adds descriptive dimensions that cannot be grasped by the way 'structures of experience' are described so far in semantic networks in microphenomenological analysis. For example, it may be possible to characterize relations of directedness among different categories in a semantic network representing a synchronic structure of experience (that is, in the present interpretation, a structure of resemblance categories in a given experiential present, see §60 above). And, again, primitive directedness makes this possible in a pure-experiential way.

§62 Relative Cohesion

Cohesion is probably the least intuitively appealing relation to be introduced here. It marks what characterizes conglomerates (§46) of individual experiences – namely, clinging together. The cohesion-relation may be motivated indirectly: If there are conglomerates in experience (which is plausible), then there must be some internal cohesion (in form of a mutual relation) within the conglomerate. The only alternative would be to introduce 'conglomeration' as some kind of non-relational experience-property, which is not admissible in the relational methodological approach that is followed here.

A more direct motivation of cohesion may be given as follows: Experiences of intentional objects (experiences 'of' things, compare §2 above) have to be such conglomerates, but this cannot just be constituted by similarity.

Example. I may have an experience of one thing that is composed of different sensual modalities, my thoughts and my feelings towards that thing. \Box

Alternatively, an experience of things may be accommodated through a mutual directedness of the experienced aspects of a thing. But then, one experienced aspect of one thing may of course also be directed at an experienced aspect of another thing, making the mutual differentiation of experienced things hard to make sense of. Above that, this understanding of directedeness would possibly lead to an overabundance of directedenessrelations in the experiential present, making maybe implausibly large parts of present experience being directed to one another. And what would eventually be the outcome of the directedness-move is that these aspects of experienced things would not just directed to one another, as for example an (experienced) sign may be to its (experienced) target, but that they actually *cling together*. Thus, we may also introduce this 'cling together' as a primitive relation.

The formal characterization of relative cohesion is again fully analogous to that of relative resemblance:

Assumption 7 (Relative Cohesion of Experiences).

1. $\forall X, Y \subset P, X \neq Y, \#X \geq 2, \#Y \geq 2[\gamma X \succ \gamma Y \lor \gamma X \prec \gamma Y \lor \gamma X \sim \gamma Y]$

For non-equal sets of copresent experiences X and Y with at least 2 elements holds: Either the elements of X COHERE to each other MORE than the elements of Y ($\gamma X >$ γY), the elements of X cohere to each other less than the elements of Y ($\gamma X \prec$ γY), or the elements of X COHERE to each other AS MUCH as the elements of Y $(\gamma X \sim \gamma Y)$.

2. $\forall X, Y \subset P[\gamma X \prec \gamma Y \leftrightarrow \gamma Y \succ \gamma X]$

For non-empty sets of copresent experiences X and Y holds: The elements of Xcohere to each other more than the elements of Y, iff the elements of Y cohere to each other less than the elements of X.

3.
$$\forall X, Y, Z \subset P[(\gamma X \succ \gamma Y \land \gamma Y \succ \gamma Z) \rightarrow \gamma X \succ \gamma Z]$$

 $\gamma \bullet \succ \gamma \bullet \text{ is transitive.}$

Convention 4. 1.
$$\forall X, Y \subset P[\gamma X \succsim \gamma Y : \leftrightarrow (\gamma X \succ \gamma Y \lor \gamma X \sim \gamma Y)]$$

2.
$$\forall X, Y \subset P[\gamma X \lesssim \gamma Y : \leftrightarrow (\gamma X \prec \gamma Y \lor \gamma X \sim \gamma Y)]$$

Assumption 8 (Cohesion Equality).

1. $\forall X, Y \subset P[\gamma X \sim \gamma Y \rightarrow \gamma Y \sim \gamma X]$

2.
$$\forall X, Y, Z \subset P, X \neq Z[(\gamma X \sim \gamma Y \land \gamma Y \sim \gamma Z) \rightarrow \gamma X \sim \gamma Z]$$

Plausibly, a high mutual resemblance and a high mutual directedness in a set of experiences increase the cohesion of that set, respectively. This may even be assumed to go so far that cohesion is fully functionally dependent on the interplay of resemblance and directedness. Of course, this would raise the question how resemblance and directedness may interact in influencing cohesion. This marks another dimension in which a descriptive framework constituted of pure-experiential relations may be developed: What may be plausibly assumed about the mutual interaction of the different relations? We are not going to pursue such questions in our sketch, but we note as a possible assumption that resemblance and directedness exert a strong influence on the conglomeration of experiences.

This 'conglomeration' may be understood in parallel to the 'local resemblance maximum' of resemblance classes (see §60 above), transferred to the case of cohesion:

Definition 3 (Conglomerate Experiences).

$$\forall X \subset P[`X \text{ is a conglomerate experience}' : \leftrightarrow \forall Y \subseteq P/X[\gamma X \succ \gamma X \cup Y]]$$

Thus, a set of copresent experiences X forms a conglomerate, if it is a 'local maximum' in cohesion: Adding any other experiences to X cannot raise its internal cohesion.

Note that since this is not explicitly excluded, conglomerate experiences may intersect.

Example. Two lines (visual experiences) intersecting at a point (or, more precisely, an expanse, because the lines have a certain thickness) both have this intersection as part.

Especially, a conglomerate experience X may be part of another conglomerate experience Y: $X \subset Y$. If this is so, it must of course be the case that $\gamma X \succ \gamma X \cup (Y/X)$, because $Y/X \in P/X$. If we understand experiences of things to be conglomerates (with directedness and resemblance plausibly also having a constitutive role to play), then we may interpret experienced 'aspects' or 'parts' of things as such conglomerates being nested into conglomerates.

§63 Relative Salience

Finally, we may show how attention, widely assumed as a structuring characteristic of lived experience (compare Arvidson 2006, Watzl 2017) may be accommodated in the pure-experiential framework developed here.

We can accommodate attention through a relation of relative salience of individual experiences in the present field of experience. The expression 'salience' in comparison to 'attention' has the advantage that it is devoid of any connotation of activity: certain experiences can be salient to you, independently of whether you have actively 'directed your attention towards' them, or whether they have just 'leapt' into the focus.

With salience, we mean the relative position each experience takes in the attentional focus. In a given present P, all subsets of P are ordered by relative salience: for two sets of copresent experiences X and Y, it is either the case that the experiences in X (taken together) are more salient than those in Y, the experiences in Y (taken together) are more salient than those in X, or they are exactly equally salient. Salience appears to be a very plausible candidate for a universal relation, since every experience seems to have some relative position in the attentional focus in comparison to any other experience.

The formal characterization of relative cohesion is again analogous to that of relative resemblance and coherence:

Assumption 9 (Relative Salience of Experiences).

- 1. $\forall X, Y \subset P, X \neq Y, X \neq \emptyset, Y \neq \emptyset[\sigma X \succ \sigma Y \dot{\vee} \sigma X \prec \sigma Y \dot{\vee} \sigma X \sim \sigma Y]$ For non-equal, non-empty sets of copresent experiences X and Y holds: Either the elements of X are MORE SALIENT than the elements of Y ($\sigma X \succ \sigma Y$), the elements of X are LESS SALIENT than the elements of Y ($\sigma X \prec \sigma Y$), or the elements of X are EQUALLY SALIENT as the elements of Y ($\sigma X \sim \sigma Y$).
- 2. $\forall X, Y \subset P[\sigma X \prec \sigma Y \leftrightarrow \sigma Y \succ \sigma X]$ For non-empty sets of copresent experiences X and Y holds: The elements of X resemble each other more than the elements of Y, iff the elements of Y resemble each other less than the elements of X.

3.
$$\forall X, Y, Z \subset P[(\sigma X \succ \sigma Y \land \sigma Y \succ \sigma Z) \rightarrow \sigma X \succ \sigma Z]$$

 $\sigma \bullet \succ \sigma \bullet \text{ is transitive.}$

Convention 5.

1.
$$\forall X, Y \in P[\sigma X \succeq \sigma Y : \leftrightarrow (\sigma X \succ \sigma Y \lor \sigma X \sim \sigma Y)]$$

2.
$$\forall X, Y \subset P[\sigma X \lesssim \sigma Y : \leftrightarrow (\sigma X \prec \sigma Y \lor \sigma X \sim \sigma Y)]$$

Assumption 10 (Salience Equality).

1. $\forall X, Y \subset P[\sigma X \sim \sigma Y \rightarrow \sigma Y \sim \sigma X]$

2.
$$\forall X, Y, Z \subset P, X \neq Z[(\sigma X \sim \sigma Y \land \sigma Y \sim \sigma Z) \rightarrow \sigma X \sim \sigma Z]$$

It is important to note that salience is *not* intensity.

Example. A bright red patch in the visual field may have a greater color-intensity than some faintly red patch, but the latter may still receive greater attention, that is, be more salient. \Box

Rather, such a relative intensity of phenomenal qualities can be understood in terms of resemblance categories: Each intensity level can be defined ostensively (at least in principle) and the order-relation can be expressed in resemblance-relations. For example, that three

experiences x, y, z are displaying a certain phenomenal quality q such that q is more intense in x than in y and more intense in y than in z can be represented by $\rho\{x,y\} \succ \rho\{y,z\} \succ \rho\{x,z\}$.

With this, it is of course not expressed which level is the most and which the least intense. But this only shows that our possibilities to handle levels of intensity are restricted in general, to be sure. They can *only* be defined ostensively, bar none.

Example. As with 'This patch is larger than that.' or 'This red is more intense than that.'

That we are talking about some phenomenal quality being more intense in some instance than in another may not arise from some primitive experience of intensity order. Rather, the manner of speaking of 'greater' and lesser' intensity owes more plausibly to the fact that the different intensity levels often have correlative relationships to *other* experiential structures.

Example. Larger, brighter, and more 'colorful' (especially red and other warm tones) patches perceived visually tend to have higher salience. \Box

Conclusion

Having finished the exemplary illustration of the descriptive framework for 'the logical structure of a world of pure experience', it is now time to review the overall course of reasoning that has brought us there. In the following, I will indicate briefly the main results of the argumentation pursued throughout the thesis, as well as the central questions which have been raised by these results but could not be pursued further.

Moving from the motivation of phenomenology by immersive primacy, through the notion of empirical, abductive phenomenology, and finally to the framework of pure experience, we have covered quite variegated philosophical ground. This has hopefully contributed to a greater mutual interconnection of different philosophical approaches and traditions, such as phenomenology and analytic philosophy. However, it also means that it was not possible to go more into detail at many points, leaving them in need for further development.

In chapter 1, I have argued for the methodological significance of phenomenology. In this context, the main accomplishment is surely the differentiation of the accessive, the foundational, and the immersive sense of the primacy of lived experience. These dimensions are not clearly distinguished from each other in the motivation of phenomenology given in 'traditional' approaches.

Through making this differentiation, it becomes possible in the first place to point out that the immersive sense of primacy is more basic than the others, and that it affords the most adequate way to motivate phenomenology. This explicit motivation of phenomenology through immersive primacy is the second main result of the thesis. It makes it possible to contrast the phenomenological from a non-phenomenological perspective in a comprehensive manner. Simply taking foundational or accessive primacy as the motivation for phenomenology would lead to a more restricted understanding of this methodological approach.

I have tried to show how taking immersion in lived experience seriously motivates phenomenology as a transcendental approach. The idea of transcendental phenomenology is not a new one, but it receives a further accentuation through the notion of immersive primacy. This makes it possible to understand transcendental phenomenology in a sense that is not committed to the way it has been developed in the tradition emanating from Husserl.

With the notions of immersive primacy and transcendental phenomenology in the background, it has been argued that there is a certain methodological indispensability of the phenomenological perspective. This gives rise to an 'implicit' or 'unofficial' application of phenomenology. The indispensability shows most strikingly in the context of objectivity itself, which has served as the main reason to reject or avoid phenomenology. Nonetheless, objectivity has to be understood and described as being generated through processes being immersed in lived experience.

Of course, a corresponding immersive-processual account of objectivity incorporating phenomenological descriptions and evidence is yet to be provided. Open questions in this context include: What stages of the process of generating objectivity may be distinguished? What invariant structures may be discerned at each of the stages? And in answering these question, how may phenomenological descriptions and evidence interact with third-person accounts of objectivity?

Going beyond the question of objectivity, we may ask: If the indispensability-thesis holds, how do the 'implicit' applications of phenomenology manifest themselves in different areas of inquiry? Tracing out the use of implicit phenomenology in specific philosophical discourses has not been possible in the scope of the argument pursued here. An obvious point to start would be philosophy of mind, which can hardly do without some at least

implicitly phenomenological account of mind and consciousness. Also practical philosophy has to draw more or less explicitly on the first-person perspective when defining its concepts and making assertions. Even if it may not be systematically developed, this amounts to 'phenomenology' in the wide sense proposed here. And even those working in the 'theoretical' disciplines of philosophy of language, logic, or even metaphysics may be asked, proceeding from an abductive understanding of philosophy, how they produce the 'evidence' for their generalized theses. Again, if the indispensability-thesis holds, this has to include phenomenology in some form or other, if possibly hard to discern.

The third main result is given in chapter 2 through arguing for the intimate connection of motivating phenomenology by immersive primacy and doing it in a certain way: namely, as an 'empirical' and 'enactive' practice. In contrast to 'armchair' approaches, what empirical phenomenology offers is, instead of another theoretical account of experience, a specific methodological approach for describing it. This 'second-person' approach, following the processual understanding of intersubjective validity, has found its most elaborate form in microphenomenology.

Now, partly due to the overwhelming concentration on armchair reflection in the transcendental-phenomenological tradition, the present state of the empirical approach to phenomenology does not go beyond beginnings yet. Especially, microphenomenology is still in an open and developing stage. This means that there are still a lot of open questions pertaining to microphenomenological methodology.

In this context, the specific 'blind spot' that has been detected here is the question of an adequate understanding of 'performative coherence' as criterion for validity. I take this to be a methodological question of central importance for the microphenomenological approach.

The detection of this open question in empirical microphenomenology and the suggestion to answer it with an abductive understanding of microphenomenological reasoning is the fourth main result of this thesis, as developed in chapter 3. The course of argumentation up to this point may be summarized as follows: proceeding from immersive primacy, we arrive at an understanding of phenomenology as being not only a transcendental approach, but also an enactive, empirical, and abductive one.

As demonstrated by the parallel between abductivist vs. deductivist approaches in analytic philosophy and empirical vs. armchair approaches in phenomenology, there are similar methodological issues in both traditions. Against this background, abduction may serve as a bridge for a mutual rapprochement of (empirical) phenomenology and (abductivist) analytic philosophy. The interpretation of microphenomenology in terms of the Abductive Theory of Method may serve as an example for the possibility of such mutual fertilization. This interpretation is a genuine contribution of this thesis (and of course open for further refinement and criticism).

Above that, the abductive understanding of empirical phenomenology opens a way for the integration of different perspectives on lived experience, along two axes: Firstly, an integration of a micro-, a meso-, and a macro-level of phenomenology. Secondly, an integration of different kinds of evidence, namely, first-person description (with second-person validation) and third-person observation.

But it is of course still open how an implementation of such a multi-dimensional integration may look like. On the first axis mentioned, such an integration would include bringing together accounts of experiential 'meso'- or 'macro'-processes of greater temporal extension with accounts of microphenomenological structures. The microphenomenologists have been silent upon these matters so far, although they aim for far-ranging applications of their method. On the second axis, there is the need for an interplay between the phe-

nomenological and the third-person perspective within in one account. But the suggestions on such 'mutual enlightenment' or 'mutual constraints' are still largely programmatic.

What may help, again, to make headway in both contexts, is an explicitly abductive framework as a basis for integration. What has been provided in the scope of this thesis, however, is a general characterization of the possible founding principles for such a framework. A further development of the abductive-phenomenological framework is a task that remains for the future.

The notion of pure experience developed in chapters 4, 5, and 6 lays out a possible foundation for such an abductive framework. This may be considered the fifth main result of the thesis, although it has to remain admittedly sketchy and tentative.

The decisive methodological step towards pure experience is made in chapter 4, by arguing that the 'presuppositionless supposition' of the the subject-object duality in experience leads into a phenomenological Myth of the Given and that this can be avoided in the pure-experiential approach. This is argued by pointing out that the subject-object duality is formative for the approach to lived experience in both the phenomenological tradition and in the tradition of analytic philosophy of mind. This subject-object duality amounts to a mythical Given, if assumed as an ineluctable categorial framework for the description of lived experience. Moreover, while the genetic-phenomenological approach points beyond the phenomenological Myth of the Given, it still may give rise to yet another mythical Given, this time in dynamic terms.

While the susceptibility of armchair phenomenology to the Myth of the Given has already been argued elsewhere, this argument is put in a specific context here, with immersive primacy as its background. Thus, the overall line of argument runs as follows: It is methodologically indispensable for us to do transcendental phenomenology of some kind. Yet, the very reason for this, immersive primacy, also urges us to do phenomenology in a way that avoids the Myth of the Given. And phenomenology does not per se succumb to the Myth of the Given, as it is argued in chapter 1 by characterizing the foundational primacy of lived experience through immediate support foundationalism. However, proceeding from the subject-object duality in a transcendental-phenomenological setting leads into the Myth of the Given in its categorial and subsequently also in its epistemic form.

The combination of two approaches to philosophy, the abductive one and the phenomenological one, that has been suggested here (to my knowledge without precedent), opens a way out of this predicament. Namely, the abductive approach may avoid a mythical framework for the description of lived experience by taking different understandings of the subject-object duality as abductive hypotheses. And the notion pure experience affords a framework for comparing such abductive hypotheses in being itself an abductive 'meta-model' for lived experience independent of the subject-object duality. This may be considered the sixth main result of the thesis.

The application of pure experience suggested here does not only rely on an interpretation of James' original texts, in which the idea of pure experience is developed, but also on a contextualization of this notion in abductive-empirical phenomenology. This is admittedly a somewhat ahistorical and eclectic procedure, since James did not develop his ideas in the context of phenomenology, let alone empirical phenomenology (although interpretations of radical empiricism and pure experience as 'phenomenological' have been suggested before). Nonetheless, I see the value of this interpretation not so much in its historical accuracy as in its systematic potential for philosophical methodology. Especially, I take situating pure experience in the context of abductive-empirical phenomenology as a way to unfold its methodological potentials for the *practice* of philosophy in a systematic manner. Such a practice-oriented interpretation may be perfectly in the spirit of James' radical empiricism.

Chapter 5 traces out different 'metaphysical' options for the pure-experiential framework and their possible combinations. The discussion of these metaphysical options admittedly has the character of only charting out possible ways. Which of these ways may be taken has to show in the context of concrete applications. What has been worked out are the two coherent options for mapping the sphere of pure experience: a finite two-kind-world and an infinite one-kind-world. These possibilities constitutes one dimension of the 'world of pure experience'. The other dimension is constituted by the different models of temporality of the experiential present: the 'cinematic', the 'retentional', the 'extensional', and the 'point-extension model'. With these two dimensions, I have demonstrated the possible options for a framework of pure experience. In line with the idea of abductive analogical modeling, concrete decisions on these options should best be taken in the context of applying this descriptive framework.

Pointing in the direction of such possible applications, the seventh main result of the thesis consists in the combination of the pure-experiential perspective with relational description in chapter 6. Thus, I suggest that a combination of relational description with reference to 'impure' examples is a viable approach for a pure-experiential descriptive framework. Similarly to the interpretation of James, my use of Carnap's methodological suggestions is eclectic and practice-oriented. Again, I see systematic advantages in this approach. It allows us to reap the gains in clarity through formalization without lapsing into excessive abstraction and idealization (as Carnap seems to have done).

The formal approach makes it possible to characterize in a precise manner how universal and gradual relations in the field of present experience may be modeled, exemplified by the introduction of the 'tetrachotomous' relations resemblance, directedness, cohesion, and salience.

It may be stressed again that this relational framework amounts only to a preliminary demonstration of *how* pure-experiential relational description may be implemented. Nonetheless, *that* such a framework may be indispensable to do phenomenology, which in turn is indispensable for doing philosophy, this is what the overall argumentation of this thesis comes down to.

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